

Literary/Aesthetic Cliche-Probes in the American Classroom-Without-Walls

by Bob Dobbs

On America's Bicentennial, 4 July 1976, I was standing on the top floor of one of the towers of New York City's World Trade Center viewing the Tall Ships' Armada sailing up the Hudson River.

Over the loudspeaker broadcasting the ebullient ceremonies I heard the interviewer address Marshall McLuhan with a question about his thoughts on the future of America as it entered its third centennial. With no hesitation McLuhan answered:

"In one word, apocalypse."

I knew Marshall McLuhan at the time and looking back at that incident 25 years later on Nov. 16 '01, two months after the hijacked airplanes crashed into the Twin Towers of Manhattan's skyline, I am not surprised at McLuhan's synchronicity. It comes with the Tradition he represented (Eric McLuhan in *WHO WAS MARSHALL McLUHAN?*, Barrington Nevitt and Maurice McLuhan, 1994, p.241) - and enlarged. How he massaged that Tradition is the intention of this expose and it may take a while to explain. But you've come this far, so why not continue.

For scholarly purposes McLuhan has been classified as a principal of the Toronto School of Communication (including Eric Havelock and Harold Adams Innis), a phrase invented by Donald Theall (McLuhan and the Toronto School of Communication in *UNDERSTANDING* 1984, D. de Kerckhove and D. Jutras (Eds.), Occasional Paper No. 48, Canadian Commission for UNESCO, Ottawa, 1984, pp.47-55, and later in *Canadian Journal of Political and Social Theory*, Vol. 10, No. 1-2, 1986, pp.79-88).

And many writers and/or scholars who were influenced by that milieu have subsequently published since McLuhan's death on Dec. 31 '80. It is through these works we will begin to pursue an exegesis of the role McLuhan played in the post-1960 Menippean Global Theater as it evoked a new kind of surreal, anarchistic autonomy and amnesia. "And I think it is this multiplicity of media that is now enabling man to free himself from media for the first time in history. He has been the victim, the servo-mechanism of his technologies, his media from the beginning of time, but now because of the sheer multiplicity of them he is beginning to awaken. Because he can't live with them all." Marshall McLuhan, Prospect, Canadian Art Magazine, Volume 19, September/October, 1962, p.365.

ACT ONE

The first to jump on stage was Barrington Nevitt (1908-95) with 4 books:

- ABC OF PROPHECY: Understanding the Environment (1980),
- THE COMMUNICATION ECOLOGY: Re-presentation versus Replica (1982),
- KEEPING AHEAD OF ECONOMIC PANIC (1985), and
- CAPTAIN GULLIVER'S INTERPLANETARY TRAVELS (1986, with Maurice Hecht).

These efforts by Nevitt may be the best successor to McLuhan's artistic literary purposes because Nevitt intended them to be Menippean satires. Nevitt understood Menippean satire (traditionally defined as a "mixed-media" art form, but see Eric McLuhan, THE ROLE OF THUNDER IN FINNEGANS WAKE, 1997, p.3ff.) is an important element in McLuhan's theory of communication (At the end of his Ph.D. thesis, Menippean Thunder at Finnegans Wake: The Critical Problems [1982], Eric McLuhan lists common features and topics of Menippean satire throughout its history, including the following:

- *"Do it Yourself"*. -- The reader is told to add to, subtract from or rearrange the materials of the text to suit himself...., p.455;
- *Words as Gestures**, and vice-versa. -- ..., p.468;
- *Words as Things**, and vice-versa. -- The preceding topic draws attention to eloquence inherent in the formal character of utterance: this topic deals with the relation between language and artefacts...., p.469;
- *Moderns**. -- The 'moderns', or dialecticians [*gloriosi*] in all ages, are a target of Menippists. The line of attack runs through Menippus, Varro, Petronius, Lucian [e.g., *The Sale of Philosophers*], Erasmus, Cervantes, Rabelais, Voltaire, Butler, Dekker, Nashe, Swift, Sterne, Carlyle, Flaubert and Joyce...., p.473;
- *Parody of New Forms**. -- The chameleon-like and mimetic nature of Menippean satire, which contributes to the impossibility of accounting for it descriptively, gives it immense flexibility and adaptability to new forms and new situations. As soon as new genres or modes or media for expression appear, Menippists quickly adapt to the new form and begin to explore its satirical possibilities...., p.477;
- *Printing Conventions Trifled With**. -- ..., p.479;
- *Simultaneity of Past and Present**. -- ..., p.481." The lurker familiar with Marshall McLuhan's writings, beginning with his Ph.D. thesis, should recognize some of their repeated themes in this list.)

and attempted to be true to that tradition while enhancing his own specialist bias as a management consultant with a theoretical interest in the natural sciences of astronomy, biology, and physics, etc. As a result, Nevitt's writings can be the most appropriate introduction to the Toronto school of media ecology. An example: "... But, as old nature is transformed into new Nature, a prophet can now foretell that dogmatic faith in anti-magic will revive blind trust in magic; and that science will become occult, while occult becomes

science. James Joyce [author of FINNEGANS WAKE, 1939], who foresaw this outcome, asks mythic, tribal Finn, the rhetorical question: 'Who gave you that numb?' (FW 546). Joyce then listens to 'what the thunders said' [There are eleven thunders in FW, found on pp.3, 23, 44, 90, 113, 257, 314, 332, 414, 424, and on the last line of p.612 - ed.] as the gods replied in Finnegans Wake. In this primer for prophets, Joyce reveals through the multisensuous language of the gods how archetypal Finn reacts psychically and socially to his own technological innovations, from paleolithic barbarism to modern civilization. Finn is alternately awakened to consciousness by the 'thunder' of each innovation, and lulled to unconsciousness by the environment that each creates through continued use. But, at the end of the First Cycle of merely reacting to the psychic and social consequences of innovation, he is prepared to enter the Second Cycle by anticipating them; first, he had the experience before its meaning; now he can have the meaning before the experience. 'Finn, again!' has discovered 'The keys to. Given!' (FW 628) - the KEYS (not only mechanical, but musical) to GIVEN (both data and Heaven) - in the magical intervals between sleeping and waking." - Barrington Nevitt, ABC OF PROPHECY, 1980, p.56.

Nevitt's concise précis of Finnegans Wake is very apt in light of his mentor's Ph.D. thesis which concludes: "What is true of Nashe is equally true of his contemporaries. One is, therefore, faced with the fact that while much excellent and indispensable work has been done on the Elizabethan period, we have scarcely begun to see its intellectual and literary life in an Elizabethan light. Many facts contributed to make it an age of rhetoric, and even of conflicting rhetorics; but we have long persisted in viewing it in the light of the violent reaction against what Huxley called 'the pestilent cosmetic of rhetoric'. It required, perhaps, the advent of such a successful devotee of the rhetoric of the second sophistic as James Joyce, to prepare the ground for a scholarly understanding of Elizabethan literature." - Marshall McLuhan, THE PLACE OF THOMAS NASHE IN THE LEARNING OF HIS TIME, 1943, p.447.

And the relevance is reinforced when we return to the first pages of McLuhan's thesis: "Its [the art of grammar] claim to be viewed as an important basis of scientific method, both during antiquity and continuously

throughout medieval times, and in the work of Francis Bacon, has, I think, never been indicated before the present study. In the dialogue named for Cratylus, the follower of Heraclitus, Plato has this exchange of arguments between Socrates and Cratylus:

‘Socrates: But if these things are only to be known through names, how can we suppose that the givers of names had knowledge, or were legislators before there were names at all, and therefore before they could have known them?’

Cratylus: I believe, Socrates, the true account of the matter to be, that a power more than human gave things their first names, and that the names which were thus given are necessarily their true names.’

Obviously, with this kind of importance associated with the names of things, and of gods, heroes, and legendary beings, etymology would be a main source of scientific and moral enlightenment. And such was the case. The prolific labors of the etymologists reflected in Plato's Cratylus, but begun centuries before and continued until the seventeenth century, are as much the concern of the historian of philosophy and of science as of the historian of letters and culture. Indeed, it was not only in antiquity but until the Cartesian revolution that language was viewed as simultaneously linking and harmonizing all the intellectual and physical functions of men and of the physical world as well." - Ibid., pp.2-3.

Nevitt came to understand that Finnegans Wake was the sub-plot of McLuhan's writings since his Nashe dissertation. That McLuhan was engaged in a lifelong translation of Joyce's last work can be seen in his reference to an early Menippean satire: "We can see in the Saturnalia of Macrobius how he has become for the Roman the same source of scientific and ethical lore that Homer had already become for the Greek. Thus for Macrobius the grammarian 'it is Virgil's learning that appeals to men rather than his poetry.' As grammarian, Macrobius applied the method of etymology not only to Virgil but to mythology, and astronomy, and the music of the spheres; for one relation between grammar and astronomy in antiquity was music, or harmony and rhythm. In medieval times Macrobius as grammarian and scientist had a

very great prestige; and no better indication of the need for study of the method of grammar as the accepted mode of ancient and medieval science could be adduced than the complete lack of comprehension of the aims and objectives of Macrobius which continues to prevail." - Ibid., p.9.

McLuhan worked to prevent *Finnegans Wake* from suffering the same fate. And he was the first Joyce enthusiast to see its practical utility for perceiving clearly the pressing issues plaguing his contemporaries in all walks and labors of twentieth-century life. Nevitt gives the context: "The great Cynic/Menippean satires get produced at a time of great technological change: Diogenes and Menippus with the advent of the phonetic alphabet; Rabelais and Erasmus with the printing press; Flaubert with the newspaper; James Joyce with the press, radio, film and TV. McLuhan got us thinking and talking about our new global village with the advent of satellites and computers." - Nevitt in *WHO WAS MARSHALL McLUHAN?*, Nevitt and McLuhan, p.201.

So Nevitt, McLuhan, and their colleagues, standing on the shoulders of Ovid, Dante, Giordano Bruno, Francis Bacon, Giambattista Vico, and James Joyce, created a new science of media ecology in which: "The *new* SCIENZA NUOVA recognizes the primacy of percepts and Instant Replay, the complementarity of VISUAL and ACOUSTIC space structures, also the artifacts of old art and science as probes rather than programs. It is not only of words and concepts and theories derived from past experience, but also of multi-sensory images arising from encounter with constantly changing present existence that retrieves old knowledge with new meaning. In our day, since Martin Heidegger, philology and etymology have once more become the basis for the metaphysical. Since James Joyce, the emphasis has changed from merely *reacting* to *anticipating* the material, mental, and social effects of man-made Nature -- how current artifacts reshape human nature. Today, all current artifacts resume the character of natural language to approach the *logos* with centres everywhere and boundaries nowhere. 'In my end is my beginning' (From T. S. Eliot's *East Coker*, which replays the last words of Mary Queen of Scots).

IN RETROSPECT:

- The *old* SCIENZA NUOVA of eighteenth-century Vico was concerned with discovering the mainsprings of human thought, feeling, and action in his own day through the languages of 'gods, heroes, and men' of ancient historical and mythical times.

- The *old* SCIENCE NOUVELLE of eighteenth-century *philosophes* sought to 'explain' thinking and being in terms of old Democritean 'atoms and void', and the dominant mechanical metaphors of their day, with the Yes-OR-No logic still dominant in our day. Its ideal was to separate thought from feeling *literally*.

- The *old* NEW SCIENCE of nineteenth-century Marxists revived the Heraclitean Yes-AND-No dialectic in Hegelian concepts minus percepts, by treating all order as 'visual' order, and divorcing thought from feeling *objectively*.

- The *new* NEW SCIENCE of twentieth-century Utopians restores ancient Procrustean measures to replace people with machines, or 'cyborgs', with two-bit computer wits that have already achieved deadly *logical maturity*.

- The *new* SCIENZA NUOVA of Comprehensive Understanding retrieves the Yin/Yang complementarity of ancient Chinese sages and Greek Heraclitus, with *human maturity* that savours the paradoxes of life itself, like Shakespeare at the dawn of Gutenberg. It seeks to achieve a new unity of thought and feeling, like Joyce as 'Finn, again' with 'the keys to. Given!', by using all human wits and senses with their technological extensions *comprehensively*. As James Joyce put it in his multi-sensuous Finnegans, an 'artificial' natural language, that only an Irishman could have invented: 'Toborrow and toburrow and tobarrow! That's our crass, hairy and ever-grim life, till one final howdiedow Bouncer Naster raps on the bell with a bone and his stinkers tank behind him with the sceptre and the hourglass. We may come, touch and go, from atoms and ifs but we're presurely destined to be odd's without ends.' - FINNEGANS WAKE, p.455 (A parody on what Shakespeare's Macbeth thought of life in his day upon hearing of his wife's death. Act 5, Scene 5).

IN PROSPECT:

Instead of projecting 'past' figures to future fantasies, learning to recognize the process patterns of the present 'ground' actually shaping the things to come by:

Instant Preplay

- Expands perceptual process patterns of present ground into the future.
- Contracts ground for conceptual ground rules of past sequentiality when causes logically preceded effects.
- Retrieves non-visual environment of simultaneity where effects merge with causes ecologically.
- Flips present into future, as all times and places NOW HERE, and effects precede causes by design.

We may envisage continuing exploration of the 'inner-space' conflicts of specialists and generalists in many disciplines, scientific and humanist, engendered by current artifacts as communication media; and that will suggest how their breakdowns can lead to breakthroughs by learning to recognize the new laws of each new situation in its own terms as *comprehensivists*.

[Note: The GENERALIST applies multi-specialist disciplines of literate Western culture, with its hidden visual sensory bias, *logically* like C. P. Snow, to provide plausible answers to current questions. In contrast, the COMPREHENSIVIST employs multi-cultural approaches of both literate and non-literate, Eastern and Western cultures, with full awareness of their visual and non-visual sensory biases, *ecologically* like Marshall McLuhan, to seek relevant questions for exposing hidden environments that create current problems.]" - Barrington Nevitt, Current Artifacts as Communication Media - paper delivered at a colloquium conducted by Prof. Maurice

Charland, Concordia University, Montreal, Quebec, Nov. 17 '86, pp.11-13.

Nevitt demonstrates his awareness of the comprehensivist's role as having a tactile feature when he constantly highlights the biases of visual and acoustic spaces and collapses them into a statement such as: "For understanding is the simultaneous grasp of the conflicting facets of any situation in its changing figure/ground relationships, that reveal both their complementary aspects and their dominant process patterns. Understanding demands comprehensive awareness that uses all wits and senses with ESP." - Nevitt, ABC OF PROPHECY, p.39.

Or when engaging his aforementioned interest in the physical sciences, he offers a tactile "concept" to the astrophysicists: "Pre-Socratic Parmenides reduced the infinitude of the measurable Many to the logical necessity of a finite One. But the time is now ripe to reinstate the boundless *apeiron* (Greek *Apeiron*: the unbounded) of his opponent Anaximander as a metaphor for thinking about immeasurable existence; for that is both One in Many, unity in diversity, continuity in discontinuity, and vice versa. We may think of apeiron as an invisible environment or ground with neither beginning, nor ending, nor measures - a multiverse made manifest through the interplay of its figures. Only the figures emerge and decay. Both 'space' and 'time' are relations among them." - Ibid., p.9.

It is to Nevitt's credit that while he had a professional career as an electrical engineer who helped corporations build the global theater, he did not blind himself to the fact it had been hijacked by tetrad-managers (See Marshall McLuhan [with Eric McLuhan], LAWS OF MEDIA: The New Science, 1988, pp.93ff. for an X-ray of the tetrad used by passive, postmodern social engineers who let the global audience get into the act) who electronically massaged the "global village" ("It is important to grasp Lindberg's idea of myths and norms since they have characterized all civilization till now. But henceforth they must have new functions. Myths are for Lindberg the traditional religions imposed on men. They are products of reason. They are expedient lies. They are the means of curbing the monsters bred of men's passions. Norms or moral conventions, on the other hand, are merely a cinematic projection on the screen of the city of the passions and preferences

of men. Myths are vertical affairs imposed by ruling authority on the ruled. Norms are horizontal developments spreading outwards in accordance with men's desires. Myths are static. The authoritarian myth-built city is local, brittle, easily susceptible of shock. If one myth falls, all will tend to fall. But the norm-structured society is open, elastic, malleable, receptive of change. Under current conditions of communication the static, myth-built cities of the Western world are doomed, says Lindberg. ...And it will perhaps amuse Lindberg to learn that his book is the best introduction written to date to Joyce's Ulysses and Finnegans Wake." - Marshall McLuhan, The God-making Machines of the Modern World [a review of Foundations of Social Survival by John Lindberg], The Commonweal, March 19 '54, pp.606-607) with the anticipatory principle that "today, effects precede causes by design." (Nevitt in WHO WAS MARSHALL McLUHAN?, Nevitt and McLuhan, p.290).

With McLuhan he sought to reveal the invisible vectors behind conventional postmodern "media ecology": "Current interest in communications media is itself an effect of electric media speedup, just as current difficulties in understanding media are the result of assuming that they can be neutral if properly programmed." - Barrington Nevitt, THE COMMUNICATION ECOLOGY: Re-presentation versus Replica, 1982, p.17.

Whereas others in the post-McLuhan Toronto school of media ecology merely emphasized one or more of the old McLuhan themes such as:

- breakdown as breakthrough;
- the new environment turns the old environment into an art form - a rear view mirror;
- Pound's aphoristic style and technique of poetic synchronicity;
- preference for percept rather than concept;
- delight in the transformation of language and insight via punning;
- Yeats's "emotion of multitude";
- the strategy of Poe's wise sailor in "A Descent into the Maelstrom";
- Eliot's "auditory imagination";
- stressing of rhetorical devices and downplaying of dialectical ploys;
- technological environments as numbing extensions of ourselves;

- Lewis's valuation of the detached eye and collage of varying graphics;
- grammar as the root of media awareness;
- encyclopedism's advantages over specialism;
- Joyce's use of the tactile aesthetic;
- the dropping of a moral stance after THE MECHANICAL BRIDE, Marshall McLuhan, 1951;
- spotlighting of advertising and its appropriation of artistic effects,

Nevitt saw a more comprehensive McLuhan who played the whole Trivium ("In brief, we are engaged in developing a new *Trivium*: the Dialectic, Grammar, and Rhetoric of everything imaginable, as communication media."
 - Barrington Nevitt with Maurice Hecht, CAPTAIN GULLIVER'S INTERPLANETARY TRAVELS, 1986, p.181) in his writing and regarded the above inventory as only idiosyncratic reflexes and Clichés of the inevitable consciousness of the electric (and later electronic) age and its "Hundred Years' War" (1840-1960).

So Nevitt, an invisible environment himself today, succeeded in stinging the futurists, scientists, economists, and engineers who followed in McLuhan's wake, by targeting the "technology" side of the technology-culture dialectic in McLuhan's probe (McLuhan having been the Director of the Centre for Culture and Technology) through foregrounding the "cultural" products of James Joyce as an "INSTANT PREPLAY" in the context of the Menippean Global Theater created by the instant-replay technologies. Herewith his programmatic miming of the 'anticipatory democracy' sponsored by the tetrad-managers: "Fictions foreshadow facts. We have all had the experience of living mythically as disembodied spirits via media. Those who have not missed its meaning may now plunge through the Looking Glass, like Alice, to play *yestermorrow* in:

- POLITICS, to hide behind nineteenth-century planks, while seeking twentieth-century electronic images to put on new publics;
- ECONOMICS, to deflate the inflators by leaving staples to public establishments beyond the market, while playing free private markets to speed beyond the established for testing the new; and to satisfy humanity

through community that makes markets supply human needs, rather than fragment humanity to match market demands;

- MANAGEMENT, to decentralize the centralizers through Management by Prevision, which soars above Management by Objectives, when goals move faster than plans can change; and to leave decisions to people 'on the spot' who can recognize the laws of their instantly changing situations demanding instant action;

- EDUCATION, to learn the old disciplines as art forms inside academic walls, while exploring the new problems outside where the action is; to shift stress from conceptual to perceptual training, where 'bull sessions' retrieve dialogue and lectures become entertainment;

- COMMUNICATION, to anticipate all the main effects of everything natural and artificial, sacred and profane, dead and alive, on every other living body and itself; to harmonize programs with their media in order to share intended experience with living beings involved in this communication ecology; to perceive that such communication is revolution by conversion, both inner and outer; and to leave communication between machines to engineers and scientists;

- CORRECTION, to convert the culprits not merely outside, but inside-out, by understanding the laws of their situation rather than destroy them totally by preconceptions; and to recognize that the current alternative to written law, which lags further and further behind justice, is tribal law, which leaps further and further beyond it;

- GENERALISM, to multiply technical specialisms that proliferate the fallacies of misplaced concrete, both hardware and software, as profitable substitutes for comprehensive awareness that anticipates not merely the material, but all the other consequences of major change;

- SCIENCE, to organize ignorance for deliberate discovery by recognizing new process patterns through fresh percepts; to harmonize knowledge for rapid access by reorganizing the old groundrules with new concepts; to

escape 'tunnel vision' through 'second sight' by perceiving the complementarity of Art and Science for matching and making; and to restore the ancient unity of thought and feeling;

- FUTURISM, to regurgitate packaged futures, that replay the past, as popular substitutes for understanding the present, which is the only future for the future; and thus become self-fulfilling;

- PROPHECY, to preplay *alternate* Fate, which circumvents technical grounds and digital figures alike; to make the effects precede the causes through human harmonies of rhythm, rime, reason, and silence; and thus become self-negating." -Nevitt, ABC OF PROPHECY, pp.82-84.

ACT TWO

The second to jump into the post-McLuhan arena was the publishing enterprise of the New York school of media ecology, SEMIOTEXTE, edited by Sylvere Lotringer (1938-). But with a twist. Ignoring the comprehensive approach of Nevitt, Lotringer (miming willy-nilly the strategies of the postmodern tetrad-managers) savored ambivalently the Menippean surface of the postmodern beachhead and sponsored an anti-postmodern debate between

- Michel Foucault (INTERVENTIONS, 1987 and FOUCAULT LIVE [Interviews, 1966-84], 1989),

- Jean-Francois Lyotard (DRIFTWORKS, 1984),

- Jean Baudrillard (SIMULATIONS, 1983 and IN THE SHADOW OF THE SILENT MAJORITIES OR, THE END OF THE SOCIAL AND OTHER ESSAYS, 1983 and FORGET FOUCAULT, 1987),

- Paul Virilio (PURE WAR, 1983 and SPEED AND POLITICS: An Essay on Dromology, 1986), and

- Gilles Deleuze and Felix Guattari (ON THE LINE, 1983 and NOMADOLOGY: The War Machine, 1986).

French intellectuals irritated by McLuhan's iconic status in the postmodern sixties, they danced on the toes of the "culture" side of the McLuhan dialectic by foregrounding "technological" products of the seventies and early eighties and some of their effects.

For example, while rehearsing the Menippean stance of McLuhan, post-nominalist Jean Baudrillard preferred to emphasize how the telematic society bypassed the Global Theater: "This is our problem, insofar as this electronic encephalization, this miniaturization of circuits and of energy, this transistorization of the environment condemn to futility, to obsolescence and almost to obscenity, all that which once constituted the stage of our lives." - Jean Baudrillard, THE ECSTASY OF COMMUNICATION, 1988, p.17.

Before, in the late sixties and early seventies, in his quest for a methodology that bypassed the "archetypal" McLuhan, Baudrillard had intuited the tetrad and its phatic, tactile manager (McLuhan's discovery of the late fifties as the Global Theater was inaugurated): "From this perspective, in which the production of signs seen as a system of exchange value takes on an entirely different meaning than in the naive utopia of their use value, design and the environmental disciplines can be considered as one of the branches of mass communication, a gigantic ramification of human and social engineering. From this moment on, our true environment is the universe of communication. It is in this that it differs radically from the 19th century concepts of 'nature' or of 'milieu'. While these latter referred to physical, biological (determinism of substance, of heredity and of species) or 'socio-cultural' (the 'milieu') laws, environment is from the beginning a network of messages and signs, its laws being those of communication. The environment is the autonomization of the entire universe of practices and forms, from the everyday to the architectural, from the discursive to the gestural and the political, as a sector of operations and calculation, as sending-receiving of messages, as space- time of communication.... Nothing is more false than the limits that a 'humanistic' design wishes to fix for itself; in fact, everything belongs to design, everything springs from it, whether it says so or not: the body is designed, sexuality is designed, political, social, human relations are

designed, just as are needs and aspirations, etc. This 'designed' universe is what properly constitutes the environment...." - Jean Baudrillard, FOR A CRITIQUE OF THE POLITICAL ECONOMY OF THE SIGN, 1972, pp. 200-201.

Later, as the hologrammic effect of the Global Theater "crystallized" and became for Baudrillard "the Object", he retained McLuhan's perception of the Menippean character of the tactile interplay of the mixed corporate-media (the "telematic"), which he termed "seduction": "Seduction is the world's elementary dynamic. Gods and men were not separated by the moral chasm of religion: they continuously played the game of mutual seduction; the symbolic equilibrium of the world is founded on these relations of seduction and playfulness. All this has changed significantly for us, at least in appearance. For what has happened to good and evil, to the true and the false, to all these great distinctions which we need to decipher and make sense of our world? All these terms, torn asunder at the cost of unbounded energy, are ready at any moment to extinguish one another, and collapse *to our greatest joy*. Seduction hurls them against one another, and unites them beyond meaning, in a paroxysm of intensity and charm." - Ibid., p.59, and mixed it with the reversibility of McLuhan's tetrad: "The principle of reversibility, which is also the one of magic and seduction, requires that all that has been produced must be destroyed, and that which appears must disappear. We have unlearned the art of disappearance (art as such has always been a powerful lever of disappearance - power of illusion and of a denegation of the real). Saturated by the mode of production, we must return to the path of an aesthetic of disappearance. Seduction is party to this: it is that which deviates, that which turns us away from the path, that which makes the real return to the great game of simulacra, which makes things appear and disappear." - Ibid., p.71, and McLuhan's interest in the phatic (see the top third of p.8 in Marshall McLuhan [edited by Eugene McNamara], THE INTERIOR LANDSCAPE: The Literary Criticism of Marshall McLuhan, 1969, and the bottom of p.198 in Marshall McLuhan [with Wilfred Watson], FROM CLICHÉ TO ARCHETYPE, 1970): "If the phatic has become hypertrophied in all our communications systems (i.e., within the media and information processing systems), it is because tele-distance ensures that speech literally no longer has any meaning. One says that one is

speaking, but by speaking one is only verifying the network and the fact that one is linked up with it. There is not even an 'other' at the other end, for in a simple reciprocation of signals of recognition there is no longer an identifiable transmitter or receiver, but simply two terminals. The one terminal's signal to the other is merely an indication that something is going through and that, therefore, nothing is happening. Perfect dissuasion." - Jean Baudrillard, SEDUCTION, 1990, pp.164-165 (Baudrillard used McLuhan's old theme of the "rear view mirror" to amplify the above pattern as it affected linguistics: "Language has no need for 'contact': it is *we* who need communication to have a specific 'contact' function, precisely because it is eluding us. That is why Jakobson was able to isolate it in his analysis of language, while both the concept and the terms to express it are absent from other cultures. Jakobson's grid and his axiomatics of communication are contemporaneous with a change in language's fortune - it is beginning to no longer communicate anything. It has thus become urgent to analytically restore the functional possibility of communication, and in particular the 'phatic' function that, in logical terms, is a simple truism: if it speaks, then it speaks. But in effect it no longer speaks, and the discovery of the 'phatic' function is symptomatic of the need to inject contact, establish connections, and speak tirelessly simply in order to render language possible. A desperate situation where even simple contact appears wondrous." - Ibid., p.164).

With his concept of the "Object", Baudrillard had again arrived at McLuhan's doorstep and intuited the pentadic environment (as spelled out by Frank Zingrone in Volume One, No. 1, of McLuhan Studies [1991], the pentad adds the syncretic, or fusion, factor to the tetrad) where the digital "Object" subsumes, resumes, and cancels the "designs" of the electronically-based tetrad- manager ("*The object itself takes the initiative of reversibility*", taking the initiative to seduce and lead astray. Another succession is determinant. It is no longer that of a symbolic order (which requires a subject and a discourse), but the purely arbitrary one of a rule of the game. The game of the world is the game of reversibility. It is no longer the desire of the subject, but the destiny of the object, which is at the center of the world." - Baudrillard, THE ECSTASY OF COMMUNICATION, p.80) and ignores the mass's stance of irony and disconnection. The inevitable fate of Baudrillard's "silent majorities" requires

them to respond by engaging reflexively in Menippean phatic communion ("perfect dissuasion"): "Yet immanence left to itself is not at all random. It deploys a connection of events or disconnection of events altogether unexpected, *in particular this singular form which combines connecting and disconnecting*, that of the exponential.... Moreover one finds this connected/disconnected form in the mythic form of challenge and seduction, of which we know that it is not a dialectical relation, but an escalating power expressed by a potentialization of the stakes, and not at all by an equilibrium. In seduction we re-encounter this exponential form, this fatal quality whose destiny sometimes chances upon us, as it does for things when they are left to their own devices." - Ibid., pp.55-56.

At this point it may serve as a relevant hint to remind the lurker that McLuhan's "doorstep" always already included Baudrillard's concept of the "rule of the game" as determinant in the pentadic situation. This is shown in chapter 24 of Marshall McLuhan, UNDERSTANDING MEDIA: The Extensions of Man, 1964, where the topic "Games" is given the same definition as "Media" - "the extensions of man" - the only other occasion in the book.

This leads naturally to the work of Michel Foucault. As a figure in the debate presented by Lotringer, Foucault replays the concerns in McLuhan's writings for the effects of "visual space" during the Gutenberg Galaxy (1500-1750) and their internalization at the beginning of the Marconi Galaxy (1850-1950). "It is not a mode of language, but a hollow that traverses like a great movement all literary languages." - Michel Foucault, FOUCAULT LIVE (Interviews, 1966-84), 1989, p.22. "My procedure at this moment is of a regressive sort, I would say; I try to assume a greater and greater detachment in order to define the historical conditions and transformations of our knowledge." - Ibid., p.79.

McLuhan's methodology focused on making an inventory of these effects by providing a mosaic of a wide range of activities and notions in diverse fields during a large span of time (see the "Centennial Metaphor" section in FROM CLICHÉ TO ARCHETYPE, pp.35-41).

The following statements by Foucault illustrate the parallels with McLuhan's approach: "It's why I have tried to make, obviously in a rather particular style, the history not of thought in general but of all that 'contains thought' in a culture, of all in which there is thought. For there is thought in philosophy, but also in a novel, in jurisprudence, in law, in an administrative system, in a prison." - Foucault, FOUCAULT LIVE, p.9. "I wanted to do an historian's work by showing the simultaneous functioning of these discourses and the transformations which accounted for their visible changes." -Ibid., p.29. "I wanted to displace it; to analyze the discourses themselves, that is, these discursive practices that are intermediary between words and things; these discursive practices starting from which one can define what are the things and mark out the usage of words." - Ibid., p.51.(In this last quotation, Foucault seeks to make the "interval" of the discursive practices a transparent manifest in the style of McLuhan and Nevitt's writings.) "By archeology I would like to designate not exactly a discipline, but a domain of research, which would be the following: In a society, different bodies of learning, philosophical ideas, everyday opinions, but also institutions, commercial practices and police activities, mores - all refer to a certain implicit knowledge (*savoir*) special to this society. This knowledge is profoundly different from the bodies of learning that one can find in scientific books, philosophical theories, and religious justifications, but it is what makes possible at a given moment the appearance of a theory, an opinion, a practice. Thus, in order for the big centers of internment to be opened at the end of the 17th century, it was necessary that a certain knowledge of madness be opposed to non-madness, of order to disorder, and it's this knowledge (*savoir*) that I wanted to investigate, as the condition of possibility of knowledge (*connaissance*), of institutions, of practices." - Ibid., pp.1-2.

Foucault substitutes *savoir* for McLuhan's "ground" or "medium", and *connaissance* for "figure" or "content". The effect of their interplay Foucault designates as *episteme*: "When I speak of *episteme*, I mean all those relationships which existed between the various sectors of science during a given epoch. For example, I am thinking of the fact that at a certain point mathematics was used for research in physics, while linguistics or, if you will, semiology, the science of signs, was used by biology (to deal with genetic messages). Likewise the theory of evolution was used by, or served

as a model for historians, psychologists, and sociologists of the 19th century. All these phenomena of relationship between the sciences or between the various scientific sectors constitute what I call the *episteme* of an epoch. Thus for me *episteme* has nothing to do with the Kantian categories.... I simply noted that the problem of order (the problem, not the category), or rather the need to introduce an order among series of numbers, human beings, or values, appears simultaneously in many different disciplines in the 17th century. This involves a communication between the diverse disciplines, and so it was that someone who proposed, for example, the creation of a universal language in the 17th century was quite close in terms of procedure to someone who dealt with the problem of how one could catalog human beings. It's a question of relationships and communication among the various sciences. This is what I call *episteme*, and it has nothing to do with the Kantian categories." - Ibid., pp.75-76.

Like McLuhan (see bottom half of p.31 in Marshall McLuhan [with George Thompson and Harley Parker], COUNTERBLAST, 1969), Foucault sees this episteme as a cultural "unconscious": "Very schematically, it consists of trying to discover in the history of science and of human knowledge (*des connaissances et du savoir humain*) something that would be like its unconscious.... These laws and determinations are what I have tried to bring to light. I have tried to unearth an autonomous domain that would be the unconscious of science, the unconscious of knowledge (*savoir*), that would have its own laws, just as the individual human unconscious has its own laws and determinations." - Foucault, FOUCAULT LIVE, pp.39-40. "One can say with confidence that we are not speaking of an individual unconscious, in the sense that psychoanalysis generally understands that notion. Yet neither is it a collective unconscious, which would be a kind of collection or reservoir of archetypes at the disposition of everyone. The 'structural' unconscious is neither of these things." - Ibid., p.81. "My problem is essentially the definition of the implicit systems in which we find ourselves prisoners; what I would like to grasp is the system of limits and exclusion which we practice without knowing it; I would like to make the cultural unconscious apparent." - Ibid., p.71.

Miming Belinda the Hen who found the letter in the middenheap of

Finnegans Wake, Foucault plunders the "archive" of what McLuhan designated as visual space to produce an "archeology" of this unconscious: "... it's the analysis of discourse in its modality of *archive*." -Ibid., p.25. "This other thing I have called therefore 'archeology'. And then, retrospectively, it seemed to me that chance has not been too bad a guide: after all, this word 'archeology' can almost mean - and I hope I will be forgiven for this - description of the *archive*. I mean by archive the set (*l'ensemble*) of discourses actually pronounced; and this set of discourses is envisaged not only as a set of events which would have taken place once and for all and which would remain in abeyance, in the limbo or purgatory of history, but also as a set that continues to function, to be transformed through history, and to provide the possibility of appearing in other discourses." - Ibid., p.45.

This form of pattern-recognition and insight allows Foucault to intuit McLuhan's tetrad: "The 'archive' appears then as a kind of great practice of discourse, a practice which has its rules, its conditions, its functioning and its effects. The problems posed by the analysis of this practice are the following:

- What are the different particular types of discursive practice that one can find in a given period?
- What are the relationships that one can establish between these different practices?
- What relationships do they have with non-discursive practices, such as political, social or economic practices?
- What are the transformations of which these practices are susceptible?

Ibid., pp.58-59. "I'm not looking underneath discourse for the thought of men, but try to grasp discourse in its manifest existence, as a practice that obeys certain rules - of formation, existence, co-existence - and systems of functioning. It is this practice, in its consistency and almost in its materiality, that I describe." - Ibid., p.46. "I have tried to do something else, to show that in a discourse, as in natural history, there were rules of formation for objects (which are not the rules of utilization of words), rules of formation for concepts (which are not the laws of syntax), rules of formation for theories (which are neither deductive nor rhetorical rules). These are the rules put into operation through a discursive practice at a given moment that explain why a certain thing is seen (or omitted); why it is envisaged under such an aspect and analyzed at such a level; why such a word is employed with such a

meaning and in such a sentence. Consequently, the analysis starting from things and the analysis starting from words appear at this moment as secondary in relation to a prior analysis, which would be the discursive analysis." - Ibid., p.52. "I tried to define the transformations: to show the discoveries, inventions, changes of perspective and theoretical upheavals that could occur starting from a certain system of regularities." - Ibid., p.54.

Knowing that the "materiality" of visual space continues to circulate in the contemporary mixed-media dance, Foucault, like McLuhan, uses a Menippean strategy by presenting the past ("visual space") as a probe of the present: "Placing himself at the exterior of the text, he [the contemporary critic] constitutes a new exterior for it, writing texts out of texts." - Ibid., p.21. "I try to show, based upon their historical establishment and formation, those systems which are still ours today and within which we are trapped. It is a question, basically, of presenting a critique of our own time, based upon retrospective analyses." - Ibid., p.64. "My book is a pure and simple 'fiction': it's a novel, but it's not I who invented it; it is the relationship between our period and its epistemological configuration and this mass of statements." - Ibid., p.20. "My title THE ORDER OF THINGS was perfectly ironic. No one saw it clearly; doubtlessly because there wasn't enough play in my text for the irony to be sufficiently visible." - Ibid., p.51. "I dream of the intellectual destroyer of evidence and universalities, the one who, in the inertias and constraints of the present, locates and marks the weak points, the openings, the lines of power, who incessantly displaces himself, doesn't know exactly where he is heading nor what he'll think tomorrow because he is too attentive to the present;..." - Ibid., p.155.

Also, Foucault defines his strategy apropos of the "game" quality of present-day cultural generation and regeneration (see the first ten lines at the top of p. 174 in THE MEDIUM AND THE LIGHT, 1999): "To make a truly unavoidable challenge of the question: what can we make work, what new game can we invent?" - Foucault, FOUCAULT LIVE, p.209.

And he presents this with an emphasis, like McLuhan, on a fuller understanding of "techne": "The disadvantage of this word *techne*, I realize, is its relation to the word 'technology', which has a very specific

meaning. A very narrow meaning is given to 'technology': one thinks of hard technology, the technology of wood, of fire, of electricity. Whereas government is also a function of technology: the government of individuals, the government of souls, the government of the self by the self, the government of families, the government of children, and so on. I believe that if one placed the history of architecture back in this general history of *techne*, in this wide sense of the word, one would have a more interesting guiding concept than by considering opposition between the exact sciences and the inexact ones." -Ibid., pp.276-277 (see LETTERS OF MARSHALL McLUHAN, Selected and edited by Matie Molinaro, Corinne McLuhan, and William Toye, 1987, last paragraph on p.461 and first paragraph on p.541).

Other examples of their similar interests and tentative conclusions about the effects of the Gutenberg Galaxy:

- "Hence two problems. Power - how does it work? Is it enough that it imposes strong prohibitions in order to function effectively? And does it always move from above to below and from the center to the periphery? - Foucault, FOUCAULT LIVE, p.149 (see "From the time I came back from Fordham I was studying the corporate and political world, and paying very little attention to media." - LETTERS, p.505, and pp.4, 5, 15, 20, 60, 80, 129, 145, 182, 213, 217, 231, 255, 259, 263, and 268 in Marshall McLuhan [with Barrington Nevitt], TAKE TODAY: The Executive as Dropout, 1972).

- "Sex was, in Christian societies, that which had to be examined, watched over, confessed and transformed into discourse." - Foucault, FOUCAULT LIVE, p.138. "In any case, what I would like to study for my part, are all of these mechanisms in our society which invite, incite and force us to speak about sex." - Ibid., p.139 (see "The theme of sex happens to be funny at the moment because sex is dead. Vietnam is *not* dead and, therefore, it is not funny." - Marshall McLuhan, letter to Playboy Magazine, December, 1969 or January, 1970, p.24. And see interview with McLuhan in Miss Chatelaine Magazine, September 3, 1974, pp.58-59, 82-87, 90-91).

- "I tried to pose another problem: to discover the system of thought, the form of rationality, which since the end of the 18th century has underlain the idea

that the prison is in sum the best means, one of the most efficient and most rational, to punish infractions in a society." - Foucault, FOUCAULT LIVE, p. 280 (see THE MEDIUM IS THE MESSAGE, 1967, p.61, and McLuhan, HOT & COOL: a primer for the understanding of & a critical symposium with a rebuttal by McLuhan, edited by Gerald Emanuel Stearn, 1967, p.300 [bottom third on p.290 of paperback], and Marshall McLuhan, CULTURE IS OUR BUSINESS, 1970, p.332).

- "What I tried to do was a history of the relationships that thought maintains with the truth, the history of thought insofar as it is thought about the truth. All those who say that for me the truth doesn't exist are simple-minded." - Foucault, FOUCAULT LIVE, p.295. "I have sought to analyze how fields like madness, sexuality and delinquency could enter into a certain play of the truth, and how on the other hand, through this insertion of human practice and behavior into the play of the truth, the subject himself is effected." - Ibid., p.310 (see bottom third of p.163 in FROM CLICHÉ TO ARCHETYPE, and top of p.388 and middle of p.492 in LETTERS).

- "In the first place, I don't think there is actually a sovereign, founding subject, a universal form of subject that one could find everywhere. I am very sceptical and very hostile toward this conception of the subject. I think on the contrary that the subject is constituted through practices of subjection, or, in a more anonymous way, through practices of liberation, of freedom, as in Antiquity, starting of course from a certain number of rules, styles and conventions that are found in the culture." - Foucault, FOUCAULT LIVE, p. 313. "I would call subjectivization the process through which results the constitution of a subject, or more exactly, of a subjectivity which is obviously only one of the given possibilities of organizing a consciousness of self." - Ibid., p.330 (see p.458 in LETTERS, and Chapter One in LAWS OF MEDIA).

Ignoring the technological causes of visual space as proposed by McLuhan, ironically Foucault still finds the same patterns of cultural effects in his inventories.

However, isolating and highlighting the effects of military technologies and

organization that accompanied the Revolutionary circumstances in France at the end of the eighteenth century, Paul Virilio chooses to archetypalize the kinetic vectors in McLuhan's historical phase of visual space (the period of the phonetic alphabet up to and through the Gutenberg Galaxy and stopping at the inauguration of the Marconi Galaxy) (see pp.241-243 in THE GUTENBERG GALAXY: The Making of Typographic Man, 1962, first half of p.136 in FROM CLICHE TO ARCHETYPE, and p.31 in TAKE TODAY) as the *primum mobile* and primary effect in the history of Western media up to the electric telegraph and other contemporary accelerations of the Industrial Revolution: Commerce comes after the arrival of war in a place, the state of siege, the organization of a *glacis* around an inhabited area, etc. It doesn't need the city - the city in the sense of sedentariness, the mineralization of a building. Mercantilism is even the opposite of sedentariness: it's the stop-over, the rest between two flows.

Paul Virilio and Sylvere Lotringer, PURE WAR, 1983, p.5 (see middle of p. 343, Marshall McLuhan, UNDERSTANDING MEDIA: The Extensions of Man, 1964 [all page numbers for this text refer to the MIT edition, 1994]). But no one yet suspected that the conquest of the freedom to come and go so dear to Montaigne could, by a sleight of hand, become an *obligation to mobility*. The mass uprising of 1793 was the institution of the first *dictatorship of movement*, subtly replacing the *freedom of movement* of the early days of the revolution. Paul Virilio, SPEED AND POLITICS: An Essay on Dromology, 1986, p.30. The military class, making sure to keep the proletariat under control, will thus allow it the illusion of being able to dominate, to submerge the bourgeois fortress. Ibid., p.97. The time has come, it seems, to face the facts: revolution is movement, but movement is not a revolution. Politics is only a gear-shift, and revolution only its overdrive: war as *continuation* of politics by other means would be instead a police *pursuit* at greater speed, with other vehicles. Ibid., p.18. Military science, like History, is but a persistent perception of the kinetics of vanished bodies; inversely, bodies can appear as vehicles of history, as its dynamic vectors. Napoleon the Third claimed that for the man of war, the ability to remember is science itself. Ibid., p.34.

Subsequently, Virilio notices a change at the dawn of the Marconi Revolution

and whereas before he could substitute *glacis* for McLuhan's ground or medium, and the latest weapon for figure or content, now he sees the implosion of their dialectical interplay. This post-kinetic, or proprioceptive and tactile, condition Virilio designates as the Total War stage of the dromocratic revolution, his phrase for the phases of his archetypalized speed (see bottom of p.77 and top of p.78, middle of p.170, and bottom of p.257 in TAKE TODAY):

"For ten years I looked for elements of the European Fortress, and that's how I became aware of the space of war, of the spatial dimension of Total War." Virilio and Lotringer, PURE WAR, p.2.

"In fact, history progresses at the speed of its weapons systems." Virilio, SPEED AND POLITICS, p.68. "Let's not forget that World War One was the first truly technical war in Europe (in the United States, of course, there had been the Civil War, which was already a Total War).

Virilio and Lotringer, PURE WAR, p.9 (see Marshall McLuhan and Quentin Fiore, WAR AND PEACE IN THE GLOBAL VILLAGE: An Inventory of Some of the Current Spastic Situations that Could Be Eliminated by More Feedforward, 1968, p.36).

In the Cold War phase of Total War (see Chapter 6, Old Wars and New Overkill, of TAKE TODAY, pp.149-185, where McLuhan and Nevitt anticipate many of the themes Virilio raises),

kinetic energy becomes an obligatory, programmed art form for the tetrad-manager in Virilio's military class: "*After the war of the domestic market, the war of the military market*. It is no longer a system of consumption/production aiming at a democratic alliance, but the system of objects seeking to directly elect the military class or, more accurately, a technological and industrial development in the area of weaponry."

Virilio, SPEED AND POLITICS, p.128. "Once more, the market was created not by the object of consumption but by its vector of delivery!" Ibid., p.109.

"In short, the revolutionary figure of the worker, sketched less by the industrial system than by the military one, fills the kinetic disparity between slow war and rapid war. The full steam ahead through the mud of the nihilist Nechaiev, apostle of systematized terrorist warfare, is not a rhetorical figure but a serious technological proposition: compensate for the distortion born of

the destructive assaults necessary brevity by accelerating the rhythm of attacks. Historical evolution is then kept moving literally *by a combustion engine*!" Ibid., p.113. "With the supersonic vector (airplane, rocket, airwaves), penetration and destruction become one. The instantaneousness of action at a distance corresponds to the defeat of the unprepared adversary, but also, and especially, to the defeat of the world as a field, as distance, as matter." Ibid., p.133. "*Citizen Kane*, the most accomplished product of American civic culture (later baptized pop-culture!), is less William Randolph Hearst, the newspaper magnate who served as Orson Welles' model, than Howard Hughes, the invisible citizen. Hearst still delivered information; Hughes was content to speculate indifferently on whatever delivered it. He singlehandedly constituted the most radical critique of Fuller's and McLuhan's global theories. This completely desocialized man, who vanished from the earth, who avoided human contact for fear of germs, who was terrified by the very breath of his rare visitors, nonetheless thought only of the media, from the aerospace industry to the cinema, from gasoline to airfields, from casinos to the star system, from the design of Jane Russell's bra to that of a bomber. His existence could be considered exemplary. Hughes cared only about that which passes in transit. His life rebounded from one vector to another, as has, for two hundred years, the power of the American nation he adored. Nothing else interested him. He died in the open sky, in an airplane." Ibid., pp.108-109. "To the heavy model of the hemmed-in bourgeoisie, to the single schema of the weighty Marxist *mobil-machung* (ostensibly planned control of the movement of goods, persons, ideas), the West has long opposed the diversity of its logistical hierarchy, the utopia of a national wealth invested in automobiles, travel, movies, performances... A capitalism that has become one of jet-sets and instant-information banks, actually a whole *social illusion* subordinated to the strategy of the cold war. Let's make no mistake: whether it's the drop-outs, the beat generation, automobile drivers, migrant workers, tourists, olympic champions or travel agents, the military-industrial democracies have made every social category, without distinction, into *unknown soldiers of the order of speeds* - speeds whose hierarchy is controlled more and more each day by the State (headquarters), from the pedestrian to the rocket, from the metabolic to the technological." Ibid., pp.119-120 (see bottom of p.170 in TAKE TODAY and pp.110-111 in the Spring, 1971 issue of Explorations

[insert in University of Toronto's Varsity Graduate], No.30, titled "The Hijacking of Cities, Nations, Planets in the Age of Spaceship Earth", written by Marshall McLuhan). "In the 1960s a mutation occurs: *the passage from wartime to the war of peacetime*, to that *total peace* that others still call peaceful coexistence. The blindness of the speed of means of communicating destruction is not a liberation from geopolitical servitude, but the extermination of space as the field of freedom of political action. We only need refer to the necessary controls and constraints of the railway, airway or highway infrastructures to see the fatal impulse: the more speed increases, the faster freedom decreases. The apparatus self-propulsion finally entails the self-sufficiency of automation. What happens in the example of the racecar driver, who is no more than a worried lookout for the catastrophic probabilities of his movement, is reproduced on the political level as soon as conditions require an action in real time." Virilio, SPEED AND POLITICS, p.142 (see middle of p.149 in TAKE TODAY).

In the resonance of Total War/Total Peace (see middle of p.83 and pp. 158-159 in TAKE TODAY)

Virilio sees consequences for diverse practical areas of social and economic life similar to those noted by McLuhan:

- "The union functions, relayed by mob associations, are entirely supplanting the administration and services of the old bourgeois employer. Order reigns in the Bronx thanks to the Mafia, which is itself becoming international, aiming now at a direct collaboration with the military class, as was revealed by a recent scandal that called into question the relations between the Israeli generals and members of international crime.... The military class, increasingly distanced from its bourgeois partner, abandons the street, the highway, those outmoded vectors, to the small and middle-sized business of the protection rackets. The city unions in New York are starting to replace their members' productive activity with simple crisis management, by becoming administrators and bankers." Virilio, SPEED AND POLITICS, p. 102 (see pp.49, 94, and 211 in TAKE TODAY).

- "It is enough to hear the speeches of today's Chinese leaders about consumer goods to know that the old thinker [Mao - ed.] did no more than

delay the institution in China of the West's fearsome system of intensive growth, and whether it is conveyed by orthodox Marxism or liberalism is of little import!" Virilio, SPEED AND POLITICS, p.67 (see p.3 in the May/June, 1970, issue of The McLuhan DEW-LINE, Volume 2, No.6, titled An Interview: McLuhan on Russia).

- "The pacifists of the 1930s opposed real war, a war inscribed in its practical execution. Pacifists today oppose the tendency toward war, in other words *the war for preparation for war*. Not a hypothetical war which could begin in France, China or elsewhere, but war as scientific and technological preparation." Virilio and Lotringer, PURE WAR, p.139 (see p.152 and middle of p.153 in TAKE TODAY, and last sentence of first paragraph of p. 37 in UNDERSTANDING MEDIA).

- "In any case, the apocalypse is here. It could happen at any moment, but the interesting argument is that apocalypse is hidden in development itself, in the development of arms - that is, in the non-development of society." Virilio and Lotringer, PURE WAR, p.139 (see last sentence of penultimate paragraph of p.153 in TAKE TODAY).

- "The military class is turning into an internal super-police. Moreover, it's logical. In the strategy of deterrence, military institutions, no longer fighting among themselves, tend to fight only civilian societies - with, of course, a few skirmishes in the Third World (the role of the police played here and there by Europe - particularly France, and elsewhere by the United States at the time of Vietnam.)" Virilio and Lotringer, PURE WAR, p.94 (see last sentence of p.31 in TAKE TODAY, p.138 in THE MEDIUM IS THE MESSAGE, and penultimate paragraph of McLuhan's op-ed column in The New York Times, September 23, 1976).

- "In a social configuration whose precarious equilibrium is threatened by any ill-considered initiative, security can henceforth be likened to the absence of movement. The extended proletarianization of the suppression of wills can be likened to the suppression of gestures, for which the rise in unemployment is the best and most obvious image. We redistribute social work; we spotlight the performances of the physically and mentally handicapped, their records in

olympics for the disabled; we impose the new belief that a body's inability to move is not really a serious problem." Virilio, SPEED AND POLITICS, p. 125 (see p.33 and middle of p.261 in TAKE TODAY).

- "For in reality, Walesa is the priest's man. He's not so much a union leader as a man of faith recognized by the Pope. Glempl-Walesa form a couple and the warrior, Jaruzelski, stands alone. Thus, the conflict is between two supremacies: an imperialistic and military supremacy (Jaruzelski's) and an imperialism in the cosmic or mythical sense, which is Catholicism. If we look at recent events, the fall of Lebanon, the fall of Iran - how is it that hyper-powerful armies such as Iran's, or at least solid ones such as Lebanon's, could suddenly fall, with almost no resistance? Because they crumbled precisely from within, because of a religious conflict.... Thus, in my opinion, the Polish affair is especially original in the importance it gives the religious question with respect to the military question." Virilio and Lotringer, PURE WAR, pp.150-151 (see the second column on p.33 in McLuhan's The 80s: Living at the speed of light, MacLeans, January 7, 1980).

- "The moon and the stars are all part of the Western imperialist illusion: The world is not finite, we have conquered America, tomorrow we'll conquer the moon, etc., etc.... It's absurd." Virilio and Lotringer, PURE WAR, p.71 (see bottom of p.126 and top of p.127 in WAR AND PEACE IN THE GLOBAL VILLAGE).

- "Speed allows for progress in space, only progress in space has been identified with progress in time, in history. And that is really an abuse of language. We know very well that progress in space is not necessarily progress in time. The fact of going faster from Paris to New York doesn't make the exchanges any better. It makes them shorter. But the shortest is not necessarily the best. There again it's the same illusory ideology that when the world is reduced to nothing and we have everything at hand, we'll be infinitely happy." Virilio and Lotringer, PURE WAR, pp.68-69 (see last paragraph of p.110 in TAKE TODAY).

- "This is why the airport today has become the new city. At Dallas-Fort Worth they serve thirty million passengers a year. At the end of the century

there will be one hundred million. People are no longer citizens, they're passengers in transit. They're in circum-navigation." Virilio and Lotringer, PURE WAR, p.64.

- "For a long time the city existed just where it was. Paris was in Paris and Rome in Rome. There was a territorial and geographical inertia. Now there's an inertia in time, a *polar* inertia, in the sense that the pole is simultaneously an absolute place (for the metaphor), absolute inertia which is geographically locatable, and also an absolute inertia in the planets' movement. We're heading toward a situation in which every city will be in the same place - in time. There will be a kind of co-existence, and probably not a very peaceful one, between these cities which have kept their distance in space, but which will be telescoped in time. When we can go to the antipodes in a second or a minute, what will remain of the city? What will remain of us? The difference of sedentariness in geographical space will continue, but real life will be led in a polar inertia."

Virilio and Lotringer, PURE WAR, pp.61-62 (see pp.33-37 in Edmund Carpenter, ESKIMO REALITIES, 1973, p.72 in THE MEDIUM IS THE MESSAGE, pp.23-25 [pp.38-40 in paperback], top of p.280 [bottom of p.272 in paperback] in McLuhan: HOT & COOL, last sentence of p.156 in TAKE TODAY).

- "We must take hold of the riddle of technology and lay it on the table as the ancient philosophers and scientists put the riddle of Nature out in the open, the two being superimposed." Virilio and Lotringer, PURE WAR, p.30 (see pp.429 and 431 in LETTERS).

- "I'm saying that there's work to be done, the epistemo-technical work we were talking about before, in order to re-establish politics, at a time when technology no longer portions out matter and geographical space (as was the case in ancient democratic society), but when technology portions out time - and I would say: the depletion of time." Virilio and Lotringer, PURE WAR, p.28 (see McLuhan and Nevitt's op-ed column in The New York Times, September 21, 1974),

- "No, but in fact, the Second World War never ended. Legally, furthermore,

it's not finished. It hasn't been put out. There is no state of peace. It isn't over because it continued in Total Peace, that is in war pursued by other means. You know Clausewitz's statement: 'War is politics by other means.' I would say that the Total Peace of deterrence is Total War pursued by other means." Virilio and Lotringer, PURE WAR, p.25 (see middle of p.152 and headline at top of p.153 in TAKE TODAY).

As the Cold War is eclipsed, Virilio intuits the pentadic stage for the global military class where the Present is necessarily programmed as an art form: "If over thirty years ago the nuclear explosive completed the cycle of *spatial wars*, at the end of this century the implosive (beyond politically and economically invaded territories) inaugurates *the war of time*. In full peaceful coexistence, without any declaration of hostilities, and more surely than by any other kind of conflict, rapidity delivers us from this world. We have to face the facts: today, speed is war, the last war." Virilio, SPEED AND POLITICS, pp.138-139. "History as the extensiveness of time - of time that lasts, is portioned out, organized, developed - is disappearing in favor of the instant, as if the end of history were the end of duration in favor of instantaneousness, and of course, of ubiquity." Virilio, PURE WAR, p.46. "What we call *azimuthal equidistant projection* is the geography of time. Geography of the day by speed, and no longer a geography of the meteorological day. Already now, when you come back to Paris from Los Angeles or New York at certain times of the year, you can see, through the window, passing over the pole, the setting sun and the rising sun. You have dawn and dusk in a single window. These stereoscopic images show quite well the beyond of the geographical city and the advent of human concentration in travel time. This city of the beyond is the City of Dead Time." Ibid., p.6. "We thus find ourselves facing this dilemma: The threat of use (the second component) of the nuclear arm prohibits the terror of actual use (the third component). But for this threat to remain and allow the strategy of deterrence, we are forced to develop the threatening system that characterizes the first component: the *ill omen of the appearance of new performances for the means of communicating destruction*. Stated plainly, this is the perpetual sophistication of combat means and the replacement of the geostrategic breakthrough by the technological breakthrough, the great logistical maneuvers." Virilio, SPEED AND POLITICS, pp.146-147 (see

first paragraph of p.31 in COUNTERBLAST, and the penultimate paragraph of p.156 in TAKE TODAY). “... The continental translation that, curiously enough, we find both in the geophysician Wegener, with the drift of land masses, and in Mackinder, with the geopolitical amalgam of lands, has given way to a world-wide phenomenon of terrestrial and technological contraction that today makes us penetrate into an artificial topological universe: *the direct encounter of every surface on the globe.* The ancient inter-city duel, war between nations, the permanent conflict between naval empires and continental powers have all suddenly disappeared, giving way to an unheard-of opposition: *the juxtaposition of every locality, all matter*. The planetary mass becomes no more than a critical mass, a precipitate resulting from the extreme reduction of contact time, a fearsome friction of places and elements that only yesterday were still distinct and separated by a buffer of distances, which have suddenly become anachronistic. In *The Origin of Continents and Oceans*, published in 1915, Alfred Wegener writes that in the beginning *the earth can only have had but one face*, which seems likely, given the capacities for interconnection. In the future the earth will have but one interface... If speed thus appears as the essential fall-out of styles of conflicts and cataclysms, the current arms race is in fact only *the arming of the race toward the end of the world as distance, in other words, as a field of action*.” Virilio, *SPEED AND POLITICS*, pp.135-136. “At the close of our century, *the time of the finite world is coming to an end*; we live in the beginnings of a paradoxical *miniaturization of action*, which others prefer to baptize *automation*.” - *Ibid.*, p.140. “... Contraction in time, the disappearance of the territorial space, after that of the fortified city and armor, leads to a situation in which the notions of before and after designate only the future and the past in a form of war that causes the present to disappear in the instantaneousness of decision.” *Ibid.*, pp.140-141 (see last sentence of p.94 in TAKE TODAY). “Here we have the fearsome telescoping of elements born of the amphibious generations; the extreme proximity of parties *in which the immediacy of information immediately creates the crisis*; the frailty of reasoning power, which is but the effect of a miniaturization of action - the latter resulting from the miniaturization of space as a field of action. An imperceptible movement on a computer keyboard, or one made by a skyjacker brandishing a cookie box covered with masking tape, can lead to a catastrophic chain of events that until recently was inconceivable. We are too

willing to ignore the fact that, alongside the threat of proliferation resulting from the acquisition of nuclear explosives by irresponsible parties, there is a proliferation of the threat resulting from the vectors that cause those who own or borrow them to become just as irresponsible.” Virilio, *SPEED AND POLITICS*, pp.143-144 (see pp.149-151 in *TAKE TODAY*, and p.334 in *CULTURE IS OUR BUSINESS*).

So, since he doesn't ignore McLuhan as much as Foucault does, Virilio is able to forge a larger canvas which perceptively rebuilds and expands on the house that McLuhan constructed for clarifying political anti-environments to the global warlords.

Turning to Jean-Francois Lyotard, we find a writer who, paralleling McLuhan, celebrates non-specialist perception in art as the appropriate political mentor for revealing the crude maintenance of the centralized, industrial, hardware environment in the face of the services (not the disservices) of contemporary fragmented poly-sensuality, the product of a tactile, decentralized, software environment that Lyotard calls drift : “... Everyone knows that socialism is identical with kapitalism. Any critique, far from transcending the latter, reinforces it. What destroys it is the drift of desire, the withdrawal of cathexis, not at all where the economists look for it (the kapitalists' reluctance to invest), but the libidinal relinquishment of the system of kapital and of all its poles, is the fact that for millions of young people (irrespective of their social origin), desire no longer invests the kapitalist set-up; is that they no longer consider themselves or behave as a labor-power to be valorized with a view to exchanges, i.e. consumption, is that they locate what kapital persists in naming work, modern life, consumption, nation, family, State, ownership, profession, education, all values that they perceive as so many parodies of the one and only value, the exchange-value. *That* is a drift, affecting all civilizations on a worldwide scale.”

Jean-Francois Lyotard, *DRIFTWORKS*, 1984, p.14 (see middle of p.84 and pp.259-261 in *TAKE TODAY*, penultimate paragraph in the letter to H. A. Innis on p.222 in *LETTERS*, and p.224 in *ESSENTIAL McLUHAN*, edited by Eric McLuhan and Frank Zingrone, 1995 [all page numbers for this text refer to the House of Anansi edition]). “Driftworks in the plural, for the

question is not of leaving *one* shore, but several, simultaneously; what is at work is not one current, pushing and tugging, but different drives and tractions.” (see last paragraph of p.4 in UNDERSTANDING MEDIA, and last sentence of p.56 in THE MEDIUM IS THE MESSAGE). Nor is just one individual *embarking* here, or even a collective of individuals, but rather, as in Bosch’s Ship, a collection of fools, each fool being an exaggerated part of the normal subject (see bottom third of p.155 in FROM CLICHE TO ARCHETYPE, and last page of Edmund Carpenter [with Ken Heyman and Marshall McLuhan], THEY BECAME WHAT THEY BEHELD, 1970), libido cathected in such and such a sector of the body (see first 14 lines of p. 124 in FROM CLICHE TO ARCHETYPE), blocked up in this or that configuration of desire (see last paragraph of p.13 in Ibid.), all these fragments placed next to each other (the category of *neben*!) for an aimless voyage (see p.100 in THE MEDIUM IS THE MESSAGE, and the middle of the second column of the last page of THEY BECAME WHAT THEY BEHELD), a collection of fragments impossible to unify for it drifts with the Ship (see last sentence of p.173 in TAKE TODAY), its very drift giving the advantage of the strongest resonance now to one *Trieb*-fool, now to another, in accordance with the diversity of the times and sceneries wafted through (see last sentence of first paragraph of p.145 in Ibid.). Not at all a dislocated body, since there has never been anything but pieces of the body and there will never be a body, this wandering collection being the very affirmation of the non-body (see middle of p.144 in Ibid.). The plural, the collection of singularities, are precisely what power, kapital, the law of value, personal identity, the ID card, responsibility, the family and the hospital are bent on repressing.” Lyotard, DRIFTWORKS, p.10 (see p.109 and pp. 238-239 in TAKE TODAY, especially concerning medical institutions). “And we don’t want to destroy kapital because it isn’t rational, but because it is. Reason and power are one and the same thing. You may disguise the one with dialectics or prospectiveness, but you will still have the other in all its crudeness: jails, taboos, public weal, selection, genocide.” Lyotard, DRIFTWORKS, p.11 (see pp.78-83, 211, and 213 in TAKE TODAY, and Marshall McLuhan’s Forward to Donald DeMarco, ABORTION IN PERSPECTIVE: The Rose Palace or the Fiery Dragon, 1974, pp.iv-v).

Lyotard continues McLuhan’s project of pointing out that the artists

traditional anti-environmental role has been replaced by the Global Theater's programmed tactile environment (see p.224 in ESSENTIAL McLuhan): "The poet who does no more than express himself is completely bound by his phantasy, and being always bound by the same elements, he is not a poet. He produces a falsely figural text, the figural traces of which are but those of his phantasies."

Lyotard, DRIFTWORKS, p.77 (see bottom third of p.11 in THE INTERIOR LANDSCAPE, and bottom of pp.58 and 204 in FROM CLICHE TO ARCHETYPE). "Such are thus the fundamental modes of the connivance that desire establishes with figurality: transgression of the object, transgression of form, transgression of space." Lyotard, DRIFTWORKS, p. 65 (see last sentence of p.205 in FROM CLICHE TO ARCHETYPE).

But Lyotard reveals his awareness, as McLuhan also never stopped reminding us in his printed presentations, that his project's translation into print requires a corrective maneuver vis-a-vis the printed form: "The drift must go beyond the anchorage where this book arbitrarily interrupts it. If reason, which has been handed over to the air-conditioned totalitarianism of the very disputatious end of this century, is not to be relied upon, then its great tool, its very main-spring, its provision of infinite progress, its fertile negativity, its pains and toiling - i.e. critique - shouldn't be given credit either. Let it be said very clearly: it is untrue that a political, philosophical, artistic position is relinquished through *sublation*; it is untrue that the experiencing of a position entails the complete development of its content, its exhaustion, and thus its transcendence into another position which preserves-suppresses it, it is untrue that, in experience and discourse, the occupation of a position necessarily leads to its critique and impels you to adopt a new position which will negatively include the former one and sublimate it. This description of the dialectic of Spirit by Hegel, is also that of the capitalists getting richer and richer by Adam Smith, it is the good student's vision of life, it is in addition the thick string on which the political jumping-jacks hang their promises of happiness and with which they strangle us."

Lyotard, DRIFTWORKS, pp.11-12 (see last sentence of p.190 in WAR AND PEACE IN THE GLOBAL VILLAGE, and first sentence of Marshall McLuhan's Forward to the 1972 edition of Harold A. Innis, EMPIRE AND COMMUNICATIONS, p.v). "What is forgotten in dialectic is that one

forgets and that forgetting implies the preservation of everything, memory being but a selection.” Lyotard, DRIFTWORKS, p.12 (see bottom of p.viii, and pp.100-101 in LAWS OF MEDIA).

Similarly to McLuhan’s emphasis on the arts as meteorology, Lyotard advocates studying the arts as figures revealing the contours and rim-spins of the new pressures, or ground - shifts: “Something is always happening in the arts - now the theater, now painting, or music, or the cinema (the latter being more directly placed on the orbit of kapital, however) - which incandesces the embers glowing in the depths of society. It is depressive and nihilistic to consider the region of unreality where the forms flare up as a mere deportation camp or as a cozy shelter for irresponsible elements, socially neutralized, hence politically null; the opposite is to be understood, namely that artists want society as a whole to reach this unreality, want the repression and suppression of libidinal intensities by the so-called seriousness, which is only the torpescence of kapitalist paranoia, to be lifted everywhere, and show how to do it by working and removing the most elementary obstacles, those opposing to desire the *No* of the alleged reality, the perception of times, spaces, colors, volumes.”

Lyotard, DRIFTWORKS, pp.15-16 (see Marshall McLuhan [with Harley Parker], THROUGH THE VANISHING POINT: Space in Poetry and Painting, 1968, pp.29-31).

“But such study is not guided by the specialized critic, in any field: Critique as well is a selective activity:... This activity is deeply rational, deeply consistent with the system. Deeply reformist: the critic remains in the sphere of the criticized, he belongs to it, he goes beyond one term of the position but doesn’t alter the position of terms. And deeply hierarchical: where does his power over the criticized come from? he *knows* better? he is the teacher, the educator? he is therefore universality, the University, the State, the City, bending over childhood, nature, singularity, shadiness, to reclaim them? The confessor and God helping the sinner save his soul? This benign reformism is wholly compatible with the preservation of the authoritarian relationship. Multiplying the overturns and reversals leads nowhere. The transforming activity is underhandedly privileged in all this repair shop machinery, which is the reason why the ultra- leftist revolutionary groups and micro-groups

have failed: they had to display their maleness, their brawn, they had to keep the initiative. But the same idea of efficiency drives the bosses - high-level bureaucrats, business executives, decision-makers and officers. Do not say that unlike them, *we* know the desire of the masses (the criticized object): no one knows it, for desire baffles knowledge and power. He who pretends to know it is indeed the educator, the priest, the prince. Nothing will have changed, therefore, if while claiming to serve the desire of the masses you act according to your alleged knowledge and assume their *direction*. Where do you criticize from? Don't you see that criticizing is still knowing, knowing better? That the critical relation still falls within the sphere of knowledge, of realization and thus of the assumption of power? Critique must be drifted out of. Better still: *Drifting is in itself the end of all critique.*"

Lyotard, DRIFTWORKS, p.13 (see p.65 in UNDERSTANDING MEDIA, and pp.238-239 in THROUGH THE VANISHING POINT).

Just as McLuhan discovered tactility as the prime component in most of the arts of the twentieth century, so Lyotard features those artists who mime tactility, which he names the figural, as of primary political importance: "In fact, the criteria of reality are those of communication - objects are real to the extent that they are communicable on two levels: on the level of language and on that of practice. It is obvious, although not always explicitly stated, that Freud considers reality to be fundamentally social, while he at the same time always keeps it in quotation marks. This reality is the little, even the very little reality. Which means that this bound set of perceptions, signifiable in words, exchangeable by gestures, has gaps, is lacunary; there are regions that remain outside reach, that cannot be approached, that are utterly unrecognized. There are words that are unpronounceable because they lack signification, perceptions that are impossible, things that cannot be seen: thus, there are screens. This is the aspect I would call Dada-reality: reality insofar as the fabric that holds it together is missing. It is obviously in these regions where something is lacking, either the transformative experience or the words to exchange (because they are impossible to say), that works of art can take place. Figures, in Freudian terms, (not only image-figures in the plastic sense, but also three or one-dimensional figures; a movement can be a figure, so can a music) - that is to say objects that do not exist according to the two criteria just stated, that are not transformable, or at least whose reality is not

measurable by their transformability - are essentially not linguistically communicable. (The commonplaces I am running through rapidly underlie Freud's characterization of dreams and the primary process, even if they are not explicitly stated.) These objects can be characterized as figures precisely to the extent that they belong to an order of sense - to an order of existence - which is neither that of language, nor of practical transformation. I tentatively suggest calling this order an order of figure, not in the sense of figurative, but in a sense I would like to call figural." Lyotard, DRIFTWORKS, pp.69-70 (see top of p.95 in The Emperor's Old Clothes, an essay by Marshall McLuhan in VISION + VALUE SERIES, Gyorgy Kepes, ed., 1966, and bottom of p.199 and top of p.200 in FROM CLICHE TO ARCHETYPE). "What struck me in May 1968 was this: something happened precisely to the extent that this type of discourse, if it kept on being produced, at least had absolutely no relation whatsoever with the real unsettling of things; it even had an inverse relation to it. The people who believed in their own political awareness continued to hold this kind of discourse, and it was easy to see that their utterances, very far from promoting the real transformation of things, helped to keep them as they stood. The true problem, politically as well as from an artistic point of view (and only anti-art is possible), is the inverse. The system, as it exists, absorbs every consistent discourse; the important thing is not to produce a consistent discourse but rather to produce figures within reality. The problem is to endure the anguish of maintaining reality in a state of suspicion through direct practices; just like, for example, a poet is a man in a position to hold language - even if he uses it - under suspicion, i.e. to bring about figures which would never have been produced, that language might not tolerate, and which may never be audible, perceptible, for us." Lyotard, DRIFTWORKS, p.79 (see middle of first paragraph of p.448, bottom of p.460, and last sentence of first paragraph of p.517 in LETTERS). "An artist is someone who presents problems of forms. The essential element, the only decisive one, is form. Modifying social reality is not important at all if it aims at putting back into place something that will have the *same form*. What is important, above all, is to cease sympathizing with artists, what must be understood is the true problem they are putting before political people. There is more revolution, even if it is not much, in American Pop art than in the discourse of the Communist party." Lyotard, DRIFTWORKS, p.83 (see bottom of p.1 in THE GUTENBERG

GALAXY, p.65 in UNDERSTANDING MEDIA, top of p.224 in ESSENTIAL McLUHAN, middle of p.243 in THROUGH THE VANISHING POINT). "It is on this very level that junctions can occur between students and workers, on this level of an absolutely practical art which consists, precisely, in deconstructing not the material, plastic screen of representation - not an automobile as in the case of pop artists - but the ideological screen of representation, a subway station as a social space, for example, peoples relation to the public transport system taking them to work, their relation to subway tickets, their relation with one another, or with the hierarchical organization of a workshop, a factory, or a university, etc. This has a direct connection with art, not with the avant-garde, but with anti-art, with that capacity to seek out and to maintain forms that are neither realist forms at the level of perception, not signifiable within an articulated discourse." Lyotard, DRIFTWORKS, p.81 (see Marshall McLuhan [with Kathryn Hutchon and Eric McLuhan], MEDIA, MESSAGES & LANGUAGE: The World as Your Classroom, pp.xix-xxv, and bottom third of p.100 in TAKE TODAY).

Following in McLuhan's footsteps as a phenomenologist (see top of p.540 in LETTERS, and pp.60-66 in LAWS OF MEDIA), Lyotard does not propose tactility, or silence, *per se* as an aesthetic program for seduction: I believe that the true art-phantasy relation is not direct; the artist does not externalize systems of internal figures, he is someone who undertakes to free *from* phantasy, *from* the matrix of figures whose heir and whose locus he is, what really belongs to the primary process, and is not a repetition, not a graphy."

Lyotard, DRIFTWORKS, p.74 (see Fantasy News, Psychedelic TV section of Marshall McLuhan's interview with Mark Gerzon in WORLD PAPER, Volume 1, No. 1, January, 1979). When this is resorted to, you have a work that is no longer jammed by phantasy, that is no longer blocked in a repetitive configuration, but on the contrary one that opens upon other possibilities, that *plays*, that sets itself up in the inner-world: this is not the world of personal phantasy (and neither, obviously, is it that of reality); this is an *oscillating* work, in which there is room for the play of forms, a field liberated by the reversal of phantasy, but which still rests upon it. This has nothing to do with aesthetics and it does not necessarily produce hermetic works." Lyotard,

DRIFTWORKS, p.75 (see middle of p.223 in LETTERS).

Citing Freud as a media analyst, Lyotard limns McLuhan's method of corporate psychiatry: "Freud tells the hysteric: you are seeing things, you are fantasizing, tell me what you see, as you tell me about it, the consistency of the images will melt away. So there is a theater of images, of which the hysteric is the spectator, on the couch. Upon this, Freud constructs a second set-up where the hysteric is an actress, and the analyst, the invisible listener; radio comes after theater, more precisely, a radio hooked up to the auditorium, the listener not seeing the stage himself, as in radio commentary of boxing matches, football games. The charges invested in images will be *spent*, but in words. These words (the patients, the commentators) will butt against the analysts' silence: energizing silence, of course - these words given as a request for love will remain unanswered. If the analyst were to reply, it would be as if he himself had stepped out onto the stage. Far from dissolving the phantasy, this would reinforce it, which is what happens in everyday ordinary life, where the hysteric has eyes and does not hear. But here, in Doctor Freud's office, what is keeping silent in and being kept silent by the phantastic mise-en-scene must be heard. The analysts silence *must* put an end (?) to the silence of the hysteric. Obliteration of the operations of production in the symptom, exhibition of these same operations in the analysis: two silences with inverse functions; the silence of noise, of the imaginary, the silence of structure, of the symbolical; and like a springboard from one to the other, the silence of the analyst. All three the complementary elements of a single device, that of analysis. The words the patient addresses to the analyst carry the murmur of the affects; they meet with the doctors silence, thanks to which they will be distributed throughout the pure silence of *ratio*, which separates distinctive units (phonemes) and allows us to recognize the verbal signifier and to communicate. This is why the scene described to the analyst under these conditions will be freed, put back into circulation, liquidated, redeemed, says Freud. The phantom-phantasy that shackled it will be removed; the true God, Logos, will triumph." Lyotard, DRIFTWORKS, pp.102-103 (see bottom of p.45 in THE GUTENBERG GALAXY, and p.225 in ESSENTIAL McLUHAN).

Lyotard is writing at the beginning of the pentadic phase of technology's

evolution when there is complete fusion between our bodies (first nature) and our technological extensions (second nature), creating the circumstances of an ersatz autonomy for the after-image of one or the other. Earlier, McLuhan wrote from this vantage but emphasized the autonomous movements of second nature (the media) and consciously suppressed first nature, as Baudrillard did later, because the printed medium dictates an arbitrary choice, or figure. Lyotard emphasizes the metamorphoses of an autonomous first nature (desire) as his necessary printed figure: “There is in every text a principle of displaceability (*Verschiebbarkeit*, said Freud), on account of which the written work induces other displacements here and there (within authors and readers both), and can thus never be but the snapshot of a mobile, itself a referred, secondary unity, under which currents flow in all directions. By collecting texts and making them a book, one encloses them in a protective membrane and they become part of a cell which will defend its unity; my aim, in presenting the essays collected here, is to break up this unity.” Lyotard, DRIFTWORKS, p.9. “The desire underlying and informing institutions composes set-ups which are energetic investments in the body, in language, in the earth and the city, in the difference of sexes and ages, etc. Kapitalism is one of these set-ups.” Ibid., p.13. “Art, in the critique factory, is not a workshop for the making of tools. The most modern trends - American abstracts, pop and hyper-realism in painting and sculpture, poor and concrete musics (Cage’s above all), free choreographies (Cunningham’s), intensity theaters (if they exist) - place critical thought and negative dialectics before a considerable challenge: the works they produce are affirmative, not critical. They aver a new position of desire, the traces of which have just been referred to. The philosopher and the politician (whose thinking you are about to consider) would have been content, after Adorno, with using the arts as formal reversal matrices; they are nonetheless required to have an eye and an ear, a mouth and a hand for the new position, which is the end of all critique. They might find this difficult: what if it were their own end as well.” Ibid., pp.16-17 (see bottom third of p.243 in THROUGH THE VANISHING POINT, and last quote from Marshall McLuhan in TIME magazine, August 9, 1968, p.40).

Lyotard also intuits McLuhan’s expose of the tetrad-manager: “Possibility of the impossibles, occupation of a single space by several bodies or of a

single body by several positions, simultaneity of the successive, consequently, approach of a timelessness which will be the chronical pendant of this topological space.” Lyotard, DRIFTWORKS, p.68. “A critical political party also inhabits the silence of the signifier, the silence of domination; it considers the surface of experience as appearance, mere symptom, and even if it decides not to take power, power is already taken by it to the extent that it repeats this device of appearance and effacement, of theater, of politics as a *domaine*. Even should tonal resolution be deferred endlessly, this party will be a tragic political party, it will be the negative dialectic of the *Aufklärung*; it is the Frankfurt School, demythologized, Lutheran, nihilistic Marxism.” Ibid., pp.108-109 (see p.22 in THE MEDIUM IS THE MESSAGE, and bottom of first column in McLuhan’s op-ed in The New York Times, July 29, 1973). “Transposed to *Kapital*: it is *produktion* no longer of products, but of productions; *konsumtion* no longer of objects, but of consumptions; *musikke* no longer of sounds, but of musics. So that the question is: the silence heard in noise, *immediately*, *suddenly*, is it not still dominated by the unheard silence of the Komposer-organizer, capital? *Kapital*, is it not the stage director of noises and silences themselves, as mise-en-scene? Destroy the work, but also destroy the work of works and *non-works*, kapitalism as museum, as memory of everything that is possible. De-memorize, like the unconscious.” Lyotard, DRIFTWORKS, pp.109-110 (see bottom third of middle column of p.89 in THE CoEVOLUTION QUARTERLY, Winter 1977/78, bottom of p.186 to top of p.188 in THE INTERIOR LANDSCAPE, and middle of p.145 in TAKE TODAY). “I would be tempted to say that what pleases us now is what disconcerts us, and in this sense we are really in Freud’s death drive. What we are interested in is the dimension of otherness, alteration. There is a constant displacement and this displacement as such is what we are interested in, the fact that we are disconcerted, put out of time, caught on the wrong foot... Yes, the absence of a locus. Pontalis spoke of a Freudian utopia in the strong sense of the word. He meant that there was a non-locus. Well, what pleases us disconcerts us because it points to a non-locus.” Lyotard, DRIFTWORKS, pp.32-33 (see last sentence of p.71 in the interview with Marshall McLuhan, Toronto Daily Star, May 6, 1967).

And this brings us to the vortex of Deleuze and Guattari. They are not timid

in confronting the pentadic features of the miniaturization of the post-Global Theater hologram and recognize the ambivalence it creates for all institutions, new, old and future ones, including the medium of print itself. “A book has neither subject nor object; it is made up of variously formed materials, of very different dates and speeds. As soon as a book is attributed to a subject, this working of materials and the exteriority of their relations is disregarded (see middle of p.33, top of p.37, and pp.56-59 in THE INTERIOR LANDSCAPE). A beneficent God is invented for geological movements. In a book, as in everything else, there are lines of articulation or segmentation, strata, territorialities; but also lines of flight, movements of deterritorialization and of destratification. The comparative rates of flow along these lines produce phenomena of relative slowness and viscosity, or alternatively of precipitation and rupture. All this, these lines and measurable speeds, constitute an *arrangement* (*agencement*). A book is such an arrangement, and as such unattributable. It is a multiplicity - but we still don’t know what the multiple implies when it ceases to be attributed, that is to say, when it is raised to the status of a substantive. A machinic arrangement (*agencement machinique*) is oriented toward the strata that undoubtedly make of it a kind of organism, either a signifying totality or a determination attributable to a subject, but it is oriented no less toward a *body without organs* that never ceases to break down the organism, causing a-signifying particles to pass and circulate freely, pure intensities, and causing the attribution to itself of subjects to which it allows no more than a name as trace of an intensity.” Gilles Deleuze and Felix Guattari, ON THE LINE, 1983, pp.2-3 (see bottom of p.36, bottom third of p.144 in TAKE TODAY, and top of p.479 in LETTERS). “Writing has nothing to do with signifying, but with land-surveying and map-making, even of countries yet to come.” Deleuze and Guattari, ON THE LINE, p.5 (see top paragraph in last column of p.4 in CAMPUS MAGAZINE, Volume 6, No. 3, October/November 1973). “The map does not reproduce an unconscious closed on itself; it constructs it. It contributes to the connection of fields, the freeing of bodies without organs, and their maximal access onto the plane of consistency. It becomes itself part of the rhizome. The map is open, connectable in all its dimensions, and capable of being dismantled; it is reversible, and susceptible to constant modification. It can be torn, reversed, adapted to montages of every kind, taken in hand by an individual, a group, or a social formation. It

can be drawn on a wall, conceived of as a work of art, constructed as a political action or as a meditation. Perhaps one of the most important characteristics of the rhizome is that it always has multiple entrances.” Deleuze and Guattari, ON THE LINE, pp.25-26 (see p.120 in THE MEDIUM IS THE MESSAGE). “The ideal for a book would be to display everything on such a plane of exteriority, on a single page, on the same shoreline: lived events, historical determinations, received concepts, individuals, groups and social formations.” Deleuze and Guattari, ON THE LINE, p.17 (see bottom third of p.121 to top third of p.126 in FROM CLICHE TO ARCHETYPE). “Evolutionary schemes are no longer restricted to models of arborescent descent that go from the least to the most differentiated, but may follow a rhizome that operates immediately within the heterogeneous and jumps from one already differentiated line to another.” Deleuze and Guattari, ON THE LINE, p.21 (see second paragraph of p.427, and p.428 in LETTERS).

Understanding the **ad hoc** nature of the constantly improvised features of a networking crucible, Deleuze and Guattari cite the rhizome as the appropriate model for the digital environments’ inveterate simultaneous embrace of the centralizing and decentralizing characteristics that McLuhan stigmatized for the previously programmed, automated society (see MacLEANS magazine, Volume 87, No. 1, January, 1974, p.27). “To be a rhizomorph is to produce stems and filaments that look like roots, or better still, to connect with roots by penetrating into the trunk, even if it means having them serve strange new functions. We are tired of the tree. We must no longer put our faith in trees, roots, or radicles; we have suffered enough from them. The whole arborescent culture is founded on them, from biology to linguistics. On the contrary, only underground stems and aerial roots, the adventitious and the rhizome are truly beautiful, loving, or political. Amsterdam, a city not rooted at all, a rhizome-city with its canal- stems, where utility is linked to the greatest folly, in its relationship with a commercial war machine.” Deleuze and Guattari, ON THE LINE, p.33 (see middle of p.49, and middle of p.94 in TAKE TODAY, and middle of second column of p.69 in FORCES magazine, Hydro-Quebec, No. 22, 1973). “Arborescent systems are hierarchical systems comprised of centers of significance and subjectivization, of autonomous centers like organized memories. The

corresponding models are such that an element receives information only from a superior unity, and a subjective affect only from pre-established connections. This is easily seen in current problems with data processing and electronic computers, which still retain the oldest models of thought insofar as they confer power on a central organ or memory.... The authors contrast these centered systems with a-centered systems, networks of finite automata, where communication occurs between any two neighbors, where channels or links do not pre-exist, where individuals are all interchangeable and are defined only by their state at a given moment, in such a way that local operations are co-ordinated and the final overall result is synchronized independently of any central authority.”

Deleuze and Guattari, ON THE LINE, pp.36 and 38 (see top of p.110 in TAKE TODAY, and pp.356-357 in UNDERSTANDING MEDIA). “The margin for manoeuvre in psychoanalysis is thus very limited. There is always a General or a boss in psychoanalysis (General Freud), as there is in its object. Alternatively, by treating the unconscious as an a-centered system, that is, as a machinic network of finite automata (rhizomes), schizo-analysis reaches another state altogether of the unconscious.” Deleuze and Guattari, ON THE LINE, pp.39-40 (see middle of p.223 and top third of p.239 in UNDERSTANDING MEDIA, top half of p.86, middle of p.99, pp.161-162, bottom of p.199 and top of p.200 in FROM CLICHE TO ARCHETYPE, bottom third of p.22 in TAKE TODAY, and pp.67 and 83 in THE GLOBAL VILLAGE: Transformations in World Life and Media in the 21st Century [with Bruce Powers], 1989). “More still, it is American literature, and before that English, that has indicated this sense of the rhizomatic, that has known how to move between things, to institute a logic of *and*, to overthrow ontology and to dismiss the foundations, to nullify beginnings and endings. It has known how to be pragmatic. The middle is not at all an average - far from it - but the area where things take on speed. *Between* things does not designate a localizable relation going from one to the other and reciprocally, but a perpendicular direction, a transversal movement carrying away the one *and* the other, a stream without beginning or end, gnawing away at its two banks and picking up speed in the middle.” Deleuze and Guattari, ON THE LINE, p.58 (see pp.6-7 in The McLuhan DEW-LINE, Volume 1, No. 4, October, 1968, top third of p.136, bottom third of p.155, and photograph on p.156 in FROM CLICHE TO ARCHETYPE, middle of p.81 in TAKE

TODAY, and first full sentence at the top of p.371, bottom half of p.392, p. 461, and p.504 in LETTERS). “America should be considered a place apart. Obviously it is not exempt from domination by trees and the search for roots. This is evident even in its literature, in the quest for a national identity, and even for a European ancestry or genealogy (Kerouac sets off in search of his ancestry). Nevertheless, everything of importance that has happened and that is happening proceeds by means of the American rhizome: the beatniks, the underground, the subterranean mobs and gangs - all successive lateral shoots in immediate connection with an outside. Hence the difference between an American book and a European book, even when the American sets off pursuing trees. A difference in the very conception of the book: Leaves of Grass.” Deleuze and Guattari, ON THE LINE, pp.42-43 (see pp.74-75 in THE MEDIUM IS THE MESSAGE, middle of p.457 in LETTERS, p.44 and top of p.45 in TAKE TODAY, p.66 in FORCES magazine, Hydro-Quebec, No. 22, 1973, and first column of p.87 in THE CoEVOLUTION QUARTERLY, Winter 1977/78). “The law of the State is not the law of All or Nothing (State-societies *or* counter-State societies), but that of interior and exterior. The State is sovereignty. But sovereignty only reigns over what it is capable of internalizing, of appropriating locally. Not only is there no universal State, but the outside of States cannot be reduced to foreign policy, that is to a set of relations among States. The outside appears simultaneously in two directions: huge worldwide machines branched out over the entire *ecumenon* at any given moment, which enjoy a large measure of autonomy in relation to the States (for example, commercial organization of the multinational type, or industrial complexes, or even religious formations like Christianity, Islam, certain prophetic or messianic movements, etc.); but also the local mechanisms of bands, margins, minorities, which continue to affirm the rights of segmentary societies in opposition to the organs of State power. The modern world can provide us today with particularly well- developed images of these two directions, in the way of worldwide ecumenical machines, but also a neoprimitivism, a new tribal society as Marshall McLuhan describes it. These directions are equally present in all social fields, in all periods. It even happens that they become partially merged. For example, a commercial organization is also a band of pillage, or piracy, for part of its course and in many of its activities; or it is in bands that a religious formation begins to operate. What becomes clear is that bands, no less than

worldwide organizations, imply a form irreducible to the State, and that this exteriority necessarily presents itself as that of a diffuse and polymorphous war machine. It is a *nomos* very different from the law.” Gilles Deleuze and Felix Guattari, *NOMADOLOGY: The War Machine*, 1986, pp.15-16 (see pp.120-124 in *THE GUTENBERG GALAXY*, pp.60-61 in *FROM CLICHE TO ARCHETYPE*, bottom half of p.318, top of p.360, bottom of p.361, top half of p.368, p.468, and bottom of p.515 in *LETTERS*, and pp.38-43 in *TAKE TODAY*). “The State-form, as a form of interiority, has a tendency to reproduce itself, remaining identical to itself across its variations and easily recognizable within the limits of its poles, always seeking public recognition (there is no masked State). But the war machines form of exteriority is such that it exists only in its own metamorphoses; it exists in an industrial innovation as well as in a technological invention, in a commercial circuit as well as in a religious creation, in all the flows and currents that only secondarily allow themselves to be appropriated by the State. It is not in terms of independence, but of coexistence and competition *in a perpetual field of interaction*, that we must conceive of exteriority and interiority, war machines of metamorphosis and State apparatuses of identity, bands and kingdoms, megamachines and empires. The same field circumscribes its interiority in States, but describes its exteriority in what escapes States or stands against States.” Deleuze and Guattari, *NOMADOLOGY*, pp.16-17 (see *The McLuhan DEW-LINE*, Volume 1, No. 8, February, 1969, and p.68, top third of p.112, p.180, and top third of p.322 in *CULTURE IS OUR BUSINESS*). “One no longer goes from the straight line to its parallels, in a lamellar or laminar flow, but from a curvilinear declination to the formation of spirals and vortices on an inclined plane: the greatest slope for the smallest angle. From *turba* to *turbo*”: in other words from bands or packs of atoms to the great vortical organizations. The model is a vortical one; it operates in an open space throughout which thing-flows are distributed, rather than plotting out a closed space for linear and solid things. It is the difference between a *smooth* (vectorial, projective or topological) space and a *striated* (metric) space: in the first case space is occupied without being counted, while in the second case space is counted in order to be occupied.” Deleuze and Guattari, *NOMADOLOGY*, pp.18-19 (see pp.214-216 in *ESSENTIAL McLUHAN*, bottom quarter of p.7 in *CULTURE IS OUR BUSINESS*, and middle of p.5 and middle of p.273 in *TAKE TODAY*).

In the style of McLuhan, Deleuze and Guattari offer nine dialectics as exercises to prepare their readers for a surprise:

1. “Chess is indeed a war, but an institutionalized, regulated, coded war, with a front, a rear, battles. But what is proper to Go is war without battle lines, with neither confrontation nor retreat, without battles even: pure strategy, while chess is a semiology. Finally, the space is not at all the same: in chess, it is a question of arranging a closed space for oneself, thus of going from one point to another, of occupying the maximum number of squares with the minimum number of pieces. In Go, it is a question of arraying oneself in an open space, of holding space, of maintaining the possibility of springing up at any point: the movement is not from one point to another, but becomes perpetual, without aim or destination, without departure or arrival. The smooth space of Go, as against the striated space of chess. The **nomos** of Go against the State of chess, **nomos** against **polis**. The difference is that chess codes and decodes space, while Go proceeds altogether differently territorializing or deterritorializing it (make the outside a territory in space; consolidate that territory by the construction of a second, adjacent territory; deterritorialize the enemy by shattering his territory from within; deterritorialize oneself by renouncing, by going elsewhere...). Another justice, another movement, another space-time.”

Deleuze and Guattari, *NOMADOLOGY*, p.4 (see top half of second column of p.263 in *ESSENTIAL McLUHAN*, and first two sentences at top of p.227 in *TAKE TODAY*).

2. “Packs, bands, are groups of the rhizome type, as opposed to the arborescent type which centers around organs of power. That is why bands in general, even those engaged in banditry or high society life, are metamorphoses of a war machine that differs formally from all State apparatuses or their equivalents, which, on the contrary, structure centralized societies. One certainly would not say that discipline is what defines a war machine: discipline becomes the characteristic required of armies when the State appropriates them. But the war machine answers to other rules. We are of course not saying that they are better, only that they animate a fundamental indiscipline of the warrior, a questioning of hierarchy, perpetual blackmailing

by abandonment or betrayal, and a very volatile sense of honor, all of which, once again, impedes the formation of the State.” Deleuze and Guattari, *NOMADOLOGY*, p.13 (see p.239 in *CULTURE IS OUR BUSINESS*, and bottom third of p.20 in *TAKE TODAY*).

3. “But it needs it in a very different form, because the State needs to subordinate hydraulic force to conduits, pipes, embankments which prevent turbulence, which constrain movement to go from one point to another, and space itself to be striated and measured, which makes the fluid depend on the solid, and flows proceed by parallel, laminar layers. The hydraulic model of nomad science and the war machine, on the other hand, consists in being distributed by turbulence across a smooth space, in producing a movement that holds space and simultaneously affects all of its points, instead of being held by space in a local movement from one specified point to another. Democritus, Menaechmus, Archimedes, Vauban, Desargues, Bernoulli, Monge, Carnot, Poncelet, Perronet, etc.: in each case a monograph would be necessary to take into account the special situation of these savants whom State science used only after restraining or disciplining them, after repressing their social or political conceptions. (p.21)... This opposition, or rather this tension- limit between the two kinds of science - nomad, war-machine science and royal, State science - reappears at different moments, on different levels. (p.22)... What we have, rather, are two formally different conceptions of science, and, ontologically, a single field of interaction in which royal science is perpetually appropriating the contents of vague or nomad science, and nomad science is perpetually releasing the contents of royal science. At the limit, all that counts is the constantly moving borderline. (p.28) (see first column of p.5 in *TV GUIDE*, September, 1978)... In any case, if the State is always finding it necessary to repress the nomad and minor sciences, if it opposes vague essences and the operative geometry of the trait, it does so not because the content of these sciences is inexact or imperfect, or because of their magic or initiatory character, but because they imply a division of labor opposed to the norms of the State. (p.30)... In the field of interaction of the two sciences, the ambulant sciences confine themselves to *inventing problems* the solution of which is linked to an entire set of collective, nonscientific activities, but the *scientific solution* of which depends, on the contrary, on royal science and the way it has transformed the problem by

introducing it into its theorematic apparatus and its organization of work. This is somewhat like intuition and intelligence in Bergson, where only intelligence has the scientific means to solve formally the problems posed by intuition, problems that intuition would be content to entrust to the qualitative activities of a humanity engaged in *following* matter...” (p.40) Deleuze and Guattari, NOMADOLOGY, pp.21-40 (see bottom third of p.27 and top third of p.28 in THE INTERIOR LANDSCAPE, p.271 in THE GUTENBERG GALAXY, and top third of p.119 in FROM CLICHE TO ARCHETYPE).

4. “In modern States, the sociologist succeeded in replacing the philosopher (as for example when Durkheim and his disciples set out to give the republic a secular model of thought). Even today, psychoanalysis lays claim to the role of *Cogitatio universalis* as the thought of the Law, in a magical return. And there are quite a few other competitors and pretenders. Noology, which is distinct from ideology, is precisely the study of images of thought, and their historicity. In a sense, it could be said that all this has no importance, that thought has never had anything but laughable gravity. But that is all it requires: for us not to take it seriously. Because that makes it all the easier for it to think for us, and to be forever engendering new functionaries. Because the less people take thought seriously, the more they think in conformity with what the State wants. Truly, what man of the State has not dreamed of that paltry impossible thing - to be a thinker? But noology is confronted by counterthoughts, which are violent in their acts, discontinuous in their appearances, and the existence of which is mobile in history. These are the acts of a private thinker, as opposed to the public professor: Kierkegaard, Nietzsche, or even Chestov... Wherever they dwell, it is the steppe or the desert. They destroy images.” Deleuze and Guattari, NOMADOLOGY, pp. 43-44 (see bottom half of p.247 in THE GUTENBERG GALAXY, and middle of p.184 in FROM CLICHE TO ARCHETYPE).

5. “The *nomos* is the consistency of a fuzzy aggregate: it is in this sense that it stands in opposition to the law or the *polis*, as the backcountry, a mountainside or the vague expanse around a city (either nomos or polis). There is therefore, and this is the third point, a significant difference between the spaces: sedentary space is striated, by walls, enclosures and roads

between enclosures, while nomad space is smooth, marked only by traits that are effaced and displaced with the trajectory. Even the lamella of the desert slide over each other, producing an inimitable sound. The nomad distributes himself in a smooth space, he occupies, inhabits, holds that space; that is his territorial principle. It is therefore false to define the nomad by movement. Toynbee is profoundly right to suggest that the nomad is on the contrary *he who does not move*. Whereas the migrant leaves behind a milieu that has become amorphous or hostile, the nomad is one who does not depart, does not want to depart, who clings to the smooth space left by the receding forest, where the steppe or the desert advance, and who invents nomadism as a response to this challenge. Of course, the nomad moves, but while seated, and he is only seated while moving (the Bedouin galloping, knees on the saddle, sitting on the soles of his upturned feet, a feat of balance). The nomad knows how to wait, he has infinite patience. (p.51)... The nomad is there, on the land, wherever there forms a smooth space that gnaws, and tends to grow, in all directions. The nomad inhabits these places, he remains in them, and he himself makes them grow, for it has been established that the nomad makes the desert no less than he is made by it (see middle of p.443 in LETTERS, first italicized sentence at bottom of p.82, and last sentence on p.205 in TAKE TODAY). He is a vector of deterritorialization. He adds desert to desert, steppe to steppe, by a series of local operations the orientation and direction of which endlessly vary. The sand desert does not only have oases, which are like fixed points, but also rhizomatic vegetation that is temporary and shifts location according to local rains, bringing changes in the direction of the crossings. The same terms are used to describe ice deserts as sand deserts: there is no line separating earth and sky; there is no intermediate distance, no perspective or contour, visibility is limited; and yet there is an extraordinarily fine topology that does not rely on points or objects, but on haecceities, on sets of relations (winds, undulations of snow or sand, the song of the sand or the creaking of ice, the tactile qualities of both); it is a tactile space, or rather haptic, a sonorous much more than a visual space... (p.53)” Deleuze and Guattari, NOMADOLOGY, pp.51-53 (see top half of second column of p.71 in the interview with Marshall McLuhan, Toronto Daily Star, May 6, 1967, and p.198 in FROM CLICHE TO ARCHETYPE).

6. “It is in State armies that the problem of the treatment of large quantities

arise, in relation to other matters; but the war machine operates with small quantities that it treats using numbering numbers. These numbers appear as soon as one distributes something in space, instead of dividing up space or distributing space itself. The number becomes a subject. The independence of the number in relation to space is not a result of abstraction, but of the concrete nature of smooth space, which is occupied without itself being counted. The number is no longer a means of counting or measuring, but of moving: it is the number itself that moves through smooth space.” Deleuze and Guattari, *NOMADOLOGY*, pp.65-66 (see bottom half of p.109 in *UNDERSTANDING MEDIA*).

7. “Weapons and weapon handling seem to be linked to a free action model, and tools to a work model. Linear displacement, from one point to another, constitutes the relative movement of the tool, but it is the vortical occupation of a space that constitutes the absolute movement of the weapon. It is as though the weapon were moving, self-propelling, while the tool is moved. (p. 79)... What effectuates a free action model is not the weapons in themselves and in their physical aspect, but the war machine assemblage as the formal cause of the weapons. And what effectuates the work model is not the tools, but the work machine assemblage as the formal cause of the tools. When we say that the weapon is inseparable from a speed-vector, while the tool remains linked to conditions of gravity, we are claiming only to signal a difference between two types of assemblage, a distinction that holds even if in the assemblage proper to it the tool is abstractly faster, and the weapon abstractly more weighty. The tool is by essence tied to a genesis, a displacement and an expenditure of force whose laws reside in work, while the weapon concerns only the exercise or manifestation of force in space and time, in conformity with free action. The weapon does not fall from the sky, and obviously assumes production, displacement, expenditure and resistance. But this aspect relates to the common sphere of the weapon and the tool, and does not yet concern the specificity of the weapon, which only appears when force is considered in itself, when it is no longer linked to anything but the number, movement, space or time, or *when speed is added to displacement*. Concretely, a weapon as such does not relate to the Work model, but to the Free Action model, with the assumption that the conditions of work are fulfilled elsewhere. In short, from the point of view of force, the

tool is tied to a gravity-displacement, weight-height system; the weapon to a speed-**perpetuum mobile** system (it is in this sense that it can be said that speed in itself is a weapons system. (pp.80-81)” Deleuze and Guattari, NOMADOLOGY, pp.79-81 (see bottom of p.87 to top half of p.90 in LAWS OF MEDIA, and bottom half of p.510 in LETTERS).

8. “**Metallurgy in itself constitutes a flow necessarily confluent with nomadism.** (p.90)... Matter and form have never seemed more rigid than in metallurgy; and yet the succession of forms tends to be replaced by the form of a continuous development, the variability of matters tends to be replaced by the matter of a continuous variation. If metallurgy has an essential relation with music, it is not only by virtue of the sounds of the forge, but of the tendency within both arts to bring into its own, beyond separate forms, a continuous development of form, and beyond variable matters, a continuous variation of matter: a widened chromaticism sustains both music and metallurgy; the musical smith was the first transformer. In short, what metal and metallurgy bring to light is a life inherent to matter, a vital state of matter as such, a material vitalism that doubtless exists everywhere but is ordinarily hidden or covered, rendered unrecognizable, dissociated by the hylomorphic model. Metallurgy is the consciousness or thought of the matter-flow, and metal the correlate of this consciousness. As expressed in panmetallism, metal is coextensive to the whole of matter, and the whole of matter to metallurgy. Even the waters, the grasses and varieties of wood, the animals are populated by salts or mineral elements. Not everything is metal, but metal is everywhere. Metal is the conductor of all matter. The machinic phylum is metallurgical, or at least has a metallic head, as its itinerant probe-head or guidance device. And thought is born more from metal than from stone: metallurgy is minor science in person, vague science or the phenomenology of matter. The prodigious idea of **Nonorganic Life** - the very same idea Worringer considered the barbarian idea **par excellence** - was the invention, the intuition of metallurgy. Metal is neither a thing nor an organism, but a **body** without organs. (pp.102-103)” Deleuze and Guattari, NOMADOLOGY, pp.90-103.

9. “**War does not necessarily have the battle as its object, and more importantly, the war machine does not necessarily have war as its object,*

although war and the battle may be its necessary result (under certain conditions).* (pp.109-110)... This explains Clausewitz's vacillation when he establishes at one point that total war remains a war conditioned by the political aim of States, and at another that it tends to effectuate the Idea of unconditioned war. In effect, the aim remains essentially political and determined as such by the State, but the object itself has become unlimited. We could say that the appropriation has changed direction, or rather that States tend to unleash, reconstitute, an immense war machine of which they are no longer anything more than the opposable or apposed parts. This worldwide war machine, which in a way reissues from the States, displays two successive figures: first, that of fascism, which makes war an unlimited movement with no other aim than itself; but fascism is only a rough sketch, and the second, post-fascist, figure is that of a war machine that takes peace as its object directly, as the peace of Terror or Survival. The war machine reforms a smooth space which now claims to control, to surround the entire earth. Total war itself is surpassed, towards a form of peace more terrifying still. The war machine has taken charge of the aim, worldwide order, and the States are no longer anything more than objects or means adapted to that machine. This is the point at which Clausewitz's formula is effectively reversed; to be entitled to say that politics is the continuation of war by other means, it is not enough to invert the order of the words as if they could be spoken in either direction; it is necessary to follow the real movement at the conclusion of which the States, having appropriated a war machine, and having adapted it to their aims, reissue a war machine that takes charge of the aim, appropriates the States and assumes increasingly wider political functions. (pp.118-119)" Deleuze and Guattari, *NOMADODOLOGY*, pp. 109-119 (see p.152 in *TAKE TODAY*, bottom half of p.12 to top half of p.13 in *FROM CLICHE TO ARCHETYPE*, and last sentence on p.xi in *Canadian National Bank [Montreal] 100th Annual Report Publication*, December, 1974).

Deleuze and Guattari collapse the dialectic to reveal they had been playing with the tactile interval all along, and then put the post-tactile observer in the bulls-eye position on the rhizome's dartboard: "Undoubtedly, nothing is more outmoded than the man of war: he has long since been transformed into an entirely different character, the military man. And the worker himself has

undergone so many misadventures... And yet men of war reappear, with many ambiguities: they are all those who know the uselessness of violence, but who are adjacent to a war machine to be recreated, one of active, revolutionary counterattacks. Workers also reappear who do not believe in work, but who are adjacent to a work machine to be recreated, one of active resistance and technological liberation. They do not resuscitate old myths or archaic figures, they are the new figure of a transhistorical assemblage (neither historical, nor eternal, but untimely): the nomad warrior and the ambulant worker. A somber caricature already precedes them, the mercenary or mobile military instructor, and the technocrat or transhuman analyst, the CIA and IBM

(see p.257 in TAKE TODAY, and top half of back-cover book flap of TAKE TODAY). But a transhistorical figure must defend himself as much against old myths (see pp.140-141 in FROM CLICHE TO ARCHETYPE) as against preestablished, anticipatory disfigurations

(see bottom of first column and top of second column in McLuhan's op-ed in The New York Times, July 29, 1973). One does not go back to reconquer the myth, one encounters it anew, when time quakes at its foundations under the empire of extreme danger. Martial arts and state-of-the-art technologies only have value because they create a possibility of bringing together worker and warrior masses of a new type (see first paragraph of p.31 in COUNTERBLAST). The shared line of flight of the weapon and the tool: a pure possibility, a mutation. There arise subterranean, aerial, submarine technicians who belong more or less to the world order, but who involuntarily invent and amass virtual charges of knowledge and action that are usable by others, minute but easily acquired for new assemblages. The borrowings between warfare and the military apparatus, work and free action, always run in both directions, for a struggle that is all the more varied." Deleuze and Guattari, NOMADOLOGY, pp.89-90 (see pp.117-130 in FROM CLICHE TO ARCHETYPE). "We can now better understand why I said that sometimes there are at least three different lines, sometimes only two, and sometimes only one, all very entangled. Sometimes there are actually three lines, because the line of flight or of rupture combines all the movements of deterritorialization, precipitates quanta, tears off accelerated particles that cross into each others territories, and carries them onto a plane of consistency or a mutating machine. And then there is a second molecular line, where the

deterritorializations are now only relative, always compensated for by reterritorializations which impose on them so many loops and detours, equilibria and stabilizations. Finally there is the molar line, with well-defined segments, where the reterritorializations accumulate in order to constitute a plane of organization and to pass into an overcoding machine. Three lines: the nomad line, the migrant line, and the sedentary line (the migrant and nomad lines are not at all the same). Or there might only be two lines, because the molecular line would only appear in oscillation between the two extremes, sometimes swept away by the combination of deterritorializations, and sometimes contributing to the accumulation of reterritorializations (sometimes the migrant allies himself with the nomad, sometimes with the mercenary or confederate of an empire: the Ostrogoths and the Visigoths). Or perhaps there is only a single line, the primary line of flight, the border or edge that is relativized in the second line, and allows itself to be stopped or cut in the third. But even then, it can be conveniently presented as *the* line born from the explosion of the other two. Nothing is more complicated than a line or lines. This is what Melville is concerned with: the dingys tied together in their organized segmentation, Captain Ahab on his molecular line, becoming animal, and the white whale in its mad flight.” Deleuze and Guattari, ON THE LINE, pp.93-94. “Doubtless, the present situation is highly discouraging. We have watched the war machine grow stronger and stronger, as in a science fiction story; we have seen it assign as its objective a peace still more terrifying than fascist death; we have seen it maintain or instigate the most terrible of local wars as parts of itself; we have seen it set its sights on a new type of enemy, no longer another State, nor even another regime, but the unspecified enemy; we have seen it put its counter-guerilla elements into place, so that it can be caught by surprise once, but not twice... Yet the very conditions that make the State or World war machine possible, in other words constant capital (resources and equipment) and human variable capital, constantly recreate unexpected possibilities for counterattack, unforeseen initiatives determining revolutionary, popular, minority mutant machines. The definition of the Unspecified Enemy testifies to this... multiform, maneuvering and omnipresent... of the moral, political, subversive or economic order, etc., the unassignable material Saboteur or human Deserter assuming the most diverse forms. The first theoretical element of importance is the fact that the war machine has many varied

meanings, and this is *precisely because the war machine has an extremely variable relation to war itself.*” Deleuze and Guattari, *NOMADOLOGY*, pp. 119-120 (see pp.140-143 in *THE GLOBAL VILLAGE*).

Deleuze and Guattari skillfully refresh the implications for autonomy that McLuhan first articulated when he recognized the discarnate animal stalking our tiny neighborhood.

So, in retrospect, it appears Sylvere Lotringer astutely mimed the pentadic when he offered five slippery pillars to establish the foundations for the New York school of media ecology.

And, Sylvere Lotringer recently commented on the origins of his SEMIOTEXTE project: “If you compared theorists like Gilles Deleuze and Michel Foucault to John Cage and William Burroughs, you could see a connection between what the French were doing with concepts and what the Americans were doing with perception.” *Time Out New York* magazine, March 7-14, 2002, p.73.

The parallels to the earlier project of the Toronto school of media ecology are obvious, including especially the playful, satirical aspects.

ACT THREE

The third to surf the post-McLuhan wave was Arthur Kroker (1945-). But with a double twist. As a counter-environment to both the Toronto school of media ecology and the New York school, there developed the Montreal school around the *Canadian Journal of Political and Social Theory* edited by Kroker. Initially inspired by Donald Theall's book on McLuhan, *THE MEDIUM IS THE REAR VIEW MIRROR: Understanding McLuhan* (1971) and his work at McGill University in the late sixties and early seventies - Theall having been McLuhan's first Ph.D. graduate - this school targeted both ends of the McLuhan dialectic. Scanning past Baudrillard's notion of "theory fiction", Kroker et al. foregrounded the incipient organicity of "technology" - the fact that the mediascape had come alive ("The important thing is to realize that electric information systems are live environments in the full organic sense." - Marshall McLuhan [with Quentin Fiore], *WAR AND PEACE IN THE GLOBAL VILLAGE: An Inventory of Some of the Current*

Spastic Situations that Could Be Eliminated by More Feedforward, 1968, p. 36). If this appears as an approach perversely similar to science fiction, then it needs to be appreciated as entirely consistent with McLuhan's artistic strategy, on one level, of a more sophisticated and complex invasion and critique of the popular genre as illustrated in a letter McLuhan wrote to his mother in 1952 after the publication of *THE MECHANICAL BRIDE* in 1951: "The Mechanical Bride is really a new form of science fiction, with ads and comics cast as characters. Since my object is to show the community in action rather than *prove* anything, it can indeed be regarded as a new kind of novel." - *LETTERS*, p.217.

Kroker's artistic agenda was to scratch the blackboard that displayed the iconic image of McLuhan as a technotopian created by Madison Avenue's mediascape in the sixties. Kroker did this by stressing the political and creative implications of the principle (and McLuhan's little-known aphorism), "the user is the content", that McLuhan had purposely suppressed in his art ("When I say 'the medium is the message', I suppress the fact that the user or audience or cognitive agent is both the 'content' and maker of the experience, in order to highlight the *effects* of the medium, or the hidden environment or *ground* of the experience. The nineteenth century, as the first great consumer age, suppressed the function of the user and the public as cognitive agent and producer. The Pre-Raphaelites at least strove to overcome the passive consumer bias of an industrial time by stressing the role of *work* and crafts in art and society." - *Ibid.*, p.443).

An example of an explicit statement of Kroker's program apropos of McLuhan: "To dismiss McLuhan as a technological determinist is to miss entirely the point of his intellectual contribution. McLuhan's value as a theorist of culture and technology began just when he went over the hill to the side of the alien and surrealistic world of mass communications: the 'real world' of technology where the nervous system is exteriorised and everyone is videoated daily like sitting screens for television. Just because McLuhan sought *to see* the real world of technology, and even to celebrate technological reason as freedom, he could provide such superb, first-hand accounts of the new society of electronic technologies. McLuhan was fated to be trapped in the deterministic world of technology, indeed to become one of

the intellectual servomechanisms of the machine-world, because his Catholicism failed to provide him with an adequate cultural theory by which to escape the hegemony of the abstract media systems that he had sought to explore. Paradoxically, however, it was just when McLuhan became most cynical and most deterministic, when he became fully aware of the nightmarish quality of the 'medium as massage', that his thought becomes most important as an entirely creative account of the great paradigm-shift now going on in twentieth-century experience. McLuhan was then, in the end, trapped in the 'figure' of his own making. His discourse could provide a brilliant understanding of the inner functioning of the technological media; but no illumination concerning how 'creative freedom' might be won through in the 'age of anxiety, and dread'. In a fully tragic sense, McLuhan's final legacy was this: he was the playful perpetrator, and then victim, of a sign-crime." - Arthur Kroker, TECHNOLOGY AND THE CANADIAN MIND: Innis/McLuhan/Grant, 1984, pp.85-86.

But Kroker was pursuing a valid posture for media ecology because the post-satellite and post-instant replay, digital environment of the eighties replayed a hologram that boiled at the speed of thought and simulated the individual autonomy evoked by the earlier environment of slower speed-of-light, mixed corporate-media that McLuhan parodied. In this later context, the role of theory fiction performed by the pentadic Menippean technoscape required the response of "panic writing": "In McLuhan's terms, life in the simulacrum of the mediascape consists of a big reversal: the simulacrum of the image-system goes inside; consciousness is ablated. In the sightscape of television, just like before it in the soundscape of radio, the media function as a gigantic (and exteriorised) electronic nervous system, amplifying technologically our every sense, and playing sensory functions back to us in the processed form of *mutant* images and sounds. TV life? That's television as a mutant society: the mediascape playing back to us our *own* distress as a simulated and hyperreal sign of life." - Arthur Kroker and David Cook, THE POSTMODERN SCENE: Excremental Culture and Hyper-Aesthetics, 1986, p.277.

This organic mutantscape thus left the global audience free to create new networks on the imaginary sidelines: "In mathematized space, the body is

only understandable cabalistically: a topographical filiation *en abyme*, a perspectival simulacrum, a fractal figure with no (hyperreal) existence except as part of a large holographic pattern, the product of the folded space of culture as a fuzzy set without depth." - Arthur Kroker, Panic Value: Bacon, Colville, Baudrillard and the Aesthetics of Deprivation in LIFE AFTER POSTMODERNISM: Essays on Value and Culture, 1987 (edited and introduced by John Fekete), p.187.

Via Kroker, his wife, Marilouise Kroker, and David Cook, the Montreal school produced five books in the eighties:

- TECHNOLOGY AND THE CANADIAN MIND:
Innis/McLuhan/Grant (1984),

- THE POSTMODERN SCENE:
Excremental Culture and Hyper-Aesthetics (1986),

- LIFE AFTER POSTMODERNISM:
Essays on Value and Culture (1987, edited and introduced by John Fekete),

- BODY INVADERS:
panic sex in America (1987), and

- PANIC ENCYCLOPEDIA:
the definitive guide to the postmodern scene (1989).

An ex-seminarian, Kroker retrieved the probes of Nietzsche for his refusal of the Toronto school: "Nietzsche is, then, the limit and possibility of the postmodern condition. He is the *limit* of postmodernism because, as a thinker who was so deeply fixated by the death of the grand referent of God, Nietzsche was the last and best of all the modernists. In The Will to Power, the postmodernist critique of representation achieves its most searing expression and, in Nietzsche's understanding of the will as a 'perspectival simulation', the fate of postmodernity as a melancholy descent into the violence of the death of the social is anticipated. And Nietzsche is the *possibility* of the postmodern scene because the double-reversal which is

everywhere in his thought and nowhere more so than in his vision of artistic practice as the release of the 'dancing star' of the body as a *solar system* is, from the beginning of time, the negative cue, the 'expanding field' of the postmodern condition. Nietzsche's legacy for the *fin-de-millennium* mood of the postmodern scene is that we are living on the violent edge between ecstasy and decay; between the melancholy lament of postmodernism over the death of the grand signifiers of modernity - consciousness, truth, sex, capital, power - and the ecstatic nihilism of ultramodernism; between the body as a torture-chamber and pleasure-palace; between fascination and lament. But this is to say that postmodernism comes directly out of the bleeding tissues of the body - out of the body's fateful oscillation between the finality of 'time's it was' (the body as death trap) and the possibility of experiencing the body (*au-dela* of Nietzsche) as a 'solar system' - a dancing star yes, but also a black hole - which is the source of the hyper-nihilism of the flesh of the postmodern kind." - Arthur Kroker, THE POSTMODERN SCENE, pp.9-10.

And retrieved St. Augustine (see Arthur Kroker, THE POSTMODERN SCENE, pp.35-72) for his refusal of Lotringer's New York school: "This is *imaging* to such a degree of hyper-abstraction that Jean Baudrillard's insight in Simulations that the 'real is that of which it is possible to give an equivalent reproduction' is now rendered obsolescent by the actual transformation of the simulacrum with its hyperreality effects into its opposite: a *virtual* technology mediated with designer bodies processed through computerized imaging-systems. When technology in its ultramodernist phase connects again with the primitivism of mythic fear turned radical, it's no longer the Baudrillardian world of the simulacrum and hyperrealism, but a whole new scene of *virtual* technology and the end of the fantasy of the Real. Electronic art is the limit of postmodern aesthetics." - Ibid., p.15.

Kroker was correctly intuiting that the ultramodernist phase required perception of the suiciding of the Menippean media-dance: "And likewise with Colville's Man, Woman and Boat and Four Figures on a Wharf. These paintings (reminiscent of de Chirico's Turin meditations) are metaphysical because they illustrate the ontology of hyperrealism: our disappearance into

the fascinating, and relational, topology of a measured and calculative universe. Here, everything has been reduced to perspectival relations of spatial contiguity (the mummy-like figures of Man, Woman and the symmetry of the classical statuary); the water, in both paintings, does not represent an edge, but the opposite - the dissolution of all borders; the mapping of which is sidereal and topographical. We might say, in fact, that these paintings figure the double liquidation of classical mythological space (Four Figures on a Wharf is a hologram for the world as a fuzzy set), and modern panoptic space (for there is no disappearing viewpoint in Man, Woman and Boat). As the immolation of classical and panoptic space, they also work to provide the internal grammatical rules of the intensely mathematized space of ultramodernism: folded in time, more real than the real, always topological and fractal. Consequently, the ultra-symmetry of colours, figures, and textures in Man, Woman and Boat and Four Figures on a Wharf are real because their very perfection indicates their *hyperreal* existence as sliding signifiers in a topographical and aestheticized surface of events. In space as a designer, mathematical construct, the boat floats on the water, the classical statuary is geometrically abstracted, and the designer environment is superior to any original because its ontology is that of excessive *hyper-nature*." - Arthur Kroker, Panic Value: Bacon, Colville, Baudrillard and the Aesthetics of Deprivation in LIFE AFTER POSTMODERNISM: Essays on Value and Culture, 1987 (edited and introduced by John Fekete), p.187.

“And so, postmodern culture in America is what is playing at your local theatre, TV set, office tower, or sex outlet. Not the beginning of anything new or the end of anything old, but the catastrophic, because fun, implosion of America into a whole series of panic scenes at the *fin-de-millennium*.

Panic God: This is Jimmy Bakker and what the press love to describe as the heavily mascaraed Tammy Faye. Not just TV evangelicals brought to ground by a double complicity - Jerry Falwell's will to money and Jimmy Schwaggart's will to power - but Jimmy and Tammy as the first, and perhaps the best, practitioners of the New American religious creed of *post-Godism*. TV evangelicism, then, is all about the creation of a postmodern God: not religion under the sign of panoptic power, but the hyper-God of all

the TV evangelicals as so fascinating and so fungible, because this is where God has disappeared as a grand referent, and reappeared as an empty sign-system, waiting to be filled, indeed *demanding* to be filled, if contributions to the TV evangelicals are any measure, by all the waste, excess and sacrificial burnout of Heritage Park, U.S.A. An excremental God, therefore, for an American conservative culture disappearing into its own burnout, detritus, and decomposition. For Jimmy and Tammys disgrace is just a momentary *mise-en-scene* as the soap opera of a panic god reverses field on itself, and everyone waits for what is next in the salvation myth, American-style: Jimmy and Tammy in their struggle through a period of dark tribulations and hard trials on their way to asking forgiveness (on Ted Koppel's Nightline show on ABC). As Jimmy Bakker once said: In America, you have to be excessive to be successful. Or, as Tammy likes to sign out all her TV shows: Just remember. Jesus loves you. He *really, really* does....

Panic TV: This is Max Headroom as a harbinger of the post-bourgeois individual of estheticized liberalism who actually vanishes into the simulacra of the information system, whose face can be digitalized and fractalized by computer imaging because Max is living out a panic conspiracy in TV as the real world, and whose moods are perfectly postmodern because they alternate between kitsch and dread, between the ecstasy of catastrophe and the terror of the simulacra. Max Headroom, then, is the first citizen of the end of the world.” - Arthur and Marilouise Kroker, Panic Sex in America in BODY INVADERS: panic sex in America, 1987, edited and introduced by Arthur and Marilouise Kroker, pp.17-19.

“In a postmodern culture typified by the disappearance of the Real and by the suffocation of natural contexts, fashion provides *aesthetic holograms* as moveable texts for the general economy of excess. Indeed, if fashion cycles now appear to oscillate with greater and greater speed, frenzy and intensity of circulation of all the signs, that is because fashion, in an era when the body is the inscribed surface of events, is like Brownian motion in physics: the greater the velocity and circulation of its surface features, the greater the internal movement towards stasis, immobility, and inertia. An entire postmodern scene, therefore, brought under the double sign of culture where, as Baudrillard has hinted, the secret of fashion is to introduce the

appearance of radical novelty, while maintaining the *reality* of no substantial change. Or is it the opposite? Not fashion as a referent of the third (simulational) order of the real, but as itself the spectacular sign of a parasitical culture which, always anyway excessive, disaccumulative, and sacrificial, is drawn inexorably towards the ecstasy of catastrophe. Consequently, the fashion scene, and the tattooed body with it, as a Bataillean piling up of the groundless refuse of activity. When the sign of the Real has vanished into its (own) appearance, then the order of fashion, like pornography before it, must also give the appearance of no substantive change, while camouflaging the *reality* of radical novelty in a surface aesthetics of deep sign-continuity. Fashion, therefore, is a conservative agent complicit in deflecting the eye from fractal subjectivity, cultural dyslexia, toxic bodies, and parallel processing as the social physics of late twentieth-century experience. Ultimately, the appearance of the tattooed body is a last seductive, ventilated remainder in the reality of the implosion of culture and society into what quantum physicists like to call the world strip, across which run indifferent rivulets of experience.” - Arthur and Marilouise Kroker, Fashion Holograms in BODY INVADERS: panic sex in America, 1987, edited and introduced by Arthur and Marilouise Kroker, p.45.

“The postmodern body is penetrated by power and marked by all the signs of ideology. Indeed, when power actually produces the body and when the body itself becomes conditional for the operation of a fully relational power, then the postmodern body is already only a virtual afterimage of its own simulated existence. Virtual sex, virtual eyes, virtual organs, virtual nervous system: that is the disappearing body now as the cynical site of its own exteriorization (and immolation) in the mediascape. And so, what follows is body writing for the end of the world. No longer writing *about* the body or even *from* the body, but robo-bodies writing the violent and excessive history of their (own) disappearance into the simulacrum. It’s Kathy Acker still in Haiti and Jean Baudrillard spitting on the Eiffel Tower as letters to excess for a hyper-modern time.” - Arthur and Marilouise Kroker, Body Writing in BODY INVADERS: panic sex in America, 1987, edited and introduced by Arthur and Marilouise Kroker, p.223.

“In the 1960s, Marshall McLuhan might have described television as a *cool

medium*, but in the 1980s its the TV audience which has cooled down to degree absolute zero, to that point where the audience itself actually becomes a *superconductor*: a zone of absolute non-resistance and hyper-circulability of exchange for all the TV beams which pass through it. Even postmodern babies, the latest wave of the TV generation, are now born as instant superconductors. Thus, for example, there was recently a televised report of some interesting mass media research which had to do with the seemingly remarkable ability of very young babies to recognize facial images on TV screens. The ideological object of the report was probably to provide comfort to working mothers by demonstrating the possibility of a new long-distance video relationship with their infants. And sure enough, when a little cooing baby, lying in a crib in the research lab, saw its mothers face on the massive TV screen, it beamed, cooed, and gave every sign of mother recognition. However, when the TV reporter substituted herself for the mother, the babys eyes beamed just as much, and in its laughing noises and clapping hands, gave every sign that it wasnt, perhaps, the mommy image which was the object of fascination, but *any* electroid, vibrating image being blasted out of that big TV screen. It seemed that the baby was responding less to the video face of its mother, than to any magnified human face which appeared on the TV screen. This was, after all, a postmodern baby who, like everyone else, might just have loved television. And not just babies either, but if the wave of media hysteria and audience fascination with Ollie and Gorby is any indication, any hyped-up image passing through the TV ether zone streaks now through the cold mass of the audience superconductor: moving at hyper-speeds all the while and meeting absolutely no resistance. Thus, the political curiosity of an American media audience which can, in the same TV season, go wild over Ollie and Gorby, arch-rivals perhaps in the ideological arena, but image-superconductors in the TV simulacrum where the cooled out mass of the audience is just like that postmodern baby, gurgling and clapping and beaming in fascinated seduction at all the spectral images.” - Arthur Kroker [with Marilouise Kroker and David Cook], PANIC ENCYCLOPEDIA: the definitive guide to the postmodern scene, 1989, pp.57-58.

“The real truth of postmodern America is to be found in the machine ecstasy which is the driving force behind the production of cyber- bodies in the USA today. It is not any longer the (American) body as quadriped as in prehistory

nor even the body as a now obsolete modernist biped, but the postmodern American body (which is to say everyone's body - since McLuhan was correct when he said that the USA is the world environment) entering a third stage of human evolution: the virtual body of ultramodern technology. Half-flesh, half-cyberspace, the virtual body of the third stage of human evolution is just what the physicists who gathered in Paris last winter predicted: a body fit for exiting Planet One with radiation-proof skin, large globular eyes for spatialized existence, and no legs (this is a floating body at zero gravity). Recently, Scientific American described some pioneering research being done at NASA's Ames Research Center where pilots, wearing designer helmets for ocular movement in cyberspace, can now put on wired hands (complete with photo sensors) which provide a graphic sense of tactility when touching objects in a virtual space which does not exist. And not just touching either, but if the scientists at Ames are to be believed, their dream is really about the creation of a William Gibson-like Neuromancer head where, when you wear a virtual helmet (at ultrasonic aerial speeds), the wired hand can be used to control body dimensions in the spatial environment: a clenched fist is the signal for movement around in cyberspace where suddenly vision moves outside its bodily referent and you look at yourself from any spatial referent; a Vulcan salute, in a parody of Star Trek, miniaturizes the body, and you find yourself with the sense of actually being any object in the immediate environment (research scientists at Apple Computers research laboratory in Hollywood are now at work developing simulations of the animal world where children can become sharks, dolphins, sea urchins, or even pebbles on the ocean floor). And in cyberspace, you can have multiple personalities: designer heads with wired hands interacting on a schizoid basis, with multiple personalities projected outwards simultaneously. Human beings, then, at the end of the world: chip nerves, spectral vision, with floating personalities fit for cyberspace as the third (technological) stage of human evolution." - Ibid., pp.78-79.

As the eighties ended with the perfect pitch of their Panic Encyclopedia, the Montreal school positioned themselves in the foremost assassins' perch and awaited with consummate poise the approaching pentadic Ghost Dance of the seamless web of culture, technology and theory.

ACT FOUR

In the second half of the eighties there appeared graduates from the Toronto school of media ecology who attempted to preserve the liberal, encyclopedic humanist features that they perceived in McLuhan's discoveries. Generally, what they had in common was a rejection of the multi-media comprehensivist themes from the Toronto school that Barrington Nevitt emphasized as they wrestled with the question of the relevance of literate generalist, or multi-specialist, values in the electronic maelstrom. This Diasporic school of media ecology included:

Bruce W. Powe (*A CLIMATE CHARGED: Essays on Canadian Writers*. Oakville, Ontario: Mosaic Press, 1984, and *THE SOLITARY OUTLAW*. Toronto, Ontario: Lester & Orpen Dennys Limited, 1987),

William Irwin Thompson (*PACIFIC SHIFT*. San Francisco: Sierra Club Books, 1985, *GAIA: A WAY OF KNOWING: Political Implications of the New Biology* [edited by William Irwin Thompson]. Great Barrington, Massachusetts: Lindisfarne Press, 1987, and *IMAGINARY LANDSCAPE: Making Worlds of Myth and Science*. New York: St. Martins Press, 1989),

Neil Postman (*AMUSING OURSELVES TO DEATH: Public Discourse in the Age of Show Business*. New York: Penguin Books, 1985),

Robert K. Logan (*THE ALPHABET EFFECT: The Impact of the Phonetic Alphabet on the Development of Western Civilization*. New York: William Morrow and Company, Inc., 1986),

and Derrick de Kerckhove and C. J. Lumsden, eds., (*THE ALPHABET AND THE BRAIN: The Lateralization of Writing*. Heidelberg: Springer-Verlag, 1988).

The Diasporic school celebrated the assumptions and benefits of the Gutenberg Galaxy while cautiously recognizing, because of a McLuhan-schooled suspicion towards the formers disservices, the opportunities for the renewal of humanist ideals presented by the Marconi Galaxy. This school

was indifferent to McLuhan's disgust with the sectarian conflicts that humanism necessarily evoked because it genuinely believed the struggles over cultural content were nutritious and invigorating. It lacked the detachment that McLuhan encouraged towards technological content (see middle of p.22 in COUNTERBLAST, and middle of p.235 in LETTERS) that led to his kind of diagnosis such as the following:

“Professor Mansell Jones in his *Modern French Poetry* (pp.30-31) takes up this theme with reference to two kinds of symbolism which he refers to as vertical and horizontal. Vertical symbolism is of the dualistic variety, setting the sign or the work of art as a link between two worlds, between Heaven and Hell. It is concerned with the world as Time process, as becoming, and with the means of escape from Time into eternity by means of art and beauty. Vertical symbolism asserts the individual will against the hoi polloi. It is aristocratic. Yeats is the perfect exemplar. Horizontal symbolism, on the other hand, sets the work of art and the symbol a collective task of communication, rather than the vertical task of elevating the choice human spirit above the infernal depths of material existence. In idealist terms, the vertical school claims cognitive status for its symbols, because the conceptual meanings attached to art are in this view a means of raising the mind of man to union with the higher world from which we have been exiled. Whereas, on the other hand, the horizontal, or space school, appeals to intuition, emotion and collective participation in states of mind as a basis for communication and of transformation of the self. The vertical school seeks to elevate the self above mere existence. The horizontal symbolists seek to transform the self, and ultimately to merge or annihilate it. Mr. Eliot's position is by no means simple or consistent within itself, but as between the vertical and horizontal camps, his poetic allegiance is markedly horizontal or spatial. To Catholics, (for all of whom pre-existence is nonsense), the anguish generated over the problems of Time and Space and the self may well be baffling. However, if you are frantically concerned with seeking an exit from a trap, it is of the utmost urgency to understand the mechanism of the trap that holds you. Are you a prisoner of time? (History is a nightmare from which I am trying to awake, says the young esthete Stephen Dedalus.) If so, there are specific dialectical resources which can conduct an elite few to the escape hatch. Are you a prisoner of space? Are you a mechanical puppet manipulated by a

thread held in remote, invisible hands? If so, you can learn the techniques of Yoga or Zen Buddhism or some related mode of illumination which will show you the *way*. To learn how to make perfect your will, you need to negate your own personality and to learn that detachment from self and from things and from persons which reveals the totally illusory character of self, things, and persons. Existence is not so much an historical trap in time as a wilderness of horrors multiplied by mirrors. Existence creates itself by an endless chain of suggestions ricocheting off each other, just as a symbolist poem of the Eliot kind generates its meanings by spatial juxtaposition. A Catholic poet like Paul Claudel, of course, is not bound by these dichotomies of space and time, the vertical and horizontal. But all he has written is strongly marked with his keen awareness of the space-time controversies in art, politics and religion. (To the European, the comparative American ignorance of these doctrines as elaborated in art, is precisely what constitutes American innocence.) Thus in his section On Time in Poetic Knowledge, Claudel takes up the space position, then appropriates the time ammunition as well:... Claudel's thought and poetry obviously move freely in both time and space. As a symbolist he avails himself to the utmost degree of the spatial techniques of inner and outer landscape for fixing particular states of mind. This procedure makes available to him all the magical resources invoked by the Romantics for using particular emotions as immediate windows onto Being, as techniques of connatural union with reality. But he values equally the resources of dialectic and continuous discourse. He can therefore be both Senecan or symbolist, and temporal. That would seem to be an inevitable program for any Catholic for whom Time and Space are not sectarian problems. Today many thoughtful people are torn between the claims of time and space, and speak even of The Crucifixion of Intellectual Man as he is mentally torn in these opposite directions. As the dispute quickens, the Catholic is more and more reminded of the inexhaustible wisdom and mercy of the Cross at every intersection instant of space and time. These moments of intersection became for Father Hopkins (and also for James Joyce) epiphanies.... It is not the purpose of this paper to explain the complex falsehoods of the time and space schools of aesthetics, religion and politics. For a Catholic it is easy to admire and use much from each position. But by and large the vertical camp is rationalist and the horizontal camp magical in its theory of art and communication." Marshall McLuhan, Eliot and the

Manichean Myth as Poetry, Address to Spring symposium of the Catholic Renaissance Society, April 19 54, The McLuhan Papers, Vol. 130, File 29, Manuscript Division, National Archives of Canada, Ottawa.

Even though McLuhan, in his role as a literary Menippean satirist (see p.448 and first paragraph of p.517 in LETTERS), would be reluctant to tolerate the issues raised by the Diasporic school, he still recognized the inevitable advantages they would temporarily enjoy in the coming decades over his study of the language of media forms because he knew that the diversification of *content* was the new ground for pentadic life (see the first four lines at the top of p.248 in THROUGH THE VANISHING POINT, and the top of the first column of p.264 in ESSENTIAL McLUHAN).

However, it was the devotion to literate content, profitable as it would be, that stigmatized this school with the anemic pall of the POB (print-oriented bastard, see bottom third of p.288 in TAKE TODAY) and left it helpless before the flood of post-literate “content” fetishism (cultural studies). The Diasporics had been given the ammunition to bypass the postmodern distraction via the Toronto schools perception that James Joyce’s Finnegans Wake, as a perpetual motion machine of multi-media content, is hardly a book or novel but a penetrating infiltration of the coming permeable environments. Instead, they sought comfort in sifting through the lingering after-image of the legacy of the heroic writer, artist, or scholar while painfully aware that this niche-marketed mirror of Perseus is cracked - doomed to stall and stutter before the Gorgon of digital exuberance.

Some samples of the blowing of both horns of their dilemma:

a) “For many, Shakespeare *has* been erased from our minds and the art is dead debate is a banality. But it is hard to smother the human spirit and wherever there are individuals, there is art. Fine poems, novels, stories, plays, and essays continue to be written, defying the prophecies of the gloom-pourers. Still, you cannot avoid the tremors of the global climate: it has to be faced that what was once called High Cult has decayed and what is considered serious has been confined to the new cloisters of the University. There the poem and the novel are reconstructed and deconstructed as a model

or paradigm of interlocking graphs and charts and abstracted symbols. The novel and the poem cease to exist: they become Structures instead. The impact on Canadian writers has been less blatant than elsewhere, but because of electric atmospheric pressures writers have been forced to deal with nineteenth century nationalism or have leapt ahead to what has been dubbed post-modernism or fabulism. And, as Louis Dudek has shrewdly observed: Modernism is something that is still developing in Canada. Thus the cultural mood in the country is a combination of the reactionary and the fashionable.” - Bruce W. Powe, *A CLIMATE CHARGED: Essays on Canadian Writers*. Oakville, Ontario: Mosaic Press, 1984, p.73. “The literate person is an outsider today. Yet this exile, as it were, may give the literate person an advantage. To read and write may be as unique an accomplishment as it was in pre-literate societies, in the thirteenth century, the time of *The Name of the Rose*. Readers and writers will have the role of maintaining the freshness and ferocity of language. They will have the job of staying out of tune: to make certain that human beings remain complex. The post-literate state may tell us why those writers with nineteenth-century views of the Heroic Author sound like anachronisms. When an author exerts the same mass-public appeal on his time as a Romantic-Heroic author, then the relationship with the audience is based on a sentimental nostalgia. The word can too easily be dismissed. Canetti has said that we cannot permit ourselves the luxury of a sentimental hope. Instant meltdown looms. What form can an eccentric literary influence take? To go beyond the wordlessness, the cynicism, and the shining surface of society, and recover the power of words. There is no way out from a critical confrontation with our world. We must probe at issues, ideas, and popular fronts; even at risk of losing a voice in the consuming-consumer rush; even at risk of having the questioning cheapened, forgotten, and flattered for the wrong reasons. Even in Canada, in the midst of post-literacy: my place, my here.” - Bruce W. Powe, *THE SOLITARY OUTLAW*. Toronto, Ontario: Lester & Orpen Dennys Limited, 1987, pp.187-188.

b) “The climactic work of the Atlantic epoch is *Finnegans Wake*. Coming from a marginal culture at the very edge of Europe, James Joyce very consciously finished Europe. First, he finished the remains of the Mediterranean vision in his *Ulysses*, a work that ends in the affirmation of the feminine brought down out of Dante’s heaven and put to bed. Then, having

finished with the voyages of the solitary individual afloat on a stream of consciousness, Joyce went on to express the transition from print-isolated humanity in its book-lined study to H.C.E., *Here Comes Everybody*. At the time when the hardy objects of a once materialistic science disappear into subatomic particles, so characters as egos with discrete identities disappear to become patterns of *corso-ricorso*, and history becomes the performance of myth. Characterization is replaced by allusion, and as pattern and configuration become more important than persons, Joyce brings us to the end of the age of individualism. But like Moses on Mount Pisgah gazing into a Promised Land he cannot enter, Joyce brings us to the end of modernism, but he himself cannot pass over into the hieroglyphic thought of the Pacific-Aerospace cultural ecology to come. McLuhan considered *Finnegans Wake* to be the prophetic work that pointed to the arrival of electronic, post-civilized humanity, the creature of changing roles who lives mythically and in depth. Obviously, we are now only in the early days of the transition from the Atlantic cultural ecology of the European epoch to the Pacific-Space cultural ecology of the planetary epoch, and so no one knows for certain just where these electronic and aerospace technologies are taking us. But since I grew up in Los Angeles, and not in Dublin or Paris, I have a few hunches.” - William Irwin Thompson, *PACIFIC SHIFT*. San Francisco: Sierra Club Books, 1985, pp.107-108. “If evil announces the next level of historical order, then evil is expressing the coming planetary culture. Unconsciously, the world is one, for global pollution spells out a dark integration that does not honor the rational boundaries of the nation-states. And so, industrial nation-states in their fullest development have contributed to their own end. Collectivization, then, must mean that the future is some sort of collective consciousness in which the completely individuated and conscious ego becomes surrounded by the permeable membrane of an ecology of Mind and not by the wall of civilization. Rock festivals in particular, and rock music in general, seem to express this fascination with collectivization. Since we have become an electronic society, a society of information, it is not surprising that the pollution of the new cultural ecology is noise and paranoia. Rock music is about the relationship between information and noise, and if the medium is the message, then the requirement that rock music be loud to the point of physiological damage clearly indicates that noise is the form that creates the collectivization that does not honor the boundaries of biological integrity. At

a recent concert in Amsterdam, the Irish rock group U2 was so loud that it registered as an earthquake on the seismographs at the university. - Ibid., p. 133. "So if we take a good look around us, we can observe the return of catastrophism to artistic and scientific narratives. What this means, I think, is that the rock bottom foundation for industrial society is giving out, and from the mathematics of Rene Thom to the novels of Doris Lessing we are being shown a new vision of planetary dynamics, a vision of sudden discontinuities. It is probably no accident that Ronald Reagan has come in to invoke all the old shibboleths of the industrial mentality, precisely at the moment when they are becoming inadequate, for one often sees in history that a radical shift is often preceded by an intensification of the old. Consider warfare in the fifteenth century: right at the moment when armor becomes most elaborate, with the knight lifted on to his horse by levers and pulleys, is right at the moment when the heavily armored knight is made irrelevant through the longbow, the crossbow, and firearms. Elsewhere I have called this kind of historical phenomenon a sunset effect, but one can see it as a kind of supernova, an intensification of a phenomenon that does not lead to its continuation, but to its vanishing. So much for Reagan, but what about us? One theme that I think this conference could consider is the ways in which the new paradigm in science and art will relate to a new paradigm in politics." - William Irwin Thompson, GAIA: A WAY OF KNOWING: Political Implications of the New Biology [edited by William Irwin Thompson]. Great Barrington, Massachusetts: Lindisfarne Press, 1987, p.18. "President Reagan is the archetypal leader of our postindustrial unconscious polity precisely because he is not a thinker. He is almost entirely unconscious. He is indeed Walt Disney's *Homo ludens* and not Luther, Calvin, or Marx's *Homo faber*. During the rise of the middle classes and the emergence of the bourgeois nation-state, the thinker, and not the military knight or the prince of the church, was the architect of new polities. As Locke was to Jefferson, so Marx was to Lenin; but now in the age of global media, it is no longer the set of the theorist and the pragmatist, but the artist and the actor. As Locke was to Jefferson, so now is Disney to Reagan, for it was Disney who first constructed a media city in which the past became a movie set and the citizen was taken for a ride in fantasies with his own enthusiastic consent. It was Disney who, along with McLuhan, first understood that television would change the consciousness of literate, civilized humanity.

Cultural critics like McLuhan and Adorno issued dire warnings about mass deception in the culture industry and the end of Western Civilization, but Disney seemed to have a Kansan American naiveté and trust in the unifying power of popular culture. Indeed with his Snow White, Disney himself effected the artistic transition from the folk culture of the Brothers Grimm to pop culture; and to be fair to Disney one must recognize that the transition from oral folk tale to literature is as artistically presumptuous as the transition from literature to film. With EPCOT, however, the shadow side of Disney's mass culture seems more apparent, as if his Imagineers now felt that the way to achieve a new political collectivization was not through sad communist suppression but happy participation in fantasies of progress. In an age when suburban Christianity no longer had the power of pagan rituals and frightful rites of initiation, Disneyland created frightful rides in which evil was distanced and laughed at, and the past became a visibly comforting artifact in a world that was invisibly hurtling toward a new scientific reorganization of society. The content of Disneyland was the turn-of-the-century small town, but the invisible structure was computerization. The content now of Disney Worlds EPCOT is the World of Motion in which General Motors proclaims the freedom of the individual to go where he chooses, but in the darkness of that ride there is neither choice nor freedom. Similarly, The American Adventure of EPCOT brings all the American presidents of history on stage, while two old irreverent writers (Franklin and Twain) obligingly serve as ushers in a memorial service of a civic religion that seeks to give the citizen an uplifting patriotic experience. But all the automaton presidents are controlled by a bank of computers from another place and by a small cadre of scientists and technicians from another time." - Ibid., pp.174-175. "Reagan's Star Wars is, therefore, no sudden caprice or casual afterthought, but a deep social and economic expression of the Southern California world view, of that curious cultural mixture of Hollywood fantasies and Big Science. It is neither a thought nor a theory, but an actor's intuition and a sense of timing of what is implicit in the audience and in the audience's historical situation. Sometimes the intuition can sense the outlines of the historical situation more quickly than the intellect, for the intellect can become blinded by mountains of data. President Carter, the nuclear engineer, clearly has a higher I.Q. than President Reagan, but it was precisely Carter's meticulousness that got in his way. Carter approved the MX missile system, a costly behemoth that dwarfed

the pyramids as a public works project, but the MX would have only stimulated the cement contractors business. Reagan's Star Wars, by contrast, demands the creation of whole new artificial intelligence systems, fifth generation computers, and an integration of universities and corporations that amounts to a complete transformation of civilian society. Ironically, Eisenhower's Republican nightmare of the military-industrial complex has become Republican Reagan's dream.... Reagan's intransigence in his refusal to give up his commitment to S.D.I. is understandable, for clearly both the U.S. and the U.S.S.R. would like to have some way of removing the threat of punk nations that act in non-European and irrational ways, and, obviously, space is the best place from which to monitor and control hostile flights and launchings; but Reagan's intransigence puts him in the contradictory position of needing to keep the Soviets as an enemy to support the American scientific economy, and at the same time share information so that the Soviets do not drop out of the competition or become a spoiler or punk nation themselves. Since both Three Mile Island and Chernobyl demonstrate that the high technologies of the superpowers cannot be trusted to work without errors, it is clear that neither the U.S.A. nor the U.S.S.R. can feel safe from an accidental misfiring on either side; therefore, anything that makes one side feel threatened enough to move up to a state of Red Alert is to be avoided at all costs. It would appear that the cops and robbers game that the U.S.A. has chosen to play with the Soviets is to challenge the Soviets with Star Wars and secretly allow the information to be stolen to insure that the Soviets will not become discouraged to drop out of the competition altogether. And so we can see that national defense is indeed an example of negation as a form of unconscious relationship, for the end result of the arms race is a transnational militarization that could be called the U.S.S.S.R." - Ibid., pp.176-178. "A World is not an ideology nor a scientific institution, nor is it even a system of ideologies; rather, it is a structure of unconscious relations and symbiotic processes. In these living modes of communication in an ecology, even such irrational aspects as noise, pollution, crime, warfare and evil can serve as constituent elements of integration in which negation is a form of emphasis and hatred is a form of attraction through which we become what we hate. The Second World War in Europe and the Pacific expressed chaos and destruction *through* maximum social organization; indeed, this extraordinary transnational organization expressed the cultural transition

from a civilization organized around literate rationality to a planetary noetic ecosystem in which stress, terrorism, and catastrophes were unconsciously sustained to maintain the historically novel levels of world integration. Through national, thermonuclear terrorism, and, as well, through subnational expressions of terrorism electronically amplified, these levels of stress and catastrophic integration are still at work today. A World should not be seen, therefore, as an organization structured through communicative rationality, but as the cohabitation of incompatible systems by which and through which the forces of mutual rejection serve to integrate the apparently autonomous unities in a meta-domain that is invisible to them but still constituted by their reactive energies. Therefore, ideologies do not map the complete living processes of a World, and unconscious polities emerge independent of conscious purpose. Shadow economies (such as the drug traffic between Latin America and the United States), and shadow exports (such as the acid rain from the United States to Canada), and shadow integrations (such as the war between the United States and Japan in the forties) all serve to energize the emergence of a biome that is not governed by conscious purpose.” - Ibid., pp.209- 210.

“Paradoxically, for my generation, one that came of age in the revolutionary spirit of the affluent 1960s, liberation from institutions and their systems of meanings was not a relationship with a specific oppressive condition but a general, eternal, and absolute value in and of itself. In challenging the rhetoric of Western Civilization, the generation that mocked the bourgeois liberal pieties of its fathers and mothers rather smugly took for granted a naive and simpleminded faith in revolt against all forms of authority and enduring value. And, as always seems to be the case in the world of fashion, the French led the way. Roland Barthes announced *The Death of the Author* and tore down this idol of literate civilization; Michel Foucault exposed the episteme that bound institutions and forms of knowing into the discourse that was itself the system of domination; and Derrida made certain, with an ultimate Deconstruction, that no text would ever rise up again with a pretense to ultimate meaning, or high-minded and high-handed final authority. For an affluent and expanding bureaucracy of academic literary critics and behavioral scientists, this demolishing of the mystique of the solitary romantic artist who could pretend to cosmic knowledge without the necessary university credentials was indeed welcome news, and without much regret

the culture of Author-hood and Author-ity was shouldered aside. Once the Author is removed, the claim to decipher a text becomes quite futile.... We know that to give writing its future, it is necessary to overthrow the myth: the birth of the reader must be at the cost of the death of the Author. Such was the Paris of 1968. Meanwhile, back in California, people couldn't care less about such remote issues of European thought. The electronic counterculture, and not literary high culture, was giving body to the *zeitgeist* and in an elitist diminuendo, first Aldous Huxley, then Alan Watts, then Timothy Leary, and then Jerry Garcia and The Grateful Dead worked to extend explorations with drugs to the new postindustrial masses who were about to find themselves in the new musical economy of the global village. Intellectual fashions, much like those of *couture*, stimulate changes that are not so much developments as reactions and a mere craving that signals boredom and a desire to mark the new decade with a new style. So the liberationism of the 1960s led to the reactionary New Age movement of the 1970s, one in which the counterculture became caught up in the pre-civilized epistemes of megalithic stone circles, dowsing, witchcraft, palmistry, shamanism, and all the esoteric schools of the world religions that were not popular with clerical orthodoxy: namely, Kabbalah, Sufism, Zen, Tibetan Tantra, Yoga, and the Christian mystics from Meister Eckhart to Thomas Merton. This fashion, in turn, generated its reaction in the 1980s, as the populace swung back to fundamentalisms in Christianity and Islam, and capitalist neoconservatism in the governments of Thatcher, Reagan, and Kohl. Just as the scholarly and introverted style of Aldous Huxley became vulgarized by Timothy Leary, so the New Age movement, initiated by the quiet introvert David Spangler in a remote village in Northern Scotland, became vulgarized by Shirley MacLaine in television specials and book dumps in supermarkets. These vulgarizations at once express the distribution of a message to its largest audience but also an addition of noise picked up by the transmitting medium that overwhelms the signal and indicates that the communication has become more mess than message and has lost its integrity as it begins to dissolve into cultural entropy. Ennui quickly follows excitement and people begin to look around for new signals to flash their passage through time. With the replacement of bookstores by supermarket chains, the only books that are now available are books by movie stars and TV celebrities. In a *differance*, the text is a sign of being famous, and the

famous are simply those who are famous for being famous. An appearance on a TV show is itself an achievement, an epiphany of the culture. A text in this world is not meant to be read: it is simply another form of currency and a means of exchange. In the consequent breakup of culture into subcultures, intellectual respectability must come from its unavailability and its resistance to communication and exchange, much like the heavy gold stored under the Paradeplatz in Zurich, and so incomprehensibility becomes the essential value. Here, the Europeans come back into their own, and no American professors can hope to compete with the likes of Derrida and Habermas.” - William Irwin Thompson, *IMAGINARY LANDSCAPE: Making Worlds of Myth and Science*. New York: St. Martins Press, 1989, pp.5-7.

c) “The first is that at no point do I care to claim that changes in media bring about changes in the structure of peoples minds or changes in their cognitive capacities. There are some who make this claim, or come close to it (for example, Jerome Bruner, Jack Goody, Walter Ong, Marshall McLuhan, Julian Jaynes, and Eric Havelock). I am inclined to think they are right, but my argument does not require it. Therefore, I will not burden myself with arguing the possibility, for example, that oral people are less developed intellectually, in some Piagetian sense, than writing people, or that television people are less developed intellectually than either. My argument is limited to saying that a major new medium changes the structure of discourse; it does so by encouraging certain uses of the intellect, by favoring certain definitions of intelligence and wisdom, and by demanding a certain kind of content - in a phrase, by creating new forms of truth-telling. I will say once again that I am no relativist in this matter, and that I believe the epistemology created by television not only is inferior to a print-based epistemology but is dangerous and absurdist. The second point is that the epistemological shift I have intimated, and will describe in detail, has not yet included (and perhaps never will include) everyone and everything. While some old media do, in fact, disappear (e.g., pictographic writing and illuminated manuscripts) and with them, the institutions and cognitive habits they favored, other forms of conversation will always remain. Speech, for example, and writing. Thus the epistemology of new forms such as television does not have an entirely unchallenged influence.... Obviously, my point of view is that the four-hundred-year imperial dominance of typography was of far greater benefit

than deficit. Most of our modern ideas about the uses of the intellect were formed by the printed word, as were our ideas about education, knowledge, truth and information. I will try to demonstrate that as typography moves to the periphery of our culture and television takes its place at the center, the seriousness, clarity and, above all, value of public discourse dangerously declines. On what benefits may come from other directions, one must keep an open mind.” - Neil Postman, *AMUSING OURSELVES TO DEATH: Public Discourse in the Age of Show Business*. New York: Penguin Books, 1985, pp.27-29. “In 1976, I was appointed editor of *ETC: The Journal of General Semantics*. For ten years, I served in that capacity, and with each passing year, my respect for Alfred Korzybski increased and my respect for those academics who kept themselves and their students ignorant of his work decreased. I here pay my respects to a unique explorer, and by implication mean to express my disdain for those language educators who steep their students in irrelevancies and who believe that William Safire and Edwin Newman have something important to say about language.” - Neil Postman, Alfred Korzybski in *CONSCIENTIOUS OBJECTIONS: Stirring Up Trouble About Language, Technology, and Education*. New York: Alfred A. Knopf, Inc., 1988, p.136.

d) “Let us examine the mechanism whereby the integration of left- and right-brain processes could take place and see what role the alphabet effect would play in the realization of this transformation. Just as the printing press enhanced the alphabet through uniformity and the ability to create multiple copies relatively cheaply, so too the computer steps up the intensity of alphabetic writing by making it more accessible and easily controllable through word-processing routines. The ability to easily assemble alphabetic texts, to automatically correct, edit, and manipulate them beginning at the first-grade level reinforces a number of left-brain processes of analysis and rationality without requiring slavish conformity to the patterns of linearity and sequence. The ease with which blocks of text can be moved about in the larger composition promotes right-brain processes of pattern recognition and hence creates a new balance in the production of literary materials that belongs uniquely to the computer. It is somewhat paradoxical that it is the unique properties of the alphabet as a writing system that enables the computer to develop the right-brain features of pattern recognition and

formation.... This is the promise of computer technology - that the vitality of alphabetic literacy will be not only maintained but also enhanced. The paradox of computers is that by stepping up the left-brain processes of linear sequencing to the speed of light, new patterns emerge, such as cybernetics and ecological analysis. These right-brain processes, however, still retain many of the analytic properties of preelectric alphabetic literacy. And it is also a reflection of the flexibility and durability of the alphabet that a machine that was designed primarily for numbers, as an automatic computing machine, should now emerge just as importantly as a processor and handler of alphabetic texts, i.e., a word processor. This transformation of the computer is another example of the ubiquity and the potency of the alphabet effect.” - Robert K. Logan, *THE ALPHABET EFFECT: The Impact of the Phonetic Alphabet on the Development of Western Civilization*. New York: William Morrow and Company, Inc., 1986, pp.246-247.

e) “The theory I proposed in *The Alphabet and the Brain: The Lateralization of Writing* is based on the observation that when the ancient Greeks created their alphabet, around the eighth century BC, they changed the direction of their written script from the left orientation of the Phoenician model to the right orientation to which we’ve become accustomed. A few years ago, to find out if there were corresponding features between the inner structure of orthographies and their orientation on the surface of writing, I surveyed all the writing systems of the world. The results were surprising. All writing systems that represent sounds are written horizontally, but all systems that represent images, like Chinese ideograms or Egyptian hieroglyphs, are written vertically. Furthermore, the vertical columns of image-based systems generally read right to left. All writing systems, except for the Etruscan, are written to the right if they contain vowels. All systems without vowels are written to the left. To explain this, I had to study the brain and the visual systems. My theory, which pertains not only to the Greek situation but also to the impact of alphabetic literacy generally, can be summarized by three basic hypotheses. Each theoretical point is supported by specific historical evidence.

- It is the intrinsic structure of a language that determines the direction of writing. Systems such as Greek, Latin or Ethiopian, which were first modeled

on right-to-left consonantal systems, eventually changed the direction of their script, but only after vowels were added to the original model.

- The choice of direction depends on whether the reading process is based on combining letters by context (right to left) or stringing them in sequence (left to right). This is because the typical human brain recognizes configurations faster in the left visual field, while it detects sequences faster in the right visual field. The change of direction in Greek script happened soon after a full complement of vowels was added to the exclusively consonantal Phoenician language. The presence of the vowels made the sequence of letters continuous, whereas the system from which they had borrowed was a discontinuous line of symbols, which relied upon being read in context rather than sequence. The fact that our alphabet changed direction once it acquired vowels supports my hypothesis: that the structure of our language has put pressure on our brain to emphasize its sequential and time-ordered processing abilities. Since literacy is generally acquired during our formative years, and since it affects the organization of language - our most integral information-processing system - there are good reasons to suspect that the alphabet also affects the organization of our thought. Language is the software that drives human psychology. Any technology that significantly affects language must also affect behaviour at a physical, emotional and mental level. The alphabet is like a computer program, but more powerful, more precise, more versatile and more comprehensive than any software yet written. A program designed to run the most powerful instrument in existence: the human being. The alphabet found its way in the brain to specify the routines that would support the firmware of the literate brainframe. The alphabet created two complementary revolutions: one in the brain and the other in the world.” - Derrick de Kerckhove and C. J. Lumsden, eds., *THE ALPHABET AND THE BRAIN: The Lateralization of Writing*, 1988 (reprinted in Derrick de Kerckhove, *THE SKIN OF CULTURE: Investigating the New Electronic Reality*. Toronto, Ontario: Somerville House Publishing, 1995, edited by Christopher Dewdney, pp.27-28).

The Diasporic school could be accused of shrinking before the task of discovering the means of living simultaneously in all cultural modes while quite conscious (see p.120 in *THE MEDIUM IS THE MESSAGE*) because

they not only failed to notice that McLuhan, in his books, satirized the pervasive twentieth-century discovery in many fields that the medium is the message, but they were also unable to intuit McLuhan's strategy for confronting the pentadic fate of the tetrad-manager. Nonetheless, they can be commended for creating rich packages that stimulated the POB's with old questions inspired by the Toronto school.

ACT FIVE

As the eighties turned into the nineties, a great surprise confronted all the post-McLuhan schools floating in the pentadic debris. Events such as the CNN coverage of the protests and massacre in China's Tiananmen Square, the dismantling of the Berlin Wall, the reunification of Germany, the collapse of the Soviet Union, genetically-engineered food, and the widespread use of the Internet evoked a new school of media ecology. This school was established by communication technology itself - that is, technology that had come alive decades earlier. I call it the Pentadic school. No longer were the slogans identified with McLuhan's icon - "the global village", "the medium is the message" - to be debated and analyzed. Now they were paraded about as essential wisdom, as necessary facts to be acknowledged for economic and social survival. Tom Wolfe's old question about Marshall McLuhan, "What if he is right?", had been answered in the affirmative. It was as if, while passing over into the astral realms, the pentadic saw not only its whole life pass before it, but could not avoid recognizing the pattern, the laws of its experience - it all made sense! And McLuhan was the physicist, sociologist, artist whose oeuvre had the most staying power of all knowledge profiles that had surfed the information highway since 1960. McLuhan rode the biggest, the longest, the most daunting wave (see pp.150-151 in *THE MEDIUM IS THE MESSAGE*).

My name for this organic technology that produced the Pentadic school is "the Android Meme". It was this environmental, organic robotoid that created the swan song of the nineties as it hid its death throes under the cover of propping up and promoting the evolutionary triumphs of human creativity. This sleight-of-hand was only possible because humanity and its technological by-products had completely merged and therefore could restage

the drama of cognition and re-cognition. The function of metaphor, of looking at one thing through another, was replayed as an ersatz anti-environment by the Android Meme. Thus, the four schools of media ecology, in following McLuhan's mandate to perceive the Present, were presented with an awesome challenge in penetrating this Mount Everest of communication problems.

It is, therefore, most interesting to review the acumen of the four previous schools' interpretation of and response to this strange "revival" of McLuhan's mode of media ecology:

A. The Toronto school took advantage of the Android Meme's revival of media ecology to reveal McLuhan's actual methodology, as well as its roots, in analyzing media, which had been obscured by the corporate iconic image of McLuhan in earlier decades. However, the inadequacy of this tactic in meeting the Android Meme, producer of the Pentadic School, was that the term "media", traditionally applied to individual technologies and their environments, did not reflect the unipolar and unilateral nature of this organic robotoid - the fused media environment. Frank Zingrone recognized this problem and later described it as "the media symplex" but he unfortunately included the word "media" in his new nomenclature. The very rise of "media studies" as a discipline in academia during the nineties signaled its obsolescence, its lack of creating perception of the living Present. In addition, the user-friendly nature of the Android Meme encouraged the merger of form and content so that media-criticism became the daily fare of the info-market, from Rush Limbaugh and Gerry Springer to Lou Dobbs and Bloomberg, Inc. The Toronto school of media ecology, represented by the approach of Barrington Nevitt - along with allies such as Maurice McLuhan, Nelson Thall, Frank Zingrone, and Eric McLuhan - produced the following (sample excerpts provided):

Dave Newfeld and Nelson Thall, **BOB'S MEDIA ECOLOGY**. Toronto, Ontario: Time Again Productions, 1992.

Dave Newfeld and Nelson Thall, **BOB'S MEDIA ECOLOGY SQUARED**. Toronto, Ontario: Time Again Productions, 1993.

Dave Newfeld and Nelson Thall, THE MEDIUM IS THE MESSAGE: McLuhan. Toronto, Ontario: Time Again Productions, 1994.

"Since the dawn of Western civilization, *art has preceded science*, precisely because the perceived effects always precede the conceived causes! Technology (derived from Greek *techne*: art or skill of the artisan) preceded science until the Age of Reason, which, pushed to extreme, became 'mother of modern revolutions' - a new chaos.

In the First Industrial Revolution of material 'hardware' production, 'value-in-exchange' via markets prevailed over 'value- in-use' for humans, and restructured their thinking and being. During this Age of Humpty Dumpty, technology became 'applied science', as all arts and sciences, thinking and doing, were further fragmented and separated. Physics stressed measurement of quantifiable aspects of material bodies, Alchemy (concerned with transmutation of metals from 'base' to 'noble') became Chemistry that stressed qualitative transformations of all materials (now, through 'resonant bonds', rather than 'mechanical connections').

In the Second Industrial Revolution of information 'software' production, the old logic of the Excluded Middle still prevails as the hidden ground of thinking in revolutions and counter-revolutions alike. By treating 'software' like 'hardware', this logic fails to achieve the potentials of exchanging information, when neither participant loses and both may gain, by making something entirely new.

Rather than more specialist knowledge, this new New Science demands comprehensive awareness of its own assumptions. We can find clues for a new 'unity of science', embracing all human knowledge, by studying the effects of our own artifacts, in the processes of human communication: the Tradition exemplified by Cicero's Doctus Orator, Bacon's Novum Organum, Giambattista Vico's Scienza Nuova, Joyce's Finnegans Wake, and the McLuhans' Laws of Media. Hitherto, Western Science has organized knowledge for retrieval, while its Art organized ignorance for discovery.

In contrast to the Next Industrial Revolution, now 'foreseen' as visible FIGURES by 'hi-techies' in their latest rearview mirrors, is the invisible GROUND of the Next Next Industrial Revolution, now here via electric media. And that revolution will embrace both market and non-market economies, as consumer and producers merge like audience and actors. It will also usher in the next Next Cultural Revolution, which demands that we look behind all visible FIGURES to find their GROUNDS: to make sense of our human situation not only after, but *before* creating its causes. We can thus learn to cope with the new chaos that becomes a boundless resource in our Global Theatre via Instant Replay, by recognizing its complementary process patterns in our actual times and spaces.

Having already learned to ask 'WHY?' logically like Western EYE-men, we must now learn to ask 'WHY NOT?' unlogically like Eastern EAR-men. Both are essential to restructure our present situation. In the real ground of constant change, in pristine and modern chaos alike, only stable figures really need explaining. The NEW New Science will embrace Art, Science, and Religion - all human knowledge - both perceptually and conceptually.

The impact of scientists on Marshall was through the metaphors underlying their theories in particular, but whatever impact McLuhan had upon scientists was through his process-pattern metaphors in general." - Barrington Nevitt [with Maurice McLuhan], WHO WAS MARSHALL McLUHAN?: A Mosaic of Impressions Explored. Toronto, Ontario: Comprehensivist Publications, 1994, edited by Frank Zingrone, Wayne Constantineau, Eric McLuhan, and Nelson Thall, pp.246-247.

"In our work with Marshall, we eventually recognized how each sense (and each medium) makes (and requires) its own humour. The deaf and the visually-minded prefer 'slapstick'. They chortle especially when the visual goes into high- definition and flips into the kinesthetic; the magically violent choreography of the Three Stooges, for example. The blind and the oral cultures, on the other hand, like Marshall, appreciate word play. Marshall was a big fan of the Marx Brothers and of W. C. Field - the foursome and the loner.

In the electric circus, stand-up comics 'put-on' the audience to share each others misadventures, misdemeanours, and misfortunes, or misplaced credulity. Stand-up comedy has emerged as the premier mode to handle the unexpected that we expect to find in our global theatre of the absurd. In all communication, the users are the content of the medium. But, in a 'put-on comedy' the users are captivated by the process of being captured as content. They may also playfully protest: 'Don't put me on!', which is another put-on." - Ibid., p.188.

"The selections in Part IV, 'Culture and Art: Figures and Grounds', exemplify McLuhan's erudite playfulness. He works a trope or two on Carl Jung and sheds new light on the notion of archetypal power. (Who would have thought anyone could alter the idea of an archetype after the dominance of that area by Jung?) Art is very serious, high-powered play, and the intrusion of popular culture into the arena of art has been one of the most important new aspects of Western culture.

Reading this material requires that the user be willing to unlearn some things that dominate our perceptual lives - for example, that logical clarity and narrative sequence are always the index of solid meaning or that the opposite of a great truth is falsity (it may be another great truth). Different media, like styles in painting or literature, are special ways of seeing and induce specific states of mind. Also, the user should remain open to the proposition that much of what is most important, and that works the most powerful changes in our lives, lies outside our general awareness, as environmentally hidden. McLuhan's work is useful and exciting precisely because it is still the best way to discover underlying structure and meaning in a world that most of the time seems impossibly overloaded with conflicting information." - From the Introduction by Frank Zingrone and Eric McLuhan, ESSENTIAL McLUHAN [by Marshall McLuhan]. Concord, Ontario: House of Anansi Press Limited, 1995, edited by Eric McLuhan and Frank Zingrone, pp.9-10.

"The odd language of Finnegans Wake clearly marks it as belonging to a lively tradition of composition called Menippean satire and thereby relates it to serious cultural observation and poetic activity of a high order. To identify Finnegans Wake as an example of this particular species of satire requires looking at it in an unorthodox manner. Both of the conventional approaches

to Menippism miss the mark. Classicists define it as involving 'a mixture of verse and prose' (the Wake does contain plenty of verse, overt as well as embedded in the text), but maintain that the practice of Menippizing died out either in antiquity or in the Middle Ages. Contemporary literary critics, particularly those basing their approach in the observations of Northrop Frye, classify works as Menippean using objective description of outward features and themes of known Menippean satires. But to approach Menippism objectively is to miss the essential character of the satire.

Of the three modes of satire - the other two are Horatian and Juvenalian - Menippism, following the practice of the Cynics, aims its attack at the reader. A Menippist will do anything necessary to reinvigorate the reader's numbed sensibilities, so the art blossoms with novelty in every age as well as with blatant plagiarism of other, earlier Menippists. Descriptive approaches cannot keep pace with novelty, and objective appraisal of the satires and their contents means ignoring their effect on the reader. The first part of this study, then, focuses on the nature and tradition of Menippism and the techniques needed to study a Menippean satire, especially Joyce's. Since rhetoric is the science of using words and images to produce a given effect in an audience (of hearers, viewers, or readers), classical rhetoric and principles of decorum are invoked as the ideal method of approach.

A great deal of the remainder of this study involves examining the language of *Finnegans Wake* and the reasons for its departures from the normal and the expected. Once we know that the Wake is a Menippean satire, we know two things, both crucial: we know what the Wake is (not simply a 'monstrous joke', as one bewildered reader howled in frustration), and we know what it is for. As a Menippean satire it is far from alone, for it belongs to a vital tradition of writing that contains similar works and that extends from Homer (*Margites*) through Varro, Seneca, Plutarch, Lucian, Macrobius, Martianus Capella, Alan of Lille, Chaucer, Erasmus, Rabelais, Cervantes, Thomas Nashe, Burton, Swift, Sterne, Mark Twain, Byron, Flaubert, and Ezra Pound, and onward through Flann O'Brien, John Fowles, Don DeLillo, and Italo Calvino, to mention but a few." - Eric McLuhan, *THE ROLE OF THUNDER IN *FINNEGANS WAKE**. Toronto, Ontario: University of Toronto Press, 1997, pp.ix-x.

"Let Arachne, then, serve as patroness and guide to those nomadic hunters who wander or surf the webs and nets. She spins tales and casts eloquent images to seize the gaze and stun her prey. She is the huntress and the patroness of those who would seek to exploit the net for a goal, profit. She is the left side of the brain on the net; Penelope is the right side. Let Penelope reign as patroness of this new state itself, not a city-state but a global state with the gossipaceous character of a small village, even as the kingdom of Ithaca was small, but no less royal. Urban and orbal.

Finally, what is the significance of what Penelope was doing - weaving a shroud? In the Odyssey, she is weaving it for Laertes, son of Arkesios and father of her husband, Odysseus. Laertes, brought back to life by Athena, fought in the last battle in the story (XXIV, 513-525). Fighting alongside his son, he throws the last spear with deadly accuracy and force.

Today, once again, Penelope weaves her shroud, a shroud for the growing millions of disembodied users of the net. This shroud enfolds the world, the World Wide Shroud. And it is never finished, just like the essay thrown out on the net which the author and readers can tinker with, and elaborate on, and comment on, and undo and redo endlessly. And it resembles the net itself, which also shrinks by night and expands by day. The net and the web are themselves encyclopedias, culture-poems of corporate - anonymous, unanimous - authorship.

So today we find ourselves in just such a mythic world of encyclopedic simultaneity: the net and web yield at every moment the living circle of cliché human knowledge, not the shop-worn one-thing-at-a-time narrative laden with archetypes. Our mode now has to be epic, not lyric or dramatic. Not tragic (for finding a private identity), but instead decidedly comic, for the job facing us is that of the beachhead, that of founding a community." - Eric McLuhan, *ELECTRIC LANGUAGE: Understanding the Message*. Toronto, Ontario: Stoddart Publishing Co. Limited, 1998, p.12.

"Because haptic space is space made by the user from moment to moment, wherever you are at any time is the center and the whole focus of the space. So there is no vanishing point, no perspective, no chiaroscuro or foreshortening. The user is the focus: it isn't so much that the user employs

all points of view at once as that the user is *looked at* in this haptic space from all points of view at once. In this space, everything is related to everything and to the user and the user's responses - a condition most cultures label paranoia.

What exactly does VR do with the senses? There are several main considerations. First, the helmet cuts off outer vision, so the play in this theater is inside, on the interior landscape. Next, the eyes are separated. This is enormously significant in terms of evolution: each eye is given its own screen to look at, and the two are not allowed to converge. Each eye examines its own world. In evolutionary terms, this gives the user the kind of vision used by fish: each eye 'does its own thing' and they never converge on the same thing at the same time, stereoscopically. Actually, although the images presented do simulate binocular 3D, the effect of separating the eyes is really to make the user double-monocular. Because the eyes never converge on an object, as they would in the outer world, the effect is to keep the visual sense in low definition, subordinate to the other senses. The one-eyed man is the hunter: VR parodies that hunter sensibility: it does not extend the visual, bureaucratic mentality. VR is for hunting and discovery. It is not a visual medium but a proprioceptive one....

Under conditions of such profound involvement as the Internet and VR afford, private, individual identity is irrelevant as well as being impossible to sustain. Private individualism calls for great intellectual detachment of knower from known, and abstraction in the very process of knowing. Participation is incommensurate with private identity. It is no coincidence that the surge of interest in VR accompanies the new fad of printed stereographic images. They now adorn newspapers, desk calendars, book covers, even postcards. To see one, you have to stare cross-eyed at an apparently pointless pattern: after a few moments, a 3D shape swims out of the page at you....

You have to move about to navigate in the 'Virtual World': you don't sit there with a channel changer or tap at a keypad. Mime, the art most closely associated with VR and body movement, holds the key to the new virtual worlds: you mime your way around in the virtual space, a space either generated by or responsive to the user's postures and gestures. If this new toy

soon takes a serious place in the world of science or of art, it will be because the disciplines developed in mime have already mapped all of the virtual spaces imaginable. Corporal mime, which reaches back to preliteracy, will provide the avant-garde cyberpunk's bodily discipline and asceticism." - Ibid., pp.19-24 in the chapter entitled "Virtual Reality: Mime without Walls".

"The *ground* of effects always paves the way for the causes to arrive, so the 'coming events cast their shadows before them'. With elevators, airplanes, helicopters, space shuttles, satellites, we have all the effects: anti-gravity will not be long in coming. Radio, telephone, TV, and the rest mean that ESP technology will soon arrive. The only question is who will get to the patent office first." - Ibid., p.57.

"The four 'parts' of a tetrad are like the lines in a stanza of a poem. Here, however, situations and things, rather than words, provide the rhymes.

In a poem, the words' ends echo each other to produce the rhymes. *Late*, *grate*, *spate*, and *fate* rhyme and also look alike, as they all end *-ate*. But then *goat* and *rote* rhyme without looking alike, and so do *too*, *two*, *to*, *shoe*, *blue*, and *flew*.

In a tetrad, with the components arranged as above, each 'part' or cluster of ideas displays an ongoing process or situation. Instead of similar sounds, then, you look for other kinds of similarities. Similar forms. Formal relations, formal resonance." - Ibid., p.36.

"I have occasionally, in the years since his death, heard my father's methods and insights dismissed as 'applied Catholicism', the contention being that he was simply a tool of the Catholic Church. Or that his media work is just age-old Catholic doctrine in new clothes and that he is merely spouting some Catholic party line. (The people who make such assertions clearly must not be Catholics: the Catholics were themselves as irritated by his insights as everyone else and never detected the slightest relation to doctrine in his observations.) At a recent (1997) conference at York University in Toronto at which Neil Postman and Arthur Kroker were featured speakers, the new conventional line was revealed: it runs, 'McLuhan's work is basically age-old

Christian Humanism in modern dress'. (One might as well charge that Northrop Frye was simply a tool of the Masons, or that his literary theories were merely age-old Masonic philosophy dressed up and regurgitated as literary criticism.) There's evidence aplenty in the chapters that follow to discourage or disprove any such imputation. But it is true that he used to drive ossified conservatives and the slow-witted to distraction. Himself neither a raving liberal nor a tight-lipped conservative, he was rather a learned man on a constant quest for understanding." - From the Introduction by Eric McLuhan, *THE MEDIUM AND THE LIGHT: Reflections on Religion* [by Marshall McLuhan]. Toronto, Ontario: Stoddart Publishing Co. Limited, 1999, edited by Eric McLuhan and Jacek Szklarek, p.xix.

"After McLuhan, my own work has unavoidably led me to study the dynamic and simultaneous relations between simplicity and complexity that result from examining the medium and the message in the context of *virtuality*. This set of relations creates an infinitely vast interactive process pattern. (A process pattern reveals an underlying structure of meaning, as in Eliot's *The Waste Land*, where the surface seems chaotic and meaningless.) Deep structure is at the same time part content and part medium, that is, symplectic. The computer, operating by binary logic, exposes the lack of deep structure in post-modern communication: what is, simply is, and means only in terms of itself.

The view implied by the statement 'the medium is the message', if taken to suggest that content is of no real importance at all, was less of an exaggeration in 1964 than it is now with virtuality massively affecting contents. The old view clearly lacks balance. The hyperbolic bias of McLuhan's statement is meant to bring home an important point: *It is only through an understanding of the structure of a medium that one can gain real access to its message*. In the end, however, it is the message that we want and need.

Media tend to simplify complex human events for easy consumption. At the same time, they complexify events through exhaustive - even obsessive - coverage, but only at the level of low-cost entertainment. In television, redundancy serves as a replacement for complexity. Care must be taken to

keep it simple and avoid alienating sponsors or consumers through real controversy, real introspection. The truth could put you out of business." - Frank Zingrone, *THE MEDIA SYMPLEX: At the Edge of Meaning in the Age of Chaos*. Toronto, Ontario: Stoddart Publishing Co. Limited, 2001, pp. 3-4.

"Interpretations of the relation between form and content appear to be inexhaustible. In fact, every philosopher has a way of approaching this thorny problem - though each, in the end, becomes only a revelation of the biases implicit in that particular philosophical view. The view that form proceeds from content, for example, or is an 'extension of content' (see Olson [the poet Charles - ed.] and others, for instance) is naive; it presupposes that the problem is dualistic enough to allow for such a simple manipulation of the terms.

To have a useful knowledge of forms, one must at least consider both *the form of the medium* as well as *the form of the content*, since every medium has as its content another medium. Every filmgoer, while familiar with the demands of film form, often lacks knowledge of the literary forms on which film content is based. The problem of form and content is one of multiple regress, as in a system of self-reflecting mirrors. The medium, even without a content, is the meaning.

This ignorance of the out-of-awareness aspects of any medium of communication is where action and change occur, particularly as one moves from one medium to another. We want to know whether there is a form/content relationship that holds true for all media of communication. An affirmative answer to this question is possible: *content consumes form*. How could *The Wizard of Oz*, *Gone With the Wind*, or *La Dolce Vita* be imagined apart from their medium's form, which has entered and become fused with content? No matter how spectacular the production values of a film, the contents of that film consume it.

Forms tend to formalize, of course, though at some point they came from pure invention: someone wrote the first sestina or the first ode. But who was the first person to use alphabetized language? (It probably wasn't the mythic Cadmus, who likely was illiterate.)

Clearly, the form of the medium is of primary importance to meaning; the form of the content, which is part medium and part literary genre, proceeds from it secondarily. Other parts of the form of the content are style, structure, voice, and the self-conscious part that assimilates aspects of the medium's form." - Ibid., p.246.

"One of the disconcerting powers of electronic information systems is the elimination of personal privacy. Special interest groups and business agencies mine uncontrolled amounts of personal data all the time. We live completely out in the informational open. There is nowhere to hide. The owners of the controlling knowledge secretly use data about each of us to make us more susceptible to their management of our lives.

Politics and economics have always operated in secrecy. In information circles, media gatekeepers are the functionaries of the new gnostics. Cyberspace bandits, information high priests, chaos investors, hacker terrorists, bank presidents and IMF globalists, drug and biotech researchers, communications moguls, and sundry other infocrats cross the data desert of the Internet in one-person caravans.

There is something fundamentally mysterious about the operations of electric process. Every square centimetre of earth has become a holographic point containing all of the transmissions over the face of the globe. The elimination of time and space in human interchange is a big enough revolution to completely change all social values - virtualized, bodiless people can make no real society. The discarnate realities of electric process and their great economic power may be the problem, not the solution to our futures." - Ibid., pp.259-260.

"An anti-environment in the form of an immanent, new technology is always there, somewhat invisible, but ready to take over at a moment's notice whenever a new age demands. No matter how adept we become at our inhibiting tactics, we remain completely vulnerable to technological change. As long as we have artists, however, we should have some awareness of a changeable reality. Art is still a fairly dependable early warning system of

cultural change. Difficult art reconnects people to the powerful stuff stored below the threshold of consciousness. Few of us want to face this. It seems dangerous to mental stability.

Our contemporary art is more symptomatic than vatic. The great artists of classical times seemed to have prophetic vision; they appeared possessed of the knowledge of what is eternally true. Today, that vatic posture is gone. Our artists seem more egocentric and speculative. Between good art and bad art lies the domain of advertising. These worlds interpenetrate. Consumerism confuses the real world with advertising, and advertising with art.

We can see only the giant, undeflectable motion of global culture toward the fiscal embrace of electric process. It didn't happen all at once. The deep pull on our sense of reality is the effect of an underlying drift in the tidal suction of our ebbing and flowing awareness of global conditions." - Ibid., p.264.

B. The New York school's tactic was a little more appropriate as it embraced printed post-postmodern, personalized "fiction" as an ironic affront to the Android Meme. Its agenda is stated in the following excerpt from a recent interview:

"Chris Kraus: French theory was usurped by academics by 1990; big presses were taking care of it. It seemed best to publish American first-person fiction. I had been living in the East Village for years, and all of my friends were writers. We published Cookie Mueller, Eileen Myles, Ann Rower and Lynne Tillman. Their work all expanded upon French theory - which, by the way, had been a very sexist intellectual universe.

Sylvere Lotringer: If you compared theorists like Gilles Deleuze and Michel Foucault to John Cage and William Burroughs, you could see a connection between what the French were doing with concepts and what the Americans were doing with perception. But Chris pointed out that I was publishing all these old French men! So we looked at the downtown New York writers who were too rough to be distributed in middle America. They were smart, and they were aware. And they didn't try to write in the third person to talk about themselves.

Kraus: All of these books were written in the first person - a first person that is adventurous, completely public and anti-introspective, not confessional. There was Deran Ludd, who was a punk-Goth comic-book novelist. And Bob Flanagan, who wrote *The Pain Journal*, a diary that he kept while he was dying of cystic fibrosis that meditated on pain-as-disease versus pain-as-S&M.

Lotringer: So the idea was to not be narcissistic and hide behind the writing. Deal with the world! To create another pseudo-individual through literature is interesting, but to look at the world and try to anticipate what is happening there is very important." - *Time Out New York* magazine, March 7-14, 2002, p.73.

C. The Montreal school, through *New World Perspectives*, trumped the first two schools by celebrating the death of "media studies" and exploiting the potential for a new spontaneously-adapting nomenclature. It also recognized that "media" did not massage and affect humanity any longer. Some samplings are:

SEDUCTION, Jean Baudrillard, 1990.

"The Gulf War, therefore, as a grisly replay of the medieval crusades. A final war in which, as the French theorist Paul Virilio states in *Pure War*, there is a conjunction of the Holy War (of religious fundamentalists) and of the Just War (of the nuclear technicians).

A war which can be fought at the geographical meeting-point of the Tigris and Euphrates Rivers as if to emphasize that this is an epochal drama: the imminent reversal of the always projective logic of the West back to its primal origins in Mesopotamia. A religious war between Virilio's 'dromocratic' war machine, the most intensive expression possible of the dream of the rationalist eschatology, and, in distorted form, the new 'Other' of Arab nationalism. The world's first purely *designer* war: a promotional war machine which scripts in advance the whole metastasis of violence as an advertising campaign for the technological invincibility, and thus political

necessity, of the 'new world order'.

The scene of a fatal decomposition in which all of the political tendencies from the past - ideology, power and sacrifice - rush towards their violent climax in purely inverted form: cynical ideology, cynical power, and cynical sacrifice. Consequently, the debates in *Ideology and Power in the Age of Lenin in Ruins* have, beyond their theoretical divisions, a broader literary significance as harbingers of the main contours of the nihilistic politics of the twenty first century. Third millenium politics, therefore, not as a time of cold seduction versus command socialism, but of a new world order which can be so deeply sacrificial because it is all about the harvesting of the energies of the social and the non-social universes by the 'dromocratic' war machine. A time of the unmasking of ideology as domination, of power as a *trompe-l'oeil* of the cynical sign, and of sacrifice as mimetic violence against an 'Other' which has only the *irreal and projected* existence of a frenzied political fantasy." - From the Introduction by Arthur and Marilouise Kroker, *IDEOLOGY AND POWER IN THE AGE OF LENIN IN RUINS*, 1991, edited and introduced by Arthur and Marilouise Kroker, pp.xiv-xv.

"Or maybe it is something more. Not just male hysteria in relation to sexual lack, but as the emblematic sign of a more primordial lack in postmodern society. Maybe male hysteria - the hysteria of the mutant sex - expresses a more fundamental inversion: the inversion of space over memory, of the ideological order of the phallus over embodied history. Male sex, then, as the sovereignty of desire as lack over libidinal history, which is to say, of spatialization over the body. An endless revenge-taking by the mutant sex against the body, against the pleasures of the clitoris. Indeed, if Virilio can write so eloquently now about the postmodern body as a 'war machine', about, that is, the indefinite combination of speed and politics into a new form of 'dromocracy', maybe that's because as a privileged participant in the mutant sex he can understand so well the dialectic of lack and deterrence. Male sexual discharge as also a kind of deferral of knowledge of absence which, first having its basis in the penis as a mutant clitoris, expands rapidly into a universal political logic of revenge-taking.

Why is the image of the erect penis now privileged as a cathected object for

political prohibition?

A new drive towards male puritanism in which the Madonna image does a gender flip? No longer woman as 'sacred vessel', but the erect penis as a prohibited object of the gaze. A sacramentalized penis which can fall under a great visual prohibition because it is now *the* sacred object. Perhaps a last domain of innocence for anxious men, desperate about all of the gains made by movements for sexual liberation. And so, the erect penis is encoded with all the liturgical trappings of a sacred vessel: the ideological prohibition of the gaze, an unseen object of veneration, an erectile domain of semiotic innocence. The erect penis, therefore, as a key agent in a new discourse of semio-sex which can be so fundamentalist in its cultural prohibitions because it screens out the reality of a culture which is all about a ruthless patriarchal politics of back to the penis. Political injunctions against images of the erect penis, therefore, as also about the repression of denial.

But, of course, the question remains: You can cover it up, but will it go away? If the erect penis can be so semiotically innocent, that is because a great political reversal is now taking place. The erect penis can acquire a cultural discourse of innocence in direct and intense relation to the new material reality of a penile power which, under the impact of a decaying neo-conservatism moving from the political to the cultural sphere, is all about predatory power against women and children. Is the new penis censorship just a camouflage, then, for a new fundamentalist cultural politics based on a new order of phallogentric domination: violence against women, the sexual abuse of children, a whole sexual politics based on the libidinal economy of abuse value? The new sexual censorship, therefore, recapitulates the historical traditions of puritanical movements: the cultural reality of a sacred object as a displaced sign for a material reality based on sexual abuse. Consequently, the discourse of the erect penis as a sacred object is central to the newly resurgent ideology of the hysterical male." - From the Introduction by Arthur and Marilouise Kroker, *THE HYSTERICAL MALE: new feminist theory*, 1991, edited and introduced by Arthur and Marilouise Kroker, pp.xi-xiii.

"The French discourse on technology explores terminal culture with such

violent intensity that it is replete with significant images: Baudrillard's simulacrum, Barthes's empire of the sign, Lyotard's driftworks, Virilio's war machine, and Deleuze and Guattari's 'rhizomes' as a scene of the sado-masochism of cynical power. If these thinkers have none of the historical agency of Sartre nor the tragic remembrance of Camus, that is not to diminish their understanding of technological society. For in their writings are to be discovered uncensored reports on the aftermath of historical decay. Thus, Baudrillard shows how the logic of seduction undermines all established systems of meaning; Foucault writes of the constitution of the fictitious bourgeois ego by a cynical power; Barthes demonstrates the sovereignty of power which functions as a rhetoric machine, where myth implodes into the dark logic of the cynical sign. While contemporary French discourse may not provide visions of human emancipation, it does have the merit of describing the evolution of technological nihilism up to its stage of simulation, and, thereupon to the age of sacrificial culture, in addition to theorizing the internal dynamics of technology under the sign of cynical power. These are theorists of possessed individualism in whose respective writings are to be discovered the psychology, ethics, media strategies, and ontology of postmodern subjectivity; i.e., the possessed individual. Here, the dynamic language of mastery of social and non-social nature finally comes inside, and takes possession of (our) bodies and minds which welcome it as a form of freedom." - Arthur Kroker, *THE POSSESSED INDIVIDUAL: technology and the french postmodern*, 1992, p.19.

"For Virilio, power now begins on the other side of the Foucauldian error and of what might be called the mercantilist distortion. Refusing both 'knowledge-power' and 'commodity-power', rejecting, that is, both the reduction of power to the monisms of epistemology or economy, Virilio theorizes the disappearance of power into a vector of speed. Here, power is only knowable, not as a form of coercion, nor as a knowledge-vector, nor as a strategy of accumulation, but as a certain form of violent mobility, a logistics of fractals in which the hologram of the whole can be seen only in the indefinite miniaturization of the dispersed subject." - *Ibid.*, p.27.

"A perfect reversibility, then, between all the old polarities of power, sex, economy, consciousness, and sacrifice. No longer production versus

consumption, use-value versus exchange-value, sign versus commodity, victim versus executioner, but a fantastically accelerated, because so depthless, alterity among all the cynical signs. Not really a human world, but a hyper-human one: that point where subjectivity inscribes itself in the commodity first, then in the sign, and finally in the sacrificial violence immanent to seduction. And where technology also finally fulfills the ancient fable by acquiring organicity: first in the reified but dull form of the commodity, then as the object (of the consumption machine) which speaks, and lastly as the spectre of evil - the fear of bodily and social contamination - which haunts the sterile perfectibility of a will to technique which knows only the maximalism of 'bad infinity'." - Ibid., pp.79-80.

DEATH AT THE PARASITE CAFE: social science (fictions) and the postmodern, Stephen Pfohl, 1992.

"Intersex states, then, as the third sex. Neither male (physically) nor female (genetically) nor their simple reversal, but something else: a virtual sex floating in an elliptical orbit around the planet of gender that it has left behind, finally free of the powerful gravitational pull of the binary signs of the male/female antinomies in the crowded earth scene of gender. A virtual sex that is not limited to gays and lesbians but which is open to members of the heterosexual club as well and one that privileges sexual reconciliation rather than sexual victimization. Intersex states, therefore, as a virtual sex that finally is liberated from sacrificial violence.

In the artistic practice of medieval times, the privileged aesthetic space was that of anamorphosis. The aesthetics, that is, of perspectival impossibility where the hint of the presence of a vanishing whole could only be captured by a glance at the reflecting surface of one of its designed fragments. A floating perspective where the part exists only to intimate the presence of a larger perspectival unity, and where the whole exists only as a momentary mirage captured for an instant by a mirrored spinning top. Now, anamorphosis returns as the privileged perspective of virtual sex, of intersex states. Virtual sex occupies the aesthetic space of anamorphosis: never fully captured in its full seductiveness by its fractal fragments, and always dispersed and exaggerated by its mirrored counter-images. And just as the

impossible space of anamorphosis can only be illuminated by the shiny surface of perfectly calibrated objects (spinning mirrors, musical instruments, silver pipes on glittering surfaces), so too are the outward signs of anamorphic sex found everywhere. Heterosexuals fleeing the violence accompanying the decline of the empire of the hysterical male, drag queens rubbing shoulders with sorority sisters at Club Park Avenue in Tallahassee, Florida, top dykes who flip easily between being Philosopher Queen for a day and practitioners of the pleasures of SM, women survivors in Stories from the Bloodhut who present a litany of war stories about male violence in voices and gestures that speak of human love. The outward signs are different: different genders, different sexual preferences, but the anamorphic space revealed by the stories told or the lives lived is always the same. And it is that new sexual horizon, post-male and post-female, that we now call the perspectival world of the last sex." - From the Introduction by Arthur and Marilouise Kroker, THE LAST SEX: feminism and outlaw bodies, 1993, edited and introduced by Arthur and Marilouise Kroker, pp.18-19.

"Maybe we are already living in another dimension of space travel: in a sub-space warp jump, a virtual reality where we can finally recognize that we are destined to leave this planet because we have already exited this body. Not simply the violent expulsion of the body from the weight of earthly gravity into galactic space, but the development of microscopic gene astronauts. Colonies of genes, which once might have fled the primeval soup of the ocean and taken refuge in the geological structure of crystals, the chemistry of plants, then animals, and finally humans, but which now warp jump from the human body into the galaxy of virtual reality. This is a time of primordial genetic rocketry in which genes suddenly are accelerated into orbit around their previous liquid station in plodding human bodies. A new stellar history of TV genes, recombinant shopping, war meiosis, gene nostalgia (what molecular biologists call *inversion*), and advertising mimesis is at hand.

And why shouldn't genes go cybernetic? They have always existed at the forefront of virtual reality: mutants, replicators, cloning, viral genes. Perhaps we have already moved beyond the first stage of the exteriorization of the human sensorium - the externalization of the human nervous system - and are now entering the second, and more decisive, phase which consists of actually

flipping the body inside out: the exteriorization of human genetic history. In this case, technologies of communication would be the means by which genes escape their long evolutionary imprisonment in the body, and inscribe themselves in the labyrinthian electronic highways of recombinant culture. The primal gene, therefore, finally prepared to abandon its evolutionary home in bodily chemistry, to fulfill its destiny by going virtual." - Arthur Kroker, *SPASM: virtual reality, android music and electric flesh*. New York: St. Martin's Press, 1993 [with accompanying CD by Steve Gibson], pp.38-39.

"What is the fate of the tongue in virtual reality? No longer the old sentient tongue trapped in the mouth's cavity, but now an improved digital tongue. A nomadic tongue that suddenly exits the dark cavity of oral secretions, to finally make its appearance in the daylight. Like *Spasm*, the new computer programme for NEXT, where the digital tongue is exteriorized from its evolutionary location in the body's biology, actually severed from the mouth. Here, the tongue might begin by curling back in the mouth with all the accompanying nasal sounds, but then it migrates out of the mouth, travelling down the chest, out of the toes, and even taking libidinal root in the talking penis. Not a surrealistic penis where objects lose their originary sign-referent, and float in an endless sign-slide, but a tongue referent that has actually lost its sound object. *Spasm* is, then, surrealism that is inscribed in the flesh. With this difference. The digital tongue has finally come alive, acquiring sounds from its different bodily referents. The tongue plops onto the chest with a gargled scream; it twins the hyperreal penis to the mutant sounds of sex without secretions; it becomes a toe sound, a knee sound, an anal sound. No longer a tongue mediating breath, lips and jaw movement, but a digital tongue in a universe of floating lips, chattering eyes, screaming hairs, gossipy genitals, whining feet.

The digital tongue samples the body. Working according to the logic of spatial association, it changes sound according to its location on the body's surfaces. Here, the text of the body is licked and consumed by the nomadic tongue: sometimes an arm, a vein, an intestine, a hip. No longer localized sound, but the speech rhythms of violent disassociation; not contextualized noise, but a floating tongue that can be endlessly reconfigured according to its geographical location in the simulacrum of the body. The digital tongue,

then, for nomadic sound in the age of the floating body. Or maybe it is something very different. Perhaps Spasm does not refer at all to the digital tongue, but to the recombinant tongue. This algorithmic tongue comes alive as a gene-splicer - half-gene/half-code: displaying that point where the reconfigured tongue fuses with the cold flesh of the recombinant body, and begins to speak. Perhaps Spasm has a broader anthropological importance: an evolutionary breakthrough in the guise of a computer programme that begins to materialize the sounds of the digital body. What we hear in Spasm, therefore, are the first tentative sounds of ourselves as androids. All of this results less in a vision of the future than an already nostalgic vision of a telematic history that has already been experienced. Spasm is nostalgia for distortion." - Ibid., pp.23-24.

Kroker, as McLuhan did with the cliché "media", takes the cliché "virtual reality" and archetypalizes it to include the whole history of Western technology from St. Augustine forwards.

"Anyway, we are already living beyond simulation (where the model generates reality) in a more spastic experience: the society of the waveform (where the model vanishes into the recombinant language data genomes). Sampling, therefore, beyond alienation (which seeks to preserve the order of the real), beyond reification (which privileges the stability of the ruling concepts), and beyond simulation (where the concept is the real itself). A culture of quantum fluctuations where you can only know that you have never seen what you thought you were looking at because you have never really heard what you were listening to.

The pre-digital ear is the first victim of sound trompe l'oeils: from the virtual sound of Madonna Mutant to the virtual body of Michael Jackson. So then, an urgent requirement emerges to speed up the ear to match the aural velocity of digital reality, to pump up the genetics of hearing to equal the sounds of the datascape. Sampling technology, therefore, as a filter for mutant eardrums: looped ears, partitioned hearing, panned sound, accelerated eardrums, time-stretched sound, digit design ears. In the materiality of sampling we can discover anew a language for rethinking a universe that has been blasted apart by digital technology. Consequently, the education of the

cynical ear can be an aesthetic strategy for learning how to cohabit the planet with android processors." - Ibid., p.53.

"We now live in the age of dead information, dead (electronic) space, and dead (cybernetic) rhetoric. *Dead information*? That's our cooptation as servomechanisms of the cybernetic grid (the digital superhighway) that swallows bodies, and even whole societies, into the dynamic momentum of its telematic logic. Always working on the basis of the illusion of enhanced interactivity, the digital superhighway is really about the full immersion of the flesh into its virtual double. As *dead (electronic) space*, the digital superhighway is a big real estate venture in cybernetic form, where competing claims to intellectual property rights in an array of multi-media technologies of communication are at stake. No longer capitalism under the doubled sign of consumer and production models, the digital superhighway represents the disappearance of capitalism into colonized virtual space. And *dead (cybernetic) rhetoric*? That's the Internet's subordination to the predatory business interests of a virtual class, which might pay virtual lip service to the growth of electronic communities on a global basis, but which is devoted in actuality to shutting down the anarchy of the Net in favor of virtualized (commercial) exchange. Like a mirror image, the digital superhighway always means its opposite: not an open telematic autoroute for fast circulation across the electronic galaxy, but an immensely seductive harvesting machine for delivering bodies, culture, and labor to virtualization. The information highway is paved with (our) flesh. So consequently, *the theory of the virtual class*: cultural accommodation to technotopia is its goal, political consolidation (around the aims of the virtual class) its method, multi-media nervous systems its relay, and (our) disappearance into pure virtualities its ecstatic destiny." - Arthur Kroker and Michael A. Weinstein, DATA TRASH: the theory of the virtual class. New York: St. Martin's Press, 1994, p.7.

"In the twilight days of the twentieth century, the occult science of anamorphosis returns as the seductive principle of distortion at the disappearing centre of virtual reality. Long consigned to the suppressed terrain of prohibited optics, anamorphosis now claims its place as *the* perspectival illusion central to the ruling technologies of digital reality. No

longer is anamorphosis a perversion of power, but the aesthetic language of a power which perverts the representational logic of social reality.

Anamorphosis is not simply a distortion of the real, but the disappearance of reality into a virtual world of technological automata and non-space. Like cynical reason and cynical power before, the illusional perspective of anamorphosis can return in a perfectly inverted form: *cynical anamorphosis* as the perverted image of virtual reality. There has never been a great difference between the spinning tops, glittering conical spaces, fantastically distorted cathedral murals of medieval times, and the automata of virtual reality today. What, after all, are VR suits, data gloves, and cyber-helmets but the fabulous automata of the aesthetic game of anamorphosis: a machinal assemblage that introduces the body to a fantastic galaxy of the perverted image?

In the visual world of anamorphosis there are no sight lines, no solitary (sovereign) subject as the privileged locus of accelerated and decelerated perspective, and no geometric grid for policing the perspectival simulacrum. What appears, instead, is a liquid world of fantastically distorted perspective: the space of illusion as non-space. Virtuality offers a third zone of liquid vision between distorted reality and its fractal distillate. It seduces us with the hint of our disappearance into the non-space of liquid vision that shadows its optical aesthetic of anamorphosis. Beyond the sovereign subject as the always fictitious locus of Renaissance perspective, to the non-space of the perverted image. This is what the technological imagination drives on, making our vanishing into the liquid inter-zone of the third eye so seductive. The third body, the non-space of the anamorphic nervous system: the dream world of virtualand.

The technologies of VR, therefore, are post-medieval surfaces where we merge with the aesthetic trompe l'oeil of anamorphosis, go liquid and become spinning tops, silver cones on glittering surfaces, a liquid array matrix. This is a way of breaking through to the non-space of the third body: that virtual space where the reality-function dissolves into a perverted image, and where reflecting surfaces are signs of that which never was. In the anamorphic space of virtual reality, we become the non-space of the perverted image." - Ibid., pp.49-50.

"The recombinant commodity has no (earthly) home, only an electronic sim/porium. A rootless nomad, it wanders restlessly through the liquid circuitry of wired culture. Renouncing its interest in property-relations, it yields fealty only to the empire of speed: the new polity of pure process (economy). Abandoning the tired dialectic of use-value and exchange-value, the recombinant commodity finally discloses itself as a fatal doubling of abuse value: process-abuse for the organic body, and a fatal register of the coming abuse of the standing-reserve of surplus flesh, surplus labor, surplus populations, and surplus states. The recombinant commodity must abandon use-value because the rest position of the referential signifier is death. It must renounce the (alienated) pleasures of exchange-value because recombinant culture occupies the mirrored world of recursive space. Refusing both the alienation of the laboring body in capitalist market exchange and the reification of the fungible body in the promotional phase of the high-intensity market setting, the recombinant commodity works the (fibre optic) vein of the ecstasy of disappearance.

Politically fascistic, culturally a cynic, relationally a sociopath, and psychologically an exponent of object-relations theory, the recombinant commodity is the operating system at the (algorithmic) centre of virtual economy. All the rest is a (computer) *application*: TV channels as abstract vectors of data entry-points into the electronic body; designer fashion as digitally coded applications of technology outreach by promotional culture; model body types (the 'waif look' so fashionably cachet in the 1990s) as bionic constructs straight off the shelf of wired culture; and sudden audience mood shifts as psychological registers of the channeled flows of the media sensorium.

As the operating system of virtual economy, the recombinant commodity functions as a *circulating medium of virtual exchange*. Think of Marx's (virtual) theory of the fetishism of the commodity-form in (re)combination with Talcott Parsons' perceptive, but as yet theoretically unappreciated, analysis of a full-fledged cybernetic system (Virtual America as the world hologram) consisting of dynamic homeostatic exchanges among 'symbolic media of exchange'. Here, the organic body vanishes into its electronic Other as the recombinant commodity works to impose a virtual system of *moral

economy* as the new world cybernetic grid. Driven by the dynamic language of the will to virtuality, the cybernetic grid has as its underlying logic the enhancement of (its own) adaptive capacity by the continual redefinition and resequencing of virtual (value) patterns. Virtual debt, virtual populations, virtual labor, virtual money, virtual resources, and virtual wars result. The conquest anew of the disappearing zone of the organic is processed through the violent circulatory system of virtual exchange. Certainly not static, the medium of virtual exchange undergoes accelerated phases of radical expansion and contraction. Its *expansive* phase comprises the will to virtuality; and its *deflationary* phase is marked by neo-fascist forms of direct action. Neither purely virtual nor essentially fascistic, the circulating medium of virtual exchange *is both, and simultaneously so.*" - Ibid., pp. 72-73.

"In the bondage rituals of pan-capitalism, culture is not a reflex of the recombinant commodity (energy), but the recombinant sign (bio-signification) coordinates the cybernetic chain of hierarchical control. No longer a materialist culture (that vanished long ago into the imaging-system), nor culture as a simple chain of signification (language is now only a fading metaphor for organic technology that has not yet learned how to speak), but culture as a cybernetic system: recombinant, semiurgical, and immensely vital because it long ago ceased to have a real, material body. In recombinant culture, dead signs trump material energy because this is a culture of disappearances, populated by screenal bodies." - Ibid., p.32.

"Virtual Evil? That is cybernauts as the sign of the beast with two easily identifiable marks burnt on their electronic flesh. First, the mark of *forgetfulness*, as cybernauts systematically expunge from their world-view any account of the human costs associated with the coming to be of the technological dynamo. And secondly, the mark of *techno-fetishism*, as cybernauts transform their cyber-bodies and cyber-consciousness into living registers of emergent technologies. Total repression and total valorization, then, as the twin signs of virtual evil." - Ibid., p.109.

"Advertising never cared for any rules. As pure recombination it never paid fealty to any genre conventions, either Philistine or avant-garde. It would be earnest, kitschy, high-brow, middle-brow, low-brow, reassuring, shocking,

challenging, narcotizing, transgressive, and any combination of the above at once: pure recombinnance." - Ibid., p.113.

"Advertisements are sunshine reports for reclining flesh. The body electronic finds its mirrored double in their panoramic, but frenzied, scans of the crash body as it moves from flesh to virtuality. Not scenes of a future yet to unfold, but of a semiurgical, virtual past that the electronic body has already experienced. Certainly not a machinery of solicitation for manipulable masses, but a bio-apparatus of dissuasion for virtualized flesh. A 'strange attractor', advertising is a massive defensive armature created by the mediascape to win back virtualized flesh to the logistics of desire. However, the bio- net of advertising must fail because the body electronic has already vectored along the vapor trail of virtual reality, leaving behind only a brilliant, because ghostly, halo-effect marking its disappearance from earthly space....

Not the ancient fable of the hare and the tortoise, but the virtual enigma of the circuit-breaker (of pan-capitalism) and the crash body. Always a struggle between the debt liquidation cycle of reclining flesh (the fall into the heavy weight of advertising) and the over-heated, hyper-inflated virtual economy of Crash. In an age infected by the will to purity, advertising is a fall into sin from the virtual state of grace." - Ibid., pp.36-37.

"The contradiction in Perot is the contradiction in virtual political economy. One hand renders the flesh superfluous and the other leads the flesh in a revolt against its superfluity, but always cynically, transacted through the mediascape... until and unless it turns to carnage. Virtualization or carnage. That is the present horizon of political possibilities.

Where does capitalism fit? Capitalist and technocratic elites play both sides of the street. Sure they would prefer the interminable speed of virtualization to death camps. But they will take death camps. They are instruments of the fluctuations of the flesh as it virtualizes and rebels, moves back and forth between 'liberal' and retro fascism: the politics of the bi-modern. The bi-modern reveals its structure in times of economic austerity when recline becomes uncomfortable. Liberal-retro fascism is irritable recline." - Ibid., pp. 92-93.

"In recombinant history, archiving is always on its way to recombination into a new configuration. Electronic bodies merge: the consumer body is a war machine; the medicalized body has its financial history stored in the spooling gateways of hospital computers, waiting to be leeched (recombined) of the weight of its earthly possessions; and the celebrity body is a dead star, which, like the luminous brilliance of a 'red dwarf', is understandable only by the rules of deep space astronomy. Just when we thought that history as a *grand recit* had finally died as the last victim of the modernist illusion of misplaced virtuality, suddenly it returns in full recombinant force: that point where history merges with digital technology, becoming the world-historical process animating the will to virtuality." - Ibid., p.133.

"Cross McLuhan's nervous system outerized by the media, with Nietzsche's 'last man' (the first unequivocal sighting of the recliner) and you get crash theory. This is how it happens: Crash theory is the post-humanist (not anti-humanist - what is there to be against if the 'human' is dead and now a subject of endless resurrection effects?) continuation of emergentism. It follows McLuhan's outerization thesis, and extends and elaborates it by calling attention to how the media-net is constituted by technologies that were not in McLuhan's ken. Crash theory, however, abandons the notion that media are 'extensions of man'. Far from it. They are humiliations of the flesh, which remains as an embarrassment after 'man' dies.

The crash has happened. The emergence of the media-net is accompanied by the onset of reclining life. Rather than McLuhan's Hegelian vision of a common sense *restored* by and through the media, a media-net scans, sucks and probes the body for more images and bytes to be archived, called up, recombined, run, and archived in cyclical processes leading nowhere: that is non-history.

History is an irrelevancy because its subject 'man' is no longer the protagonist of anything but cynical dramas on the media-net, and dead ideologies. There is no protagonist, but there is a mode of being emergent from the flesh that displaces all protagonists. Telematic being has no history because its only principle is the endless exchange of data, combined in every possible form.

Any of the directions that it seems to take are determined by the vicissitudes of the reclining flesh, which provides it with a (rotting) biological infrastructure (a resource base and an incitement for resource organization).

Telematic being, indeed, can never free itself from some form of the flesh any more than the flesh can free itself from the mineral kingdom. Androids synthesized especially for the process of providing images (data) and registering them consciously (bringing them into 'appearance') are the ultimate answer to the media-net's requirement for a biological infrastructure. It hardly need be mentioned that these 'androids' would not require any structural resemblance to the human body. As we are told ad nauseum by technotopians, silicon dryware will probably be far more effective in producing consciousness than the wetware that *homo sapiens* has become. That is all in the 'future', however. Right now the media-net would cease to be without activation through the flesh." - Ibid., pp.143-144.

"The real fascination of communication lies in the possibility of the *end* of communication, just as the seduction of information is to be found in its disappearance. Communication always wants to shed the heavy responsibility of having to maintain a gravitational field to stabilize the orbiting trajectory of information; and information desperately wants to go to ground in the referent of meaning. Information desires its own liquidation in the polar flare-outs of pure data or pure meaning; as does communication demand to be physically separated from the historical burden of the grand signifier of information. Condemned to be eternally entangled, the orbiting planets of communication and information approach and recede from one another. Never attaining the escape trajectories of pure data or pure meaning, the doubled poles of communication and information stabilize in the violent metastasis that is cyber-culture. A closed world, ritualistically inscribed, and almost autistic, cyber-culture is the non-time in which human history is harvested of its surplus-energy by the will to virtuality. In the beginning was the Word, but in the end there is only the data byte: the virtual history file." - Ibid., p.154.

"We Are Data Trash. And It's Good.

Data trash crawls out of the burned-out wreckage of the body splattered on the information superhighway, and begins the hard task of putting the pieces of the (electronic) body back together again. Not a machine, not nostalgia for vinyl, and most certainly not a happy digital camper, data trash is the critical (e-mail) mind of the twenty-first century. Data trash loves living at that violent edge where total human body scanning meets an inner mind that says no, and means it. When surf's up on the Net, data trash puts on its electronic body and goes for a spin on the cyber-grid." - Ibid., p.158.

Kroker completed the nineties with his "pulp theory": "DEAD DOGS AND DADDY UNDER THE CHRISTMAS TREE

Merry Christmas

You can't go home again? That's definitely not true because at Christmas you can always only go home And sometimes it's real grisly: stories of arthritic eyes and black spots and tumors and cancers and angina and heart attacks for the twelve very merry days of Christmas or stories of my best friend Doug who stabbed his Daddy to death and left his body under the Christmas tree until March with Rex, the good ole' family dog Now Doug was schizoid, but so was his Daddy so I guess it was only just a matter of time, or circumstance, to see which delusion won out: Oedipus revenged or Merry Christmas Dad From Hell. Or I'm out shopping with my Mother, buying her a spanking new Toshiba TV with close-captioning and digital ports galore for a happy multi-media future, and she suddenly says: 'Did you see the manager of the store? Well, a few weeks ago, his wife went down to the highway and threw herself in front of a transport truck. Left three children. Sort of sad... I guess.' This was just after we drove by the house of the family doctor, the one who had acid thrown on his face during a happy yuletide season past by an unhappy patient hiding in the back of his car after a housecall. And it was just after our next door neighbour of many years said goodnight to his wife, had a last drink with the boys down at the Legion turned on all the lights in the house, went into the basement and blew his head off with a .410 double-barrelled shotgun. Three months later his oldest son, with whom he never had good relations anyway did the very same thing. Drove his girlfriend to work, getting out of the car she said: 'See you later'. He said: 'Maybe' And he was right Because on the same day he killed himself

over his father's grave Same gun, Different shells." - Arthur and Marilouise Kroker, HACKING THE FUTURE: stories for the flesh-eating 90s. New York: St. Martin's Press, 1996 [with accompanying CD by Steve Gibson], pp. 66-67.

"Everybody who lives in the late 20th century is a potential hacker of the future. And why not? Everything has already been blown to (digital) bits by the power of virtuality. Life at the end of the second millenium is about living in the aftermath of a violent implosion of culture, politics, and society. In the short space of a single century, human experience has suffered a double technological blow. First, it has been fast-processed by the invisible media of electronic technology. What McLuhan could only prophetically talk about in the 50s and 60s is already an electronic reality that is in our past. Just when we understand the grim implications of McLuhan's warning that the invisible media of electronic communication have outered the central nervous system, that is, when McLuhan really does make common (electronic) sense, technology does a quick flip, and we suddenly find ourselves living at the end of technology (in the form of an external mediascape) and at the primal beginning of the age of virtual reality. And this is the blast that hurts. Because now it's no longer the central nervous system that is being externalized or ablated, but technology gets a life, detaches itself from the human species, and begins to grow a new telematic body just in time for the 21st century. Two blasts, then: one *electronic* (that has ejected the nervous system from the privacy of the body), and the other *virtual* (that has rubbed together the externalized central nervous system with the soft language of algorithmic codes and begun to grow a new 'distributive species': distributive intelligence, distributive sex, distributive feelings, and distributive sight). After this double implosion, life as we know it is like one of those immense stellar meltdowns where we're in a spacecraft riding at the edge of the known universe, experiencing all the while the shock-waves and spatial perturbations of this violent decompression of society and seeing all around us the zooming debris of the human wreckage. Ironically, the privileged media of electronic technology provide us with perfect viewing-screens on the virtualization of human flesh. TV is a great portal on cultural implosion: a just-to-the-minute visual simulator of how (our) bodies are virtualized by gigantic image-based processors, freely

resampled, and then played back to us for humiliated applause. Music is a favorite listening port for our disappearance into cyber-ears. Cinema has now been reconfigured into special effects to give us the actual feel of human flesh as it is coded into blurs of sight and sound and image-matrices, and then speed-forwarded into digital life. Think of *Forrest Gump*, *Braveheart*, *Apollo 13*, and *Waterworld*: monuments to the disappearance of cinema into special effects.

The media of the electronic age are the future museums of the body virtual." - *Ibid.*, pp.132-133.

"Exiting The 20th Century: Beyond Nietzsche, Marx, and McLuhan, Hacking the Future is pulp theory. That's pulp for the end of the millennium, when all the bodies are piled up one mile high. Not virtual or heavenly bodies, but bodies that are trying to cope with life lived in the twilight hours of the 20th century.

A schizoid culture that divides sharply now between the technological dynamo of the will to virtuality and its attendant virtual class on the one hand, and a spreading detritus of human remainder that can't be absorbed by digital reality on the other: surplus bodies, surplus labor, surplus nations, surplus flesh.

Pulp Theory is the story of human remainder told through the medium of 90s culture. It's our thesis that the language of digital reality has now fled the high tech labs of Silicon Valley, MIT's Media Lab, and the cyber-grids running from Tokyo to Grenoble and Munich, taking up residence in the violent force-fields of everyday cultural experience: shopping the GAP, visiting Las Vegas, Daytime TV, *Arcade Cowboys* and *Suicide Drive*, or the transgressive aesthetics of 'Slash and Burn' as young bodies in California try to 'feel' in a culture that is numbed and purified." - *Ibid.*, pp.139-140.

"Retro-Techno: The Politics Of Fear. The political tendency today is to the right.

The 90s began with a decisive split between two opposing political tendencies: the triumphant technotopia of the virtual class, and diverse forms of retro-fascism. Like a rapidly mutating cellular mass, this split was of an

extremely short duration, lasting only four years from start to finish before it evolved into something very different. Under the impact of a *managed* worldwide economic depression (that drove working- and middle class adherents of welfare state liberalism towards right-wing populism), and the failure of the so-called 'information superhighway' to live up to its utopian billing (that drove members of the technological class into the waiting game of bunker individualism - the psychological breeding ground of conservative fundamentalism), these two previously divided, and bitterly opposed, movements suddenly merged. Their combination in the ideological form of retro-techno, which is to say the merger of the fiscally conservative, morally puritanical, and anti-government populist energies of the right with the technocratic know-how of the virtual class, this merger of reactionary politics and techno-knowledge, produces the dominant ideology of the 90s. An example of this is a recently convened conference entitled 'The Aspen Summit: Cyberspace and the American Dream 11' where, as The New York Times reported, conservative venture capitalists, self-proclaimed former hippies and anarchists, and 'cyberspace prophets' came together to discuss the role of government, law, and communication in the 'knowledge society' of electronic networking. It was perfectly retro-techno, beyond the traditional labels of Republican and Democrat or conservative or liberal." - Ibid., pp. 140-141.

"Hacking the Future continues McLuhan's concept of artists as probes - with this key difference. For McLuhan, artists were early radar systems for detecting major transformations in technology, probes that went ahead of the general population much like the earlier tradition of the artistic avant-garde. Hacking the Future is about going faster, deeper, and with greater intensity into the interface between being digital and being human. Privileging human 'wetware' rather than hardware or software, Hacking the Future is about creating cuts, disturbances, and transgressions, like a space or an interzone, between digital reality and human subjectivity. Certainly not a theory of 'understanding media', Hacking the Future begins with the assumption that traditional media have been superceded by hypertext flesh, 7-second brains, and wetware minds. Human beings always go faster than technology because people have always been hypertext: fully linked, netted, downloaded, parallel processed, and interfaced. Virtual flesh is always ahead of technology, and

that's the terrain explored by Hacking the Future. Thinking ourselves as wetware to the hardware of technology and the software of the coding labs finally opens our minds to the doors of misperception." - Ibid., p.137.

"Memetic flesh? That's the street scene in cyber-city: San Francisco, CA. Not so much an ars electronica, but an Ars California: an art of digital living. Certainly not a sociological rhetoric of evolution or devolution, but something radically different. Memetic flesh as a floating outlaw zone where memes fold into genes, where the delirious spectacle of cyber- culture reconfigures the future of the molecular body. In Ars California, memetic flesh is neither future nor history, but the molecular present. Pure California Gening.

Now we just got off the Net where we experienced data delirium with the Ars Electronica manifesto for memetic flesh, the one which speculates about future memes: stochastic minds, recombinant bodies, info-skin, molecular daydreams. When we read this meme manifesto, our bodies of flesh, bone and blood sagged under the terminal evolutionary weight of it all, but the electronic sensors embedded in our nanoskin just went crazy. Like Alien 3, the electronic worms cruising the blood lanes just below skin surface heard this call of a future technotopia, flipped on their sensor matrix to red alert, whomped through the epidermal bunker, zoomed out into fresh air, and were last seen heading straight for the California coast....

Memetic flesh as daily life in cyber-city, the kind of place where the virus of the tech future digs its way under the skin, like an itch or a sore or a viral meme that just won't go away.

No one knows this better than the memetic artists of SF. Not the corporate art of Silicon Valley, the 'house' art of Interval, Xerox, and Oracle with their New Age visions of wetware products for the digital generation nor the subordinated aesthetics of the fine art emporiums in official culture, but unofficial outlaw art that's practiced in hidden warehouses and storefront galleries and ghetto schools and other side of the tracks digital machine shops: an art of dirty memes.

Dirty memes? That's what happens when memetic engineering escapes into

the streets of cyber-city, and its scent is picked up by viral artists. Like Elliot Anderson's multimedia algorithm, 'The Temptation of St. Anthony', with its brilliant psychopathology of obsessive-compulsive behavior, complete with 3-D ghostly images of emotional discomfort and stuttering gestures, as the key psychic sign of digital culture. Or Matt Hackert's dead horse flesh machines complete with belching flame-throwers and whirring chain saws and rip-snorting drills, and all of this accompanied by the robotic sounds of the mechanical orchestra. Or Lynn Hershman Leeson's memetic cinema with its application of object-relations programming to the universe of Hollywood imagery. Or the viral robotics of Chico MacMurtrie's 'Amorphic Robot Works' that encode in robo-genetics all the ecstasy and catastrophe of the ruling cultural memetics. Neither technotopian nor technophobic, memetic art in the streets of SF is always dirty, always rubbing memes against genes, always clicking into (our) memetic flesh." - Arthur and Marilouise Kroker, 'Memetic Flesh in Cyber-City' in DIGITAL DELIRIUM. New York: St. Martin's Press, 1997, edited and introduced by Arthur and Marilouise Kroker, pp.166-167.

D. The Diasporic school mistook the Android Meme as new media and actually reinforced the corporate icon of McLuhan. It did, however, add to the McLuhan stereotype the unrecognized emphasis by McLuhan on studying the largely ignored effects of technological environments. However, alas, it was irrelevant in a post-media world. Examples are:

a) "I've juxtaposed the Fathers of Confederation with Alexander Graham Bell, Thomas Watson and Guglielmo Marconi to show how Canada is an experiment in an alternative current. I call it a communication state: this is the condition of receptivity, the pattern of listening and dialogue and misunderstanding, of broken messages and missed connections, of perpetual mediation and trial through technology, of reading the signs and scanning for signals.

The only way we can live in this country is through advanced technologies of communication. We need the telephone, the telegraph, the radio, the satellite dish, TV and the computer, air travel and trains. The paradox is that these technologies do not solidify individual identity; they do not focus a singular identity for any one person. Electricity scatters individual memory, conjuring

ghosts and simulations. It transmits static, shards of disconnected data, pieces of a riddle that may be in itself part of a greater enigma. Tribes, corporations and cults can arise from the powerflow of TV sets, radios, telephones, computer networks: the isolated individual's need for meaning can translate into the handing of power over to a larger group. Yet electronic technologies spur and excite questions, allow for multiple points of view, add to the strange feeling of fusion with world events and confusion about significance and intent. Communications technologies threaten us, summon us, immerse us: they appear to be capable of dehumanizing our lives and of enhancing our awareness, sending out images and reflections of ourselves everywhere.

In electric city, we are haunted by a sense of presence, the trace of something close, almost there. Is that presence otherworldly, or is it our human world amplified, echoing, crying out? Could it be both? The electroscape is a realm of emanations and radiance, music and mystery.

Debate and energy, a country established over a bargaining table, a myth made out of vibrations in the air." - Bruce W. Powe, *A TREMENDOUS CANADA OF LIGHT*. Toronto, Ontario: Coach House Press, 1993, pp. 67-68.

"The headlong ups and downs of the market created a one-day world where people were expendable. But the market also promoted networks of association. I realized that these volatile datafields could shrink time and present the human figure writ large - what William Blake might have called an electronic Albion. Through this multimedia engagement we could hear and see ourselves on a scale that we'd never encountered before. And encoded in the bits and bytes there may be that straining spirit. The machines were fired up, amplifying our every murmur and shout. And all that we are - good and terrible - raged, racing and hustling across continents and oceans.

I recognized that each crisis, or crash, was like a seed, a cell, that contained another larger or similar event and crisis. Complex communication chains of cause and effect provoked greater opportunities for miscommunication. The stock crashes resembled wars, apocalyptic moments where terror and upheaval, recklessness and pride, dreams and revelations mixed. But in the midst of this, you could begin to sense that the seeds, scraps, and guesses, the

bedlam and blare, implied variations, extensions, passages, reshaped meanings, a voice that seemed to be calling to us, a new unfolding shade in this blend of imagination, technology, and perpetual emergency." - Bruce W. Powe, *OUTAGE: A Journey into Electric City*. Toronto, Ontario: Random House of Canada, 1995, pp.17-18.

b) "Imagination is the phase-space of perception. Each of the senses provides one dimension of meaning, but the dynamic that integrates the meanings and brings forth a coherent world is the faculty of the imagination. The mystics are probably right when they claim that there are more dimensions than meet the eye, but what brings forth a world is the human body as a field of metaphoric extension of the known into the unknown. The universe is mind-bogglingly full of multiple possibilities, with billions of impulses per square micron, so what we attend to tells us in what particular cognitive world we choose to embody our knowing. What enables us to integrate sound and light, bit and gestalt, data and divination is the imagination, and its ability to stabilize a world derives from a set of infantile, preverbal geometries of behavior we have come to cognize as the way things happen. If we have a culturally inappropriate geometry in our minds for the thing that is happening before us, we will form our social life into problems that seem to cry out for pressing solutions. If we have an unconscious anxiety of losing our basic sense of self, we will hold onto things and flatten out the complex geometries of behavior to show lines connecting everything to everything. This is the condition of the paranoid who collapses polycentric behaviors that can be marvelously self-organizing through noise into a tightly controlled centralized system that is the work of his favored conspiracy. Since the paranoid has trouble holding onto a sense of self amid noise, he relates everything to his constructed self with its **idee fixe** and projects a geometry of behavior, a phase- portrait, onto the world that is wholly inappropriate for the novel historic dynamic that is in front of him. The difficulty of our disorienting time of cultural transition is that we are all paranoids in a way, for we are struggling to hold onto a sense of self in the world precisely at a time when all traditional human cultures are coming apart, probably because they are not truly viable in the situation in which our electronic technologies seem to be expressing self-organization through noise on their own and are bringing forth a new world we do not yet know how to interpret, much less

live in." - William Irwin Thompson, 'Politics Becoming A Planet' in GAIA 2: EMERGENCE: The New Science of Becoming [edited by William Irwin Thompson]. Hudson, New York: Lindisfarne Press, 1991, pp.252-253.

"Now, there is no question that the homicide rates in North American cities such as New York, Detroit, Los Angeles, and Washington, can be directly related to the drug economy and the wars between drug lords, so the evil of this situation is clear and straightforward. But the Republican-Democrat approach is to pontificate about the horrors of this drug traffic and seek to stop it in a 'Miami Vice' game that only energizes both cops and robbers to sustain the game and not to eliminate the economy. Those who profit from the interdiction are the police-military powers who receive funding, and the criminals whose commodity is sustained in an unconscious system of price supports. Yuppie materialism plays both sides of the game, for cocaine sustains the frenetic trading, junk-bonding, and corporate raiding of the managerial class, but the drug also sustains the shadow economy and cash flow of the structurally unemployed. The banks that receive the laundered money recirculate the funds as loans to the Latin countries so that Latin American indebtedness becomes a new kind of national junk-bond which allows the banks to effect a leveraged buy-out of the nation-state with a subsequent breakup and selling off of its resources. The only protection a Latin country has against this hostile takeover is the shadow economy of drugs which returns hard currency to itself and allows it to buy up American resources and real estate. By reinvesting the laundered funds in the U.S.A., the Latin Americans, much like the Japanese who buy U.S. Treasury bonds, are purchasing United States 'nation-state futures' instead of specific commodities or unharvested crops. Indebtedness is, therefore, like pollution, an unconscious polity, a form of replacement of representation by participation in the global game. In the future, when it is to be hoped we are more enlightened about global systems dynamics, these unconscious polities and shadow economies will be understood as the phase-spaces of noetic polities." - Ibid., pp.260-261.

"... The red man had been turned into a figure of shamanic wisdom and magical power by popular culture, and the black man had been transformed into the musical hero of the world; but the poor Arab was the real primitive of

our global electronic society, and he was reduced to attacking the airlines as once the Plains Indians attacked the railroads.

Having no place in the scheme of things, the Arab was displaced from the geopolitics of the visible world to the Gaian politics of the invisible elemental world. The paranoid insanity of Saddam Hussein created an opening to a state of elemental possession. The hundreds of burning oil wells in Kuwait are an outward sign of an inward state: a visible transformation in which the elemental underworld is released into the upper world through fire and smoke. The blue sky created so long ago by the photosynthetic activity of the cyanobacteria, the elves, is now threatened with the revenge of the elementals, who were thrust down into the underworld to prepare the world for the coming of humanity. To prepare the world for the coming of posthumanity, the elemental is being released in a fury of rage and revenge. The transformation of the atmosphere has been accelerated by decades.

In Grimm's fairy tales, such as Rumpelstiltskin, the revenge of the first against the last is often expressed in the form of a dwarf that demands the sacrifice of the firstborn. Since the elementals were the firstborn of Earth who were sacrificed to make room for humanity, it only seems fair to them that humans should be asked to sacrifice their firstborn. In the parable of the vineyard in the New Testament, the workers of the first hour wonder why the workers of the last hour should receive the same wage. They are not comforted when Jesus says that 'the last shall be first, and the first shall be last.' In the fires of the oil wells in Kuwait, the insanity of Saddam has provided the elementals with a form of incarnation. And what these bodies are demanding is the sacrifice of the firstborn children of the modern world economy, the world cities of Venice, Amsterdam, London, and New York. It is precisely these cities that will be the first to be flooded and destroyed by an atmospheric Greenhouse Effect that can raise the water level of the oceans. In the exoteric hatred and revenge of the poor against the rich, an older and more esoteric hatred has been bodied forth." - William Irwin Thompson [with David Spangler], REIMAGINATION OF THE WORLD: A Critique of the New Age, Science, and Popular Culture. Santa Fe, New Mexico: Bear & Company Publishing, 1991, pp.209-210.

"In the sixties, LSD externalized the collective unconscious, the astral plane, albeit in a kitsch and degraded form. This appropriation of the astral plane into the public space is now being followed up by the appropriation of the etheric plane. As cyberdelic drugs combine with the effects of the invisible environment of drugs in food and the polluted biosphere, the cumulative effect will be to erode organic autonomy and lower fertility rates (this has already begun to happen); and this will stimulate medibusiness to compete with agribusiness. Just as America appropriated the family farm into feedlots and factories, so will it appropriate the family into the laboratory. Thus the appropriation of the astral body in the sixties through LSD, and the appropriation of the etheric body in the nineties, will pave the way for the final act of the appropriation of the physical body around the turn of the century. Thus America, the land of rugged individualism will become the land of ragged individuals, first economically, and then physiologically. Through genetic engineering, in vitro insemination, and reproductive technologies yet to come, the individual will be so contained that incarnation will be captured in engines of procreation. Technologies will become ensouled, just as souls become denatured and shifted into collective lattices rather than into the animal-hominid bodies of old evolutionary times. 'Demons' will be able to take human form, and souls will be able to dwell in cognitive lattices, so it is small wonder that today's science-fiction landscape of novels and computer games is filled with mythologies of dungeons and dragons, monsters and devils. This *para*noia is crazy, but the caricatured sketch reveals an isomorphism to an evolutionary *meta*noia that is beyond anything we could call normal. One can clue into this phenomenon of cultural evolution through the paranoid caricatures of the fundamentalists - who curiously seem to object to the Luciferic New Agers more than the Ahrimanic technologists in computer science - or one can clue into it through cyberpunk fiction, or one can get more than a clue if one reads Steiner and realizes that what one is looking at in the new electronic America so celebrated and hyped by Stewart Brand and Howard Rheingold is a collectivization that can be mythologically identified as the incarnation of the demon Ahriman." - William Irwin Thompson, THE AMERICAN REPLACEMENT OF NATURE: The Everyday Acts and Outrageous Evolution of Economic Life. New York: Doubleday Currency, 1991, pp. 43-44.

"If McLuhan was right when he said that 'the sloughed-off environment becomes a work of art in the new and invisible environment', and I think he was, then the electronic and nanotechnological transformation of human biology means that for the many, traditional sexuality is ending, but for the few, it is being retrieved as a new Tantric mystery school. Looking back over all my books, and this study of literature and the evolution of consciousness, my life's work seems to me to express the sunset effect of romanticism as well as the dawn of a new Tantric mystery school of heterosexuality. The uniqueness of our time is that in the writer's imagination he or she now seems to enjoy the position of an astronaut for whom dusk and dawn are a single horizon." - William Irwin Thompson, *COMING INTO BEING: Artifacts and Texts in the Evolution of Consciousness*. New York: St. Martin's Press, 1996, p.196.

"AT THE GRAVE OF JAMES JOYCE IN ZURICH

What are you doing here beneath the shadow of your own monument? But then what am I? Your statue looks just like my father, but I suppose you are, in exile and cunning, father to us all. I wouldn't want to be in your place now. Better to burn than to bury. Exiled by the wind in uncontainable fire, let others settle for tenure in the dust." - William Irwin Thompson, *WORLDS INTERPENETRATING AND APART: Collected Poems, 1959-1996*. Hudson, New York: Lindisfarne Books, 1997, p.122.

"A CURRICULUM FOR THE EVOLUTION OF CONSCIOUSNESS

Three Principles:

1. Match the stages of the child's cognitive evolution to the stages of cultural evolution (Haeckel's 'ontogeny recapitulates phylogeny').
2. Growth is not linear, but pulses in organic stages of *Formative* > *Dominant* > *Climactic* (compare Steiner's Waldorf process of will, feeling, understanding).
3. Present artistic, religious, technological, or scientific innovation in the

actual historical context in which it emerged." - William Irwin Thompson, *TRANSFORMING HISTORY: A Curriculum for Cultural Evolution*. Great Barrington, Massachusetts: Lindisfarne Books, 2001, p.96.

"The curriculum I am proposing does not think in terms of enculturating students within the patriotisms of nation-states or job-training programs for industrial economies, for that is the role of the public school. Nor does it think of covering the achievements of every culture on the face of the Earth in order to satisfy the identity politics of the culture wars now raging in the universities. That too is the karma of the public school. Instead an evolution of consciousness curriculum tracks emergent states and cultural transformations, and goes to the place of that emergence. As a 'thought experiment', imagine how you would report on the human cultural evolution of Earth to a scientific academy on another planet. How would you tell the story to creatures not concerned with the competitive *agons* of ethnic pride and nationalism? A curriculum for the evolution of consciousness curriculum does not think in terms of simplistic splits between culture and nature, but instead envisions cultural-ecologies that unfold as complex dynamical systems in which the traditional divisions of knowledge are inadequate. In what Jean Gebser calls the *Bewusstwerdungs Prozess* - a process of becoming in consciousness - these transformations of culture express a development in which we move through his structures of Archaic, Magical, Mythical, Mental, and Integral both in history and within the soul of the developing child. As I tried to show in my essay on Rapunzel in Imaginary Landscape, there is a reflexive nature to children's knowledge, and the fairy tale listened to in rapture in kindergarten can also become the subject for a doctoral dissertation in graduate school.

Because growth does not unfold in simple linear and accretive sequences, this twelve-year curriculum is broken up into pulses of organic growth in three-year sequences. Each triad unfolds in a sequence of *formative*, *dominant*, and *climactic*. A *formative* movement introduces a new element of consciousness; a *dominant* movement establishes and develops it, and the *climactic* movement consolidates and finishes it. One can think of this dynamic as a simple botanical one of sprouting up, rooting down, and flowering, or visualize it in terms of the four triangular faces of the

tetrahedron, the familiar pyramid. The *formative* movement is the base, the foundational platform; the second movement, the *dominant*, is one into a second dimension of the four lines moving vertically in upward growth; and the third movement is one of closure, the closure of the tetrahedron, the *climactic* movement in which one encloses and internalizes that period of growth with insight - symbolically represented by the eye at the top of the pyramid in the familiar emblem of Freemasonry that is on the American one-dollar bill....

Because mathematics and natural history are subsets of cultural history, I suggest that we overcome C. P. Snow's split between 'the two cultures' of the sciences and the humanities by putting mathematics and science back into the cultural context that gave birth to them. Thus arithmetic and number theory should be studied in the context of the rise of the ancient civilizations. Geometry should be studied in the context of the classical civilizations; algebra should be studied in the context of the medieval civilizations; and calculus, chemistry, and physics should be learned in the context of modernization in a historical appreciation of the works of Galileo, Newton, Leibniz, and Boyle. Geology and chemistry should be studied in the context of Hutton and Lavoisier, and evolutionary biology and genetics should be learned in the context of Darwin and Mendel. Ideas about relativity and Cubism should be studied together in a joint consideration of Einstein and Picasso. Adolescents will see all the themes of the curriculum coming together in the hypersphere of the planetization of individual consciousness in the twenty-first century - a time in which the study of consciousness itself becomes the focus of cultural attention in contemporary philosophy and cognitive science." - Ibid., pp.95-99.

"Both nineteenth-century Paris and twentieth-century New York are examples of the city evolving from the materialistic and capitalistic city into the informational noetic polity, one in which an overlapping moire of economic center, artistic center, and intellectual center creates a pattern in which no single institution is imperialistically in control. Thus an emergent state comes forth in which consciousness moves to a level above the traditional formations of an urban civilization. Since even this contemporary manifestation of megalopolitan growth now seems to be simply a node within the planetary informational lattice of the World Wide Web, it is hard to

prophecy just where this contemporary noetic polity is taking us in cultural evolution.

My guess is that the coming etherealization of architecture through atomic nanotechnologies will enable one to turn buildings on and off like electric lights, but will continue to make cities like New York appealing nostalgic artifacts of previous states of cultural evolution, and like Haussmann's Paris, historical camouflage to their true but more invisible structure. Los Angeles, in contrast to New York, is a single-industry city, that industry being entertainment - movies, television, and theme parks. (Both Disneyland and Las Vegas are basically theme park suburbs of L.A.) From my perspective, L.A. is isomorphic to the Vatican, and is the Vatican of our new State of Entertainment, in which politicians, sports figures, movie stars, and celebrities are all the potentates of the new willfully deluded polity. Cambridge, Massachusetts, is also a single-industry city, and that is what makes it less interesting than New York. Creative artists who earn their keep as professors at Harvard, MIT, Tufts, or Boston often get bored with their unimaginative academic colleagues and move to New York as soon as their income allows them to break loose from tenured servitude to the monocrop noetic polity of the university.

New York is not a single-industry city, and that is what makes it so much more interesting than commercial Zurich or even contemporary Paris. Contemporary Paris has more of a conformist and collective manner to its intellectual style of life, but New York is so vast that one can live and write here and never have to run into or conform to the styles of Susan Sontag or Norman Mailer. New York is a kind of mitochondrion of Archaean evolution that has moved into some gigantic Gaian planetary cell for the next stage in evolution. The moiré pattern that emerges from the overlap of Wall Street, the United Nations, music and performing arts, publishing, and universities makes it as interesting now as Paris must have been in the time of Proust, Bergson, and Poincare." - Ibid., pp.183-184.

c) HOW TO WATCH TV NEWS, Neil Postman, 1992.

"Unlike science, social research never discovers anything. It only rediscovers

what people once were told and need to be told again. If, indeed, the price of civilization is repressed sexuality, it was not Sigmund Freud who discovered it. If the consciousness of people is formed by their material circumstances, it was not Marx who discovered it. If the medium is the message, it was not McLuhan who discovered it. They have merely retold ancient stories in a modern style. And these stories will be told anew decades and centuries from now, with, I imagine, less effect. For it would seem that Technopoly does not want these kinds of stories but facts - hard facts, scientific facts. We might even say that in Technopoly precise knowledge is preferred to truthful knowledge but that in any case Technopoly wishes to solve, once and for all, the dilemma of subjectivity. In a culture in which the machine, with its impersonal and endlessly repeatable operations, is a controlling metaphor and considered to be the instrument of progress, subjectivity becomes profoundly unacceptable. Diversity, complexity, and ambiguity of human judgment are enemies of technique. They mock statistics and polls and standardized tests and bureaucracies. In Technopoly, it is not enough for social research to rediscover ancient truths or to comment on and criticize the moral behavior of people. In Technopoly, it is an insult to call someone a 'moralizer'. Nor is it sufficient for social research to put forward metaphors, images, and ideas that can help people live with some measure of understanding and dignity. Such a program lacks the aura of certain knowledge that only science can provide. It becomes necessary, then, to transform psychology, sociology, and anthropology into 'sciences', in which humanity itself becomes an object, much like plants, planets, or ice cubes." - Neil Postman, *TECHNOPOLY: The Surrender of Culture to Technology*. New York: Alfred A. Knopf, Inc., 1992, pp.157-158.

"I will discuss later the evidence supporting the view that childhood is disappearing, but I want to note here that of all such evidence none is more suggestive than the fact that the history of childhood has now become a major industry among scholars. As if to confirm Marshall McLuhan's observation that when a social artifact becomes obsolete, it is turned into an object of nostalgia and contemplation, historians and social critics have produced, within the past two decades, scores of major works on childhood's history, whereas very few were written between, say, 1800 and 1960. Indeed, it is probably fair to say that Philippe Aries's *Centuries of Childhood*, published in

1962, created the field and started the rush. Why now? At the very least we may say that the best histories of anything are produced when an event is completed, when a period is waning, when it is unlikely that a new and more robust phase will occur. Historians usually come not to praise but to bury. In any event, they find autopsies easier to do than progress reports." - Neil Postman, THE DISAPPEARANCE OF CHILDHOOD. New York: Vintage Books, 1994, p.5.

"What we are after here is to tell the story of language as an act of creation. This is what Socrates meant when he said, 'When the mind is thinking, it is talking to itself'. Twenty-five hundred years later, the great German philologist Max Muller said the same: '... thought cannot exist without signs, and our most important signs are words'. In between, Hobbes, Locke, and Kant said the same thing. So did Bertrand Russell, Werner Heisenberg, Benjamin Lee Whorf, I. A. Richards, Alfred Korzybski, and everyone else who has thought about the matter, including Marshall McLuhan.

McLuhan comes up here because he is associated with the phrase 'the extensions of man'. And my third and final suggestion has to do with inquiries into the ways in which humans have extended their capacities to 'bind' time and control space. I am referring to what may be called 'technology education'. It is somewhat embarrassing that this needs to be proposed as an innovation in schools, since Americans never tire of telling themselves that they have created a technological society. They even seem to be delighted about this and many of them believe that the pathway to a fulfilling life is through continuous technological change. One would expect then that technology education would be a familiar subject in American schools. But it is not. Technology may have entered the schools but **not** technology education. Those who doubt my contention might ask themselves the following questions: Does the average high school or college graduate know where the alphabet comes from, something of its development, and **anything** about its psychic and social effects? Does he or she know anything about illuminated manuscripts, about the origin of the printing press and its role in reshaping Western culture, about the origins of newspapers and magazines? Do our students know where clocks, telescopes, microscopes, X rays, and computers come from? Do they have any idea about how such

technologies have changed the economic, social, and political life of Western culture? Could they say who Morse, Daguerre, Bell, Edison, Marconi, De Forest, Zworykin, Pulitzer, Hearst, Eisenstein, and Von Neumann were? After all, we might say these men invented the technological society. Is it too much to expect that those who live in such a society will know about them and what they thought they were creating?

I realize I am beginning to sound like E. D. Hirsch, Jr., but I find it truly astonishing that the great story of humanity's perilous and exciting romance with technology is not told in our schools. There is certainly no shortage of writers on the subject. McLuhan, while an important contributor, was neither the first nor necessarily the best who has addressed the issue of how we become what we make. One thinks, for example, of Martin Heidegger, Lewis Mumford, Jacques Ellul, Paul Goodman, Walter Ong, Walter Benjamin, Elizabeth Eisenstein, Alvin Toffler, Theodore Roszak, Norbert Wiener, Sherry Turkle, Joseph Weizenbaum, Seymour Papert, and Herbert Schiller. One may also find ideas about the subject in the 'science fiction' writers I have previously alluded to - Huxley, Orwell, and Bradbury, for example. It would seem that everywhere one turns these days, there are books, articles, films, and television shows on the subject of how our technology has remade the world, and continues to remake it. It is among the leading topics of everyday conversation, especially among academics. There is, for example, hardly a school superintendent anywhere, or a college dean, who cannot give us a ready-made sermon on how we now live in an 'information age'. Then why do we not have a subject in which students address such questions as these: How does information differ in symbolic form? How are ideographs different from letters? How are images different from words? Paintings from photographs? Speech from writing? Television from books? Radio from television? Information comes in many forms, and at different velocities and in different quantities. Do the differences matter? Do the differences have varying psychic and social effects? The questions are almost endless. This is a serious subject." - Neil Postman, *THE END OF EDUCATION: Redefining the Value of School*. New York: Alfred A. Knopf, Inc., 1996, pp.188-190.

POST-INTELLECTUALISM AND THE DECLINE OF DEMOCRACY,
Neil Postman, 1997.

"Starting approximately at the beginning of the twentieth century, almost every field of scholarship - including psychology, linguistics, sociology, and medicine - was infused with an understanding of the problematic relationship of language to reality. I most likely earned the title of 'postmodernist' by pointing out how those in 'media studies' took hold of the idea, especially Marshall McLuhan, whose famous slogan 'the medium is the message' is as concise a summary of the idea as we are likely to get. I went, perhaps, to extremes by referring to the matter as the 'Einstein-Heisenberg-Korzybski-Dewey -Sapir-Whorf-Wittgenstein-McLuhan-et al. hypothesis'. For those readers who are especially interested in the 'et al.', I have included, in Appendix II, a set of quotations from those of the past who accepted 'in one degree or another' the view that language (as Wittgenstein put it) is not merely a vehicle of expression but also the driver. What it comes down to (or up to) is that we do not and cannot experience reality bare. We encounter it through a system of codes (language, mathematics, art). The codes themselves have a shape, a history, and a bias, all of which interpose themselves between what we see there and what is there to be seen. When McLuhan says, 'the medium is the message', or when Tollison says, 'we see things not as they are but as *we* are', or when Korzybski says, 'whatever you say something is, it is not', they mean to call our attention to the role our codes play in our interpretations of reality. They mean to disabuse us of linguistic naivete, to urge us to take into account *how* our codes do their work and enforce their authority." - Neil Postman, BUILDING A BRIDGE TO THE EIGHTEENTH CENTURY: How the Past Can Improve Our Future. New York: Alfred A. Knopf, Inc., 1999, p.71.

d) "McLuhan also saw that the electric speedup of information would neutralize the great ideological conflicts that were the basis of the cold war. 'The electric changes associated with automation have nothing to do with ideologies or social programs' (McLuhan 1964, 352). The end of communism and the restructuring of capitalism have had nothing to do with the years of military and propaganda posturing of the Eastern and Western blocs led respectively by the former USSR and the United States. The transformation took place as a result of economic and social forces driven largely by information technology. There was a reason the Communists banned private

ownership of the personal computer. They recognized that the electric flow of information was the one thing that their centralized hierarchical command-and-control system could not defend against and in the end it became impossible for them to do so. Their system was inundated by information and collapsed under its weight. The coup de grace, ironically, was actually due to Gorbachev's introduction of *glasnost* (openness) and *perestroika* (restructuring), which finally brought down the whole system. A similar but less dramatic transformation has also changed the face of capitalism as old-style forms of command-and-control hierarchical corporate structures give way due to the Western form of *glasnost* and *perestroika*, namely, open non-hierarchical computer-based communications and flow of information, and business process reengineering. McLuhan's predictions came to pass as Drucker proclaims in his latest book, *The Post-Capitalist Society*: 'That the new society will be both a non-socialist and a post-capitalist society is practically certain. And it is certain also that its primary resource will be knowledge... Instead of capitalist and proletarians, the classes of the post-capitalist society are knowledge workers and service workers' (Drucker 1993, 4, 6)." - Robert K. Logan, *THE FIFTH LANGUAGE: Learning a Living in the Computer Age*. Toronto, Ontario: Stoddart Publishing Co. Limited, 1995, pp.222-223.

"Computing also seems to be restructuring the way in which the existing classes relate to one another and changing the role that class structures play in the economics and politics of society as a whole. Computers allow the integration of many different functions and make each individual worker more self-sufficient. There is also a parallel merger of the three classes. Many of the odious and brute-force tasks of the working class are being performed by robots and other computer-controlled machinery. The percentage of jobs that are unskilled or strictly working-class continues to decrease, while the number of middle-class jobs requiring education, literacy, and computer skills increases. Another effect of computing on the breakdown of class structures is that senior and middle managers are less and less dependent upon support staff.

At the other end of the spectrum, it is easier for middle-class people to become masters of their destiny and enterprise. Information-age enterprises are much less capital-intensive than industrial-era ones. Often, all that is

required is intellectual capital and a modest amount of cash capital to start a major business operation. There are a number of middle-class computer whizzes who have become multimillionaires in a relatively short time. Another sector where the middle class is able to become self-employed and often self-realized is the service sector. While work in this sector does not often lead to a glamorous and aristocratic lifestyle, it has for a number of entertainers, fashion designers, and restaurateurs.

The computer age will continue to see a greater merging of the three traditional classes. The control of information, however, will become more and more the key to success and power. It is natural, therefore, that those who are computer literate will begin to realize tremendous advantages. As to whether or not this advantage will lead to the emergence of a distinct class just when class distinctions seem to be on the decrease is impossible to predict. There is no doubt, however, that computers will be where the action is and they will play an ever more important role in education and educational planning." - Ibid., pp.293-294.

Logan wrote a follow-up book at the end of the nineties on the theme of THE SIXTH LANGUAGE: Learning a Living in the Internet Age, 2000.

Here is what he wrote on the "sixth language" in THE FIFTH LANGUAGE:

"This study was based on the idea that computing, or the fifth language, represents the current end point in the evolution of language. This notion gives rise naturally to the question of whether language will continue to evolve and if it does what form a sixth language will take. There is no question that language will continue to evolve, but as to the nature of the sixth language, I can only guess. And guessing would be equivalent to attempting to predict the existence and nature of science fifty years after the emergence of writing and mathematics. An impossible task. Nevertheless, let me close with a bit of speculation. If I was forced to guess, my conjecture would be that the jumping-off point for the emergence of a sixth language will entail some combination of general systems theory, business process reengineering, alignment, connectivity (the Internet, EDI, and more), and ubiquitous computing, that is, the increased role of computers in work,

education, and everyday life." - Ibid., pp.294-295.

e) "I have coined the term 'psychotechnology', patterned on the model of biotechnology, to define any technology that emulates, extends or amplifies the powers of our minds. For example, while television is generally perceived only as a one-way conduit for audio-visual material, it might be helpful to psychologists to see it as an extension of our eyes and ears into the places where the images originate. When you understand television in this way, it matters little whether programming is live or recorded. Indeed, telephone, radio, television, computers and other media combine to create environments that, together, establish intermediate realms of information-processing. These are the realms of psychotechnologies. Seen from this vantage, television becomes our collective imagination projected outside our bodies, combining in a consensual, electronic teledemocracy. TV is literally, as Bill Moyers called it, a 'public mind'.

This public realm is most explicit during videoconferencing. With videoconferencing and videophones, television approaches the flexibility and instantaneous communication afforded by the telephone. Indeed, such technologies not only extend the sending and receiving properties of consciousness, they also penetrate and modify the consciousness of their users. Virtual reality is closer still. It adds touch to sight and sound and is as near to 'mainlining' the human nervous system as any technology has ever been. With virtual reality and telepresence robotics we literally project our consciousness outside our bodies and see it 'objectively'. This is the first time that humans have been able to do this.

With television and computers we have moved information processing from within our brains to screens in front of, rather than behind, our eyes. Video technologies relate not only to our brain, but to our whole nervous system and our senses, creating conditions for a new psychology. We have yet to come to terms with our relationship to our screens. It may help to understand that TV does not compete with books, but suggests something entirely different. It proposes a collective imagination as something we can actually consume, although not yet directly participate in. That essential feature, interaction, a capability that guarantees our individual autonomy within the powerful trend of psychotechnological collectivization, is provided by

computers and even more so by computer networks." - Derrick de Kerckhove, THE SKIN OF CULTURE: Investigating the New Electronic Reality. Toronto, Ontario: Somerville House Publishing, 1995, edited by Christopher Dewdney, pp.5-6.

"While I was at work on these pages, from time to time I referred back to my previous book, The Skin of Culture, to measure my current thoughts against what I had written earlier. I found that my understanding had evolved in several areas. One of my biggest surprises was to read the following: 'Not long ago, the world was dumb and we were clever. But the computer-assisted world is becoming very clever and faster than we are. Very soon our collective technological intelligence will outperform the individual organic ones both in speed and integration. It will be interesting to know how this unified cognitive organization will take care of the environment and poverty, and what criteria it will dictate for genetic engineering. For the time being, relax. We are not there yet.'

Since writing those lines I have revised my thinking in two important respects. The first is that our commonly shared technological intelligence is not really 'collective' but more precisely 'connected'. The other is that we *are* in fact there, and while we should keep our cool, this is no time to relax.

Indeed, the present book is driven by a new sense of urgency. While The Skin of Culture was about electronic media seen separately, this book shows how they are converging and tries to discover what it is they are converging towards. While Skin is basically on the mark, what it lacks is a discussion of the implications of *networked* digital communications.

Whether we call it the Net, the Internet, or the Information Highway, the growing synergy of networked communications is, with the exception of language itself, the communication medium par excellence - the most comprehensive, the most innovative, and the most complex of them all. It is also the most interesting. In the mega-convergence of hypertext, multimedia, virtual reality, neural networks, digital agents, and even artificial life, each medium is changing different parts of our lives - our modes of

communication, entertainment, and work - but the Net potentially changes all of that and more, all at once. The Internet gives us access to a live, quasi-organic environment of millions of human intelligences perpetually at work on anything and everything with potential relevance to anyone and everybody. It is a new cognitive condition I call 'webness'....

The three main underlying conditions of the new ecology of networks, by which I mean both the economy of related industries and the new social and personal cognitive habits that support them, are:

1. Interactivity, the physical linking of people, or communication-based industries (the industries of the body)
2. Hypertextuality, the linking of contents or knowledge-based industries (the industries of memory)
3. Connectedness, or webness, the mental linking of people, or the industries of networks (the industries of intelligence)

Satellites figure importantly in the equation in that they give humanity the agency and the image of the new planetary scale of its reach; the new proportions of its collective body image. As individuals and as a species, we can begin to see the growing connections between our selves, our bodies, and our minds on the one hand and the planet on the other.

Together, interactivity, hypertextuality, and connectedness constitute the basis for the planetization of ordinary people as well as organizations, nations, and continents, by a permanent, self-updating synergy of local computers, global networks, and satellites." - Derrick de Kerckhove, *CONNECTED INTELLIGENCE: The Arrival of the Web Society*. Toronto, Ontario: Somerville House Publishing, 1997, edited by Wade Rowland, pp.xxii-xxv.

E. QUOTH the ANDROID MEME:

The reactions of the four schools in the nineties to the Pentadic School have

an underlying pattern that can serve as a platform to launch MoM into a new vision that would honor them plus the fuller implications of McLuhan's project as we confront and assess a world that finds much significance in the attacks on the World Trade Center and the Pentagon.

But the genius of the Pentadic School was exemplified by its encouragement of publicity for all of the approaches of the four schools of media ecology as it sought to convince us that it still had a vigorous and viable existence.

ACT SIX

You're lookin' at it.