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Techgnosis: On the Conception of Reality as Data

Robert Grosseteste's was a polymathic intellect. He was one of the most learned individuals of his time: a peasant lad from Sussex, born around 1175, he studied law, medicine, science, philosophy, theology and became, eventually, one of the first Chancellors of Oxford University. He was an educational reformer, a philosopher with scientific interests – he mastered geometry, optics and astronomy, and even propounded a scientific principle that became central to the later work of his young pupil Roger Bacon, viz., that experimentation must be used to verify a theory by testing its consequences. He also wrote beautiful, almost poetic, prose whose purpose was to teach people religious truths. Among those writings was a remarkable text entitled, "On Light or The Ingression of Form." A key line in the text is that "In the beginning of time, light drew out matter along with itself into a mass as great as the fabric of the world." Another passage develops the idea:

But I have proposed that it is light which possesses of its very nature the function of multiplying itself and diffusing itself instantaneously in all directions. Whatever performs this operation is either light or some other agent that acts in virtue of its participation in light to which this operation belongs essentially. Corporeity, therefore, is either light itself or the agent which performs the aforementioned operation and introduces dimensions into matter in virtue of its participation in light, and acts through the power of this same light.

Thus he proposes, in a fashion that has surely become familiar again in the past decade, that non-corporeity is higher than corporeity. Of the higher, non-corporeal realm he wrote

The form and perfection of all bodies is light, but in the higher bodies it is more spiritual and simple, whereas in the lower bodies it is more corporeal and multiplied. Furthermore, all bodies are not of the same form even though they all proceed from light, whether simple or multiplied, just as all numbers are not the same in form despite the fact that they are all derived from unity by a greater or lesser multiplication.

The word Grosseteste used for "form" was "species." The original sense of the term "species" was of an aspect, i.e., an outward appearance. The meaning underwent a shift in the early medieval period: St. Augustine had used the term "species" (*De trinitate* xi 9) to refer to an incorporeal likeness of an object – first of all, to an external likeness, but also to an internal likeness produced by the senses: the species of some body, when it is perceived, produces the species that arises in the sense of the percipient, and the latter gives rise to the species in memory, which produces the species which arises in the gaze of thought. Moreover, in Augustine's system, each of the senses produced a different type of species – so our total understanding of, say, a particular person would depend on our synthesis of the various species we received through sight, through hearing, through touch and the species that that person excites in the mind. Grosseteste and Bacon extended the meaning of the term to designate the first effect of any thing. Thus it came to denote al-Kindi's universal force which radiates from everything to produce effects.

Centuries later, the filmmaker who introduced me to Grosseteste's text would offer a deliberation on the volatilization of material in the image that, likely, was based on the medieval

idea of “species” – the idea of an appearance, an incorporeal likeness similar to the simulacra that populate the digital realm. In “A Pentagonam for Conjuring the Narrative,” Hollis Frampton wrote:

The image and its pretext (the ‘portrait’ and the ‘face,’ which bear to one another the relationship called ‘likeness’) are ontologically manacled together. Every discrete phenomenon has its corresponding photograph [compare Frampton’s idea of the photograph with the medieval idea of species], every photograph its peculiar subject; and after little more than a century, the whole visible cosmos seems about to transform itself into a gigantic whirling rebus within which all things cast off scores of approximate apparitions, which turn again to devour and, finally, replace them.

Compare this with Baudrillard on “hyperreality”:

From medium to medium, the real is volatilized, becoming an allegory of death. But it is also, in a sense, reinforced through its own destruction. It becomes *reality for its own sake*, the fetishism of the lost object: no longer the object of representation, but the ecstasy of denial and of its own ritual extermination: the hyperreal. . . . The hyperreal . . . manages to efface even this contradiction between the real and the imaginary. Unreality no longer resides in the dream or fantasy, or in the beyond, but in the *real’s hallucinatory resemblance to itself*.

For Baudrillard the image is the source of malfeasance. In a lecture resoundingly entitled, “The Evil Demon of Images,” Baudrillard proclaimed:

It is precisely when it appears most truthful, most faithful and most in conformity to reality that the image is most diabolical . . . It is in its resemblance, not only analogical but technological, that the image is most immoral and most perverse.

The appearance of the mirror introduced into the world of perception an ironical effect of *trompe-l’oeil*, and we know what malefice was attached to the appearance of doubles. But this is also true of all the images which surround us: in general they are analysed according to their value as representations, as media of presence and meaning. The immense majority of present day photographic, cinematic and television images are thought to bear witness to the world with a naive resemblance and touching fidelity. We have spontaneous confidence in their realism. We are wrong. They only seem to resemble reality, events, faces. Or rather, they really do conform, but their conformity itself is diabolical.

Frederick Jameson has stated that “there is something special about the mediatization of our current culture, placing unprecedented pressure on the reality of the subject.” What strikes me about much speculative writing about the new media, on the contrary, is how bound they are to a conceptual – an ideological framework from the past. Frampton’s suggestion that “the whole visible cosmos seems about to transform itself into a gigantic whirling rebus within which all things cast off scores of approximate apparitions, which turn again to devour and, finally, replace them” is an idea that defines a metaphysics of digital reality that so many writers on the new media expound. Frampton probably knew the provenance in Greek and Medieval

philosophy of many of the comments about the virtual image that crop up with astonishing frequency in discussions of the new media. Most popular commentators do not seem to; consequently they end up in ideological deep waters. The media theorist who, after the fashion of Robert Grosseteste writing about, opines that “*everything is information* – it is digitized, moves at the speed of light thus annihilating spatio-temporal distinctions,” does not seem to write in the light of the history of debates around energy and materiality. The media theorist who proposes that in the new “mediatized” regime “*there will be no more **there** there!*” probably remembers only Gertrude Stein’s very smart, and much quoted, remark – certainly I don’t sense much awareness of earlier debates about different orders of reality, and of the relation between the transcendent (atemporal, aspatial) order and the everyday order. Arthur Kroker’s hysterical comment in *Data Trash*, again formulated on the model of Grosseteste on light – “So begins our violent descent into the electronic cage of virtual reality. Down we go into the floating world of liquid media where the body is daily downloaded into the floating world of the net, where data is the real, and where high technology can fulfill its destiny of an out-of-body experience” – isn’t situated in the context of earlier debates concerning the status of the body and the relation of body and spirit. It’s this lack of historical awareness that allows William Gibson to portray cyberspace as a site for the release of imaginings, unconscious desires, heroic adventure, offer such meagre speculations, in his *Neuromancer* trilogy, about our being shuffled off into “bodiless exultation” or Microsoft to demand of us “*Where do you want to go today?*” while we sit hopeless immobilized in front of the screen of our monitor.

George Santayana’s remark about history that by frequent repetition has become a cliché, to the effect that a person who does not remember history is condemned to repeat it, seems apposite here. It seems apposite because much of speculative discussion of the new media re-cast theological arguments that, I believe, few media theorists would be willing to accept. If there is something special about the mediatization of our current culture, as Jameson claims, it seems to me it is not being well theorized.

The assertion that “there is no ‘there’ there,” in digital reality, provides a good point of departure. Let us consider hypertext, or more precisely hypermedia, because of its exemplary status: all the new media partake of some its attributes, and the much heralded composite medium, produced through convergence, will surely have many of its attributes. Hypertext, we are told, is an open text both in the sense that has no definite beginning or ending. It redefines the borders of the text by blurring the distinction between the intra- and the extra-textual. What is especially important about this is that it brings into question our traditional notion a bounded object, and so the notion of location: hypertext conjoins links – “spaces” we are told – into a pure virtual geography.

We are told, too, that hypertext, by integrating pictures and sounds, is becoming a multi-medium that is more apt at representing our complex and non-linear mental operations than prose is. That enables us to understand why the new geography of the linked spaces is a “no-where” – it is a subjective reality. Authoring hypertext results in the production of a net-like structure which creates a rhizomatic, multiform and complex picture of the author’s multiform and complex thoughts. Thus, computer technology has developed to reflect the structure of thought. At the same time, the structure of western thought is changing to reflect the structure of its newest technology of communication – the hyperlinked, multisequential computer network. Developments in various disciplines are converging, creating a new conceptual system based on “multilinearity, nodes, links, and networks” rather than on “centre, margin, hierarchy, and linearity.”

Hypertext, we are told, mimics the way the brain works, by association – the brain, with its myriad connections of neuron pathways, associates information together. In 1991 the father of hypertext, Vannevar Bush, reflected on his invention: “The human mind operate[s] by

association. With one item in its grasp, it snaps instantly to the next that is suggested by the association of thoughts, in accordance with some intricate web of trails carried by the cells of the brain.” The World Wide Web, too, like hypertext, adheres to a distributed principle of knowledge representation, with knowledge stored as a network of nodes and links. Nodes can contain any combination of plain text, images, sounds and movies. Links connect items from a one node to any other node, according to the author’s preference, taste, and intent. As for the user interface, the user is expected to retrieve information by traversing meaningful links from node-items to other nodes, thereby making associative judgements that, from an arbitrary initial position, will lead to the node containing the desired information.

Taking the idea of hypertext to its conclusion, every node would be liked, through a path of some finite length, to all others. Ultimately, every text would be a link in every other text. The *telos* of hypertext is that all books and journals now housed in real libraries will be subsumed in “one metatext” stored in a virtual library. That this was goal of hypertext was anticipated right at the beginning of the medium: in his renown article in *The Atlantic* in July, 1945, entitled “As We May Think,” Vannevar Bush predicted as a result of his Memex hypertext system “wholly new forms of encyclopaedias will appear, ready-made with a mesh of associative trails running through them, ready to be dropped into the Memex and there amplified.” The content of this universal encyclopaedia would be a compendium of the knowledge the old era possessed, yet its form would serve to initiate the new era.

The philosopher Eric Voegelin has a name for this closure of tradition that is at the same time the formulation of a new doctrine – it is “koran.” Voegelin gives an interesting example of a “koran”: the *Encyclopédie française* “as the comprehensive presentation of all human knowledge worth preserving.” In his introduction to Vannevar Bush’s famous article, the editor of *The Atlantic* wrote, “Now, says Dr. Bush, instruments are at hand which, if properly developed, will give man access to and command over [I stress the “command over”] the inherited knowledge of the ages.” As the *Encyclopédie* was for the Enlightenment, hypertext will be for us.

But these ideas about hypertext real do represent the closure of an earlier tradition. We glimpse that earlier tradition in the earlier writings of Jacques Derrida, written when the idea of hypertext was a still a dream in the minds of the likes of Vannevar Bush and Ted Nelson. In those works Derrida proposed that a text is an unending combination of contexts that may be endlessly reshuffled to produce meaning, an “assemblage,” a “schema” for a general system and a “bringing-together” that “has the structure of an interlacing, a weaving, or a web, which would allow the different threads and different lines of sense or force to separate again as well as being ready to bind others together.” Barthes proposed similar ideas:

Any text is a new tissue of past citations. Bits of code, formulae, rhythmic models, fragments of social languages, etc., pass into the text and are redistributed within it, for there is always language before and around the text. Intertextuality, the condition of any text whatsoever, cannot, of course, be reduced to a problem of sources or influences; the intertext is a general field of anonymous formulae whose origin can scarcely ever be located; of unconscious or automatic quotations, given without quotation marks. (1981)

The universal hypertext we have spoken of is the general field, electrified.

The koranic status of hypertext reflects its totalizing character – a character whose sign is the comprehensiveness of the links that the final hypertext would incorporate. Over and over, we are told that the structure of hypertext reflects the ideal of total knowledge, of the immediate and direct awareness of all that was and is. Everyone knows, surely, that the idea of total awareness is a fictional construct. But is it interesting to ask what conditions – what

technological developments, what pre-conceptions and what narrative pressures – have produced this fiction. The technological conditions are those that have allowed for the development of enormous, distributed databases, so that the fiction of a total database that could contain all the world's knowledge today has supplanted the fiction of the universal library. What distinguishes the database from the earlier libraries is that it is accessible from everywhere, and so, in some important sense is located nowhere – recall the media theorist's "there is no **there** there" – in cyberspace. As information, what exists in the totalized database is divorced from space and time.

This universal database encodes the world's knowledge. However, this knowledge exists nowhere; so it is separate from the real world of objects. Yet, we are told, we are learning to live this new nowhere. What has occurred, then, is an alienation from the objective world: the realm of virtual knowledge is electronic (that is to say, transitory, fluxing, unstable, and, may I say, spiritual), while the world of objects is material. This alienation has now become so widespread that it has produced a widespread sense that the material world is wholly opposed to the internal, spiritual world – this is the rhetoric we hear from Kroker and Gibson, among others. The material world, according to the philosophy of the new media, has encumbered us, shackled us to time and place, though we can anywhere the virtual geography of new media reality.

Many of its defining features of the world-view that have developed from the new technologies of representation are consonant with the Gnostic world view: the belief in the duality of matter and mind, the quest for the knowledge that will save us, and the conviction that the key to this knowledge lies not with God but with the individual – all of these have crucial elements of the history and philosophies of technological development have a Gnostic provenance..

Gnosticism in its classical form, is a system of cosmic redemption. The world is evil for it was created by an evil God, the Demiurge. It is a prison from which there is no escape except through the knowledge that can free our spirit from our bodily prison. In opposition to the Christian salvation by faith, Gnosticism offers 'salvation by knowledge (*gnosis*)' – a belief that appeals to an age like ours in which learning is valued above faith. Further, since matter and the body are held to be evil, the Christian belief in bodily resurrection is denied in Gnosticism (just as it is in new media soteriology).

Early Christianity challenged antiquity by abolishing its view of history as cyclic and replacing that with a linear view. The linear view raises the question of the meaning of history. Christianity answered this question with the eschatological proposal that at the end-time, God will make a new world, populated by those who, through faith in Jesus Christ, are saved. (Acts 1:11 shows that the disciples of Jesus expected this *parousia* to happen in their lifetimes). But faith is too demanding for most people, so if salvation depends upon faith, it seems terribly uncertain. Ways of overcoming this uncertainty will be welcomed, and Gnosticism's idea of salvation through knowledge fits the bill, for the Gnostic proposes that salvation requires knowledge, not faith. Further, Gnostic doctrines did not propose that humans have to wait until the end time for the meaning of history to be revealed. The *gnosis* that Gnostics acquire can bring heaven to earth. Unwilling to wait for a celestial salvation, the Gnostic proposes to bring the future world to this world. Gnostics strive to immanentize of the *eschaton*.

Eric Voegelin demonstrated some decades ago that Gnosticism lies at the core of modern technology (that is to say, the technologies that developed after the rise of science in the 16th century). To that insight we can add that the discussions around convergent technologies offer a full-blown Gnosticism. This is understandable for, as a technology that is very closely related to information, intelligence, and communication, computers seem almost

bound to awaken dreams of revelation and transcendence. Cyberspace is often interpreted as an opportunity for humanity to climb outside the confines of material reality and access a disembodied dimension in which it can realize its true self – Kroker’s description of digital “floating world of liquid media where the body is daily downloaded into the floating world of the net, where data is the real, and where high technology can fulfill its destiny of an out-of-body experience” is a typical (and typically hysteric) example. Pure electric knowledge, we are told, will graciously put paid to the evil “wetware” of biological being. The new electronic/digital media, we hear, leave behind the physical ground of the older media, transforming them all into non-corporeal electronic data that can be stored and accessed by anyone from anywhere. Awareness is liberated from the constraints of space – time alone becomes of importance, and time, as Kant pointed out, is the form of inner sensation.

These Gnostic celebrations of the internet, and other new technologies, portray cyberspace as a new space or sphere of freedom – freedom from biological determinacy, from local censorship, and from geopolitical determinism. A soteriologic rhetoric is at work here, valorizing a kenosis – an emptying of the self. Thus one of the most common commendations of the new media proposes that a singular advantage of the new media is their power to negate the individual by transforming him or her into a non-corporeal being. This, we are told, will bring to an end 2500 years of Western metaphysics, the ideological function of which, we are told, was to ground the illusion of independent being.

The parallel between prevalent understandings of the semiotics of hypertext and prevalent conception of new digital communitarianism is striking. The exchange of messages and information over the internet is said to be an integrative activity – but one that accomplishes its aims through the decorporealization of the human being. Hypertexts, too, are understood as having a “virtual,” electrical existence. According to this prevalent conception of the metaphysics of digital reality, the converged media promise to unite non-corporeal information and non-corporeal individuals in the same electronic medium, in which everything and everybody are co-extensive. This total co-extensivity is the basis for the “total awareness” my new media students keep telling me is dawning (or rather, I understand, their classes inform them is dawning).

This is a modern version of the soteriological dream of transcendence through the emptying out of the self. The core of the argument is to eliminate a crucial Aristotelian distinction, that between things which grow and change because an inner principle makes them grow and change, until they reach their final form, and things which require an outer force to give its matter a certain form. The appeal that the idea of dematerialization has to new media theorists is that it supposedly exposes that nothing possesses an internal principle that accounts for its growth – that the self, to take it as an instance, is wholly and completely malleable and can, and is, constantly made and remade by changes in the conditions of the system of representation that shape it. The Gnosticism of this conception is evident: our world is a wrong world not only because it is a bad world, but also because it offers the illusion of corporeality, and the illusion of corporeality is the root of all evil (consider Baudrillard). According to the soteriological principles of these new media theorists, why it is so important to see through the illusion of the self – why it is so important to understand that we possess no internal principle but are subject to endless remaking – is that the new non-corporeal world can come under our complete control, because we know how we made it and how to reproduce it. In the end, we would act as a new Creator. We are unshackled from all moral limitations of our world as it is, and nothing outside of us limits our capacity to impose on the world.

Every Canadian knows the critique of this very position that Grant proposed in such stunning books as *Technology and Empire* and *Technology and Justice*. Grant showed that the belief that the Good is not inherent in the order of nature underpins that belief, essential to the regime of technique in which we exist and through which we conceive the world, that humans

are free to remake the world. Grant pointed out the notion of technique is central to modern civilization – so much so that the progress of technique has now become the horizon for those who seek to understand the Good. Moderns have lost the ability to understand the standards of goodness by which particular techniques may be judged. The conviction that human knowledge has the purpose of mastering human and non-human nature is central to moderns' ideas about the nature of human being. The idea that new media theorists expound, that human being possesses no inherent nature has the purpose of justifying the proposition that humans can be made and remade at will – that nothing in the nature of human being limits society's/ideology's/ the artist's freedom to refashion them. And that conception, in its turn, belongs to a discourse on value and freedom that is associated with the will to technique – it is part and parcel of the modern belief that nature, since it is objectively devoid of value, can be remade at will.

What more than anything impresses me about what the propositions issued as the metaphysics of digital reality is their tendency towards imperial aggrandizement. The consequence of this, I fear, may well be tyranny. I mean "tyranny" here in the Straussian sense, as it arose within a remarkable exchange between Leo Strauss, the renowned political philosopher, and Alexandre Kojève, France's great interpreter of Hegel. A key topic of the debate was Kojève's affirmation that "that the universal and homogeneous state is the best social order, and that mankind advances to the establishment of such an order." Kojève pointed out that the final stage of civilization, the establishment of the universal and homogeneous state, comes into being as the secularization of the political ideal of the Christian community, which proposed that all humans could transcend their given differences through their faith, and be made one in the body of Christ's church – I hope everyone noted that this claim resonates in the beliefs of the new media communitarians. Behind this lies the assumption (not unlike that of soteriological assumptions that undergird the metaphysics of digital media), that thought (and specifically, for the ancients, philosophy) takes its bearings not from an ahistorical eternal order, but from eternity as the totality of all historical epochs (the sum of all knowledge that our new hypertextual "koran" represents).

Strauss argued, against Kojève, that the goal of Hegel's state, universal happiness, is unachievable – and what is worse, that it will end in tyranny. Strauss' argument was founded in the classical belief that humans find their fulfillment in that thinking which leads to wisdom – a premise the Hegel had rejected for the premise that humans find adequate fulfillment in that form of recognition that is available to all. Hegel's gambit, Strauss argued, had effectively lowered the goal of political action, for his idea of universal recognition as the basis of community and state cannot recognize the inevitable differences among humans, and conceives of communities as nexûs of undifferentiated humans. When we must all be the same, no person will be a true thinker. Philosophy will disappear in such state, through the wedding of technology and ideology (a process that probably is now too far advanced to be reversed).

Voegelin's idea of the "koran" is useful in this context, exactly because it reminds us that the end is also only a beginning. The ideas of a totalization of truth and of total awareness (acquired through the complete co-extensivity of the decorporealized mind and the decorporealized text) fails to recognize that perpetual deferral is an aspect of every revelation of Being. Being is the unveiling of an originary veiling of Being – every new appearance (unveiling) of Being is also a misrepresentation (a veiling) of Being. The *eschaton* is endlessly deferred.

It is time to put away this myth of decorporealization, of the totalization of knowledge that will bring history to end. Because it is grounded in the myth of total identity, total transparency, the prevalent metaphysics of digital reality neglects the actual condition of knowledge: it arises from the Gnostic belief in the possibility of immanentizing of the *eschaton*, a belief that goes hand in hand with the idea that the future can be foreseen and planned. The prevalent metaphysics of digital reality is simply the "dream world" of Gnostic lore, where the structure of

reality is disregarded, the facts ignored, and the openness of history replaced by a revolutionary step into the New Age. To replace this myth, may I suggest that we return to where all true understanding starts – with the real body, not the amalgam of metal and flesh that is the cyborg nor the data body of Kroker's Gnostic dream, but the real body of flesh and to the real body that belongs to a real localized community, the real body experiencing localized, concrete reality.

We must begin this discussion with consideration of our respective national cultures – discussions conducted in the awareness that in advanced capitalist countries such as the USA, more than 50 per cent of labour production involves the manipulation of information. The convergence of computer and communications technologies, a process that began in the 1960s and now occurs with ever increasing rapidity, has rendered the global information infrastructure ubiquitous. This convergence has facilitated the development of an international economy and the development of multinational and transnational corporations. This has furthered the process of commodification which dominates global economic transactions. Information flows across the planet now regulate resource distribution and control, wealth and power. Transnational information linkages and 'harmonization of systems' across different media, produce tendencies towards centralization, through which power agglomerates by swallowing up disparate corporate entities.

An hysterical, panic-fuelled metaphysics of the media that celebrates these global information structures in terms of the universal post-human who is about to emerge does not help us think about the problems that emerge from these economic changes. Nor does a metaphysics of digital communications whose political effect is the celebration of the universal, homogenous state – surely everyone here notices that the Web, this non-hierarchical, undifferentiated all-encompassing totality, is the universal, homogeneous state of Strauss' dark vision. We need to think our local realities – to think soberly about our local realities, since they are much endangered by these global information structures (endangered by a development we all of here, I am sure, hope to turn to an advantage).

So, too, we must consider the concrete body, lest the forces that would turn it into a despised object should prevail. We must consider how these new media can intensify bodily experience, not deplete it. The more we have denied the body corporeal pleasure and the more we have allowed life to be sacrificed, the more we have allowed ourselves to be seized by its double, the mere spectacle of life. And the more daily life is thus impoverished, the greater the spectacle's attraction becomes. Through this process, the spectacle has dislodged us from the core of our lives, as the simulacrum conspired to make lived reality seem trivial by comparison, and eventually, the idealized projection obscured the importance of the reality of actual bodily pleasure. We have allowed identification with the re-externalized *imago* to compensate for the life energies we sacrificed to that projection. The first goal of the intensification of life is to dissolve the subjugated consciousness that feels itself impotent.

Intensity makes us feel our belongingness-to-others. The recognition that social relations are between real, embodied human beings is a key to overcoming that fetishism that generates the sensation that autonomous relations between simulacra have become the core reality for present-day metaphysics. It is important to remember the psychological conditions that allow relations between things, or between images, is a certain measure of anomie. The antidote to that *anomie* is intensity.

The kind of knowledge that arises from our familiarity with particular bodies, in particular times and places, is certainly also a *gnosis*, but not the *gnosis* of a place beyond, where everything will be better. On the contrary, this kind of *gnosis* aims at our actual, lived condition. It knows not some decorporealized, universal, totalized existence, but is **real** knowledge, that begins with concrete experiences, of immediate, localized reality, in the here-and-now. That is enough to be getting on with. What we, Canadians and Quebeckers, wish to know is whether

that knowledge, that experience, is more alike, or more alike unlike, between us.

Let us begin with the body, for all thought is bodily: all that we know begins in a peculiar fusion of the human abilities for cognitive processing of sensory inputs, for abstract conceptualisation as a means of problem-solving, and for the co-ordination of bodily functions (such as those of the hand and the eye) that enables us to translate thoughts into action. Yet, though all thinking is bodily, that does mean that physiology alone determines beliefs. For all knowledge is culturally mediated – all thought and all action belong to culture, a system of beliefs and behaviours whereby human beings create meaning in their experiential world. It is through the system of culture that consciousness acquires the ability to represent the world both internally, within the individual psyche, and externally, through communicating with others. It is through culture that the mind manifests itself to itself.

The technologies of representation have a role in forming the structures of consciousness – consciousness is shaped by the systems of signification we use, the systems of language and technology. Language, and all the other technologies of representation, are conscious recreations of our world of experience' (linguistic constructs reflect the world) and conversely, 'the world of experience is also a concrete representation of language (the structure of the world as we know reflects the structure of language). To put this in another way, we could say that we are parts of a reality which has become aware and able to reflect on events. Thus we know reality from the "inside," from our experience of consciousness. That technology has penetrated the recesses of our being does not reflect "something special about the mediatization of our current culture": our self-understanding has always (even before the commodification that characterizes the present) been intimately linked to technology (and pre-eminently the technology of language). Technology has never been something that stands outside us, available for use. Technology (and pre-eminently the technology of language) has always haunted the inner recesses of our being, defining what we are.

Humans understand themselves by transforming the realm of the alien 'other' into a world intimate with their own being. This transformation occurs through the technologies of representation – first of all, language, but also the media of representation which we are concerned with at this symposium. This capacity to bring the other within a very highly developed system of consciousness makes human being the most open of all living beings – permeable to what we sometimes call "the outside," even though it is constituted as a dialogue between the internalized system of representation and what lies outside the system of representations. Let us consider the dialogue between the concrete person and the specific conditions in which he or she lives, and the role that systems of representation have in that dialogue, and how that dialogue has been effected with the development of new systems of representation. That will be, I feel, so much better than the grand reflections about the return to pre-lapsarian conditions offered by those whose thought longs to escape from actual, local realities. Our realities. Can we begin the discussion there, with considering: What is the relation of this new art to our artistic heritages? What is the relation of body of work that new media artists produce to that corporate entity, the state, and how can that corporate entity help protect and nourish that body of work? How is that body of work restructuring the social body? How can it that body of work avoid being swallowed up by the totalizing tendencies of the corporate media? Show our productions have a role in the struggle to prevent international corporatization from swallowing up individual states? Can the emphasis on local realities play in role in that struggle? Would the study of national cultures help?

Thank you.