MONDO

Literature and Democracy: the metamorphosis of the future cognitive mutations and human values REDUX Emanuel Dimas de Melo Pimenta Georgetwon University, Washington DC © ASA Art and Technology UK, London, 2007

to René Berger

The end of the law is, not to abolih or restrain, but to preserve and enlarge freedom. John Locke

Great men, great nations, have not been boasters and buffoons, but perceivers of the terror of life, and have manned themselves to face it. Ralph Waldo Emerson

To know *how* our senses modify and *format* our patterns of thought, to know *how* that thing we call *logic* is *designed*.

Logic not as a specific type of reasoning, like the one supported by Aristotle, but a principle of order of thought, such as George Boole's ideas.

Order is differentiation; disorder, dedifferentiation – basically the two fundamental principles of thermodynamics – desegregation and aggregation.

All logic is just the design of desegregation and aggregation forces.

The emergence of the idea of isonomy and, immediately later, of democracy, coincides with the invention of the Greek miracle – through the importation of the phonetic alphabet from the Levant, in the Middle East, its synthesis and "heating" with the addition of the vowels. The fusion of phonetic alphabet and papyrus, and with the reading in silence, generates what we call *literature*.

Isonomy, democracy and literature connected.

Isonomy is a fundamental element in democracy. Other elements are departmentalization and atomization. Atoms, departments and a universe of equality before the Law.

So, another important element is for the Law to be a stable system elaborated by the people, in a representative or direct way.

Isonomy and democracy were even considered as almost opposed to each other by Plato.

Aristotle condemned a government where «the people govern and not the law».

However isonomy can exist independently, it is fundamental for democracy, at least in modern terms.

In isonomy there are no personal questions.

The form of a society structured on isonomy and democracy is similar to a literary text, where history and symbol are important factors.

In literature, voice is disembodied – separated from body, from its original organs.

Voice free from mouth and ear.

In literature also image is disincarnated, transformed into *imagination* – becoming without body.

When reading in silence, disembodiment of voice and image, associated with ocular movements, generates a special logic, a new type of memory.

While the spoken voice demands great redundancy in order to sediment long-term memory, written works as prosthetic extensions of that type of memory,

free the mind to all kinds of speculation.

Because of this, our word *speculation* comes from Latin *speculum*, directly related to *mirror*.

Thus, literary text frees poetry from song: paper substituting the function of repetition.

And also for this reason, oral systems are much more traditionalistic than those created by writing.

The spirit of invention, in the modern sense of the term, is born with literature, with prose.

The spirit of invention implies a relative independence of our long-term memory, that is, the freedom to "take in" and to "think over" – as Eric Havelock observed.

So, there is a third term – associated with the principles of isonomy and democracy – that projects what we conventionally called *modernity*: the principle of revolution.

In oral societies, plastic representation is generally structured after a geometric base, many times established by orthogonal lines like what happened in Ancient Egypt; or like the medieval geometrical diagrams.

When phonetic writing emerges, associated with a dynamic medium like papyrus or paper, that pictorial strategy is quickly changed, assuming an anthropomorphous strategy – that is, generating the emergence, while a logical principle, of that we assign as illusion of contiguity.

In the visual world, instead rigid frames of lines orienting the design of the object, human body becomes the basic reference for all measures.

But, the body is not there. It is about a second and degenerated reference, like what happens with metaphor.

There is a close relation between such phenomenon and the emergence of the idea of *isonomy* – each one equal before the Law, no longer a Law established

by a religious entity, but having the human being as *measure of all things* – as Protagoras said, exactly at the same time when the idea of isonomy took its definitive form.

Taking the notion of *resolution* as perception data, and *definition* as cognitive element.

When reading a text we generate a *high definition* universe in *low resolution*. We read a literary text and it suddenly becomes – like a hallucinogen effect – a true scene of action in *high definition*. We dive inside a story, as if we were there. But, it is about a *low-resolution* system: letters simulating sounds and sounds simulating action. Two plans of degeneration projecting a simulacrum.

In the acoustic, oral and tribal universe, everything happens in *high resolution* and *low definition* – exactly the opposite of literature.

In the acoustic universe the spoken voice still belongs to the body, happening in *total definition* – but our system of sedimentation of short into long-term memory, working in constant deletions, in self-referential loops, demands a high degree of repetition, of redundancy, projecting a *low definition* reality.

With short capacity of memory storage, repetition implies less diversity. For this reason, the verbal world is frankly two-dimensional, while the literary one, operating in depth and organized in a predicative way, is characterized by the third dimension.

In the acoustic world, informational and memory environments project social overlaid structures, always depending upon the position where we are.

Everything in literature happens in depth – like to diving inside a parallel universe: interactive layers of signs in an ample pattern of simultaneity.

The universe of fields and attractors operating towards a *singularity*: the reader.

Stereotype is its base of format – and, from human behavior to artifacts, everything can be subject to a *format* in literature.

The literary world also starts the refusal of the obsolete.

The obsolete is not what has no longer use, but yes what, remaining functional, is no longer perceived. The obsolete is what enters inside the flux of routine and becomes redundant.

The idea of obsolete practically doesn't exist in the tribal world.

The obsolete belongs to the past, to what it is already integrated. Paper belongs to the future, to the permanent exercise of elaboration on the past, transforming it.

It is here, again, that the notion of tradition emerges as product of rupture.

After the 2nd century, equality of everyone before the Law gradually loses importance, with governments increasing their interferences with citizens' lives, having as justification the improvement of security and economic performance.

Already in the 6th century the Emperor Justinian definitively ended with the idea that all should be equal before the Law and that Law should serve to the defense of freedom of individuals.

It is when papyrus practically disappears and is partially substituted by parchment.

Parchment is slower and more rare than papyrus.

The ancient principle of isonomy would only be effectively recalled in the 17th century, through the waves of transformation produced by the Italian Renaissance.

We read letter by letter and also by blocks, words and phrases – in a dynamic process of tracking involving different parts of the brain and both the basic types of vision: central and peripheral.

When we read a text, central vision identifies letters and peripheral vision gives us a perception of the whole, of the sense of the text. All very dynamically, in continuous jumps from one to the other side, up and down.

Peripheral vision - sensitive to light and movement - implies the appear-

ance of the idea of paradigm, typical of the literary world.

Central vision – sensitive to color and texture – causes to emerge departments and the principle of edition.

Reading movements: we learn to search, and when we do it well, we read in silence – and we become free from the voice and ear.

Reading in silence gradually grows with the popularization of papyrus, and disappears, in a relatively fast way, with its partial substitution by parchment in the end of the Roman Empire.

The creation of the telephone in the 19th century appears as a radical transformation of *definition* and *resolution* conditions, earlier established by literature.

While literature operates in *low resolution* and *high definition*, the telephone is designed by *low resolution* in *low definition*.

Our spectrum of auditory frequency goes from sixteen to twenty thousand cycles per second – in the most refined ears. But the spectrum of frequency used in telephones turns around only about three thousand cycles per second, which it is the frequency of heavier impact in the average of the ears. The entire remaining portion is practically lost. Nevertheless, we are able to recognize voices and even to identify different musical instruments through telephone, because we have a neuronal system that *completes* the lost information.

Involuntarily, we repeat more phonemes when speaking in the telephone. To use the telephone, to be understood and to understand what others say, implies a learning process.

The *low resolution* and *low definition* design was a barrier for the expansion of the telephone beyond individual communication.

The telephone – in contrast to literature – starts two fundamental phenomena to understand what would be, much later, the *virtual universe*: *real time* and *two hands* communication.

The strong interaction and the *real time* that *design* telephone, don't allow it to have a *format* – after the connection is made, all the rest is improvisation:

dynamic articulation between short and long-term memories.

The disembodiment phenomenon in the telephone is different from what happens with literature – there is no longer a body, but an effective link between people. It is not about a medium that articulates degenerated layers, but a direct connection.

In the telephone everything is surprise and nothing is invention – because in the oral world everything is diachronic: one thing after the other. Thus, for the acoustic universe, what is now known will only have meaning with what will come next, which will always be a surprise.

Telephone amplifies the oral phenomenon – the intimacy of the acoustic universe, full of unexpected elements but without invention, without discovery.

Everything is ephemeral with the telephone.

Like an ultra acoustic universe, with a reduced spectrum of frequency, the telephone demands great redundancy of information, implying the deep involvement of people.

Radio is always the public speaker's voice – communication from one to many. But, it happens without frontiers.

Radio is a sensorial reversion of the phenomenon created by literature – no longer different disembodied personages happening in our body, but personages made by disincarnated voices – a kind of disembodiment of theater.

Such disembodiment generated the emergence of an ideal of the pure voice.

Voice always was an essential element of social integration – the first thing we do when we are born is to learn to speak.

As an element of the social link par excellence, the disincarnated voice projected the impulses of super nationalism – generating, among other disasters, the figure of Hitler.

All nationalism is essentially tribal.

Movies also happen as a single direction path – like radio or books – but launching a new sensorial revolution: a new language of light: *projected light*.

Until then, we had homogeneous light projected on a surface of irregular reflection – like what happens with books or paintings. With movies, this phenomenon is inverted: irregular light projected on a homogeneous reflexive surface.

Not only, in a kind of artificial *obscure chamber* enlarged for all, visual phenomena relative to movement and light, which are typically worked by peripheral vision, are suddenly concentrated in central vision – sensitive to texture and color: here is the magical sense of black & white photos and movies: inverted senses.

Such sensorial reversion makes movies to be designed by *high resolution* and *high definition* – decreasing the use of peripheral vision – sensitive to light and movement.

Movies start a new strategy: the edition.

Edition happens due to the intensification of central vision. Sets of images edited in a way to create a sensation of continuity, replicating the work made by saccadic ocular movements.

Form perception implies involuntary sweepings known as saccadic movements.

We move our eyes in a frequency of about ten sweeps per second. There is a complex network of small arteries for blood irrigation in front of our retinas, many of them blocking the passage of light to photoreceptor cells. If we saw *everything*, even what is *stopped*, we would also see a huge quantity of shadows – a large and unnecessary quantity of information.

Our brains created an economic strategy to deal with this: only what is in movement is visible. Therefore, the stopped eye doesn't see.

Television screens and computer monitors, with their sweep frequencies, substitutes our saccadic ocular movements, making our eyes stop. Form perception passes from the eyes to the screen, as an intelligent type of sensorial prostheFree from ocular movements, all the rest disappears, our ears are freer to hear and we dive into a television universe. This is the phenomenon we call *immersion* – which would only become popularly known with the virtual revolution.

But, there is another revolution started by television: *emitted light* replacing *projected light*.

The retina starts to be massaged by light.

With television, peripheral vision disappears; but the light massage transports peripheral vision to the center, making everything a single fluid movement.

Single direction medium, television is profoundly hypnotic – and hypnotism doesn't know edition.

Only a small part of the light mosaic information emitted by television is memorized – that is, only a small part passes to long-term memory.

As McLuhan showed, television is a *cool* medium.

Low memorization leads to a cognitive fulfilling of those *empties*, to a kind of personal participation to complete the visual mosaic of light.

Image restoration by surface: not to *fill* ideas, but *empties* of light. Television is a superficial medium par excellence. Images of war seen on television generally generate less impact. Everything turning around short-term memory: *here and now*.

Thus the world of entertainment emerges – everything transformed into superficiality.

At the end of the 1950s a fascinating planetary metamorphosis started, with the creation by President Eisenhower of the *Advanced Research Projects Agency*, more known by *ARPA*, as reaction of the United States to the Soviet military technological development.

ARPA's main objective was to create an invisible and indestructible weapon.

sis.

In 1985, the fusion of *ARPANET* with *National Science Foundation Net* would be the beginning of the *Internet*.

Everything together in the fusion of television, telephone and, also, of everything we know.

A deep civilizational metamorphosis: the virtual universe.

The word virtual appears from the Latin virtus: potentiality.

In the virtual world, everything is total possibility.

Concepts of *definition* and *resolution* lose their sense. The universe of networks is present everywhere, from telephones to car design, from television to books.

Diving into ancient cultures already disappeared, languages that formed old civilizations – with our education penetrating the deepest cultural fabric, the most unexpected references, reaching subatomic particles, Super Strings, blackholes, strange attractors, and even regions of outer space never before imagined.

Information and matter circulating fast through the entire planet.

Everything becoming total diversity.

Everything being global contamination.

That is, to be *and* not to be – that is the new question.

What before was designed by a stable relation between short and longterm memories, is now completely transformed into new informational long-term contingent produced by digital prosthesis in network, and by a dynamic articulation of other prosthesis of short-term memory.

Cyber search engines and editing software – of any nature: true intelligent prostheses of improvisation, of dynamic articulation between short and long-term memories.

Prosthesis is something different creatively associated with the function of the extension.

While the literary world was mainly a universe of the human body extensions, the virtual world reveals itself potentially as a universe of *prosthesis* – not only of the body, but also on its extensions, on what is disembodied.

Beyond the fulfilling information on surface, originally generated by television screens, like what happens in the acoustic universe, our personal long-term memory starts demanding a higher degree of redundancy, of repetition. Repetition on the surface: the emergence of entertainment as the very first sign of practically everything.

Cars, whose original function was transportation, are changed into gadgets. Cities, like Paris, Venice and many others, are redesigned into gigantic thematic parks.

Clothes changed into trademark symbols: everything quickly forgotten and renewed.

Thus, stereotyped manners of social behavior – so characteristic after Gutenberg's press – quickly disappear.

Identity becomes ephemeral and volatile. Everything can belong to everything or nothing, immediately. More than this, everything belongs to everything and to nothing, immediately.

A planet transformed in the emergence of the obsolete – everything turned into the continuous fabric of use and consumption. Obsolete, useless people – because *utility* is linked to the future, to what generates something.

Ignorant people elected for important public positions, all over the world. Athletes and entertainment actors receiving millions: teachers and philosophers abandoned by society.

Uselessness is directly associated with the obsolete and, both, to the loss of function.

One of the central elements of *identity* is social function, what differenti-

ates and joins us in society. Without identity, violence emerges in its more diverse ways.

The volatility of the systems in the network amplifies the phenomenon produced by television and telephone, generating a universe of entertainment.

Consumption, old social standard par excellence, gives place to *use* – what would be known as *Low Power Society*: almost free access to objects that little before were restricted to the wealthiest. Movies, musical recordings and high definition photographic images become commercialized in supermarkets or are distributed through virtual networks – but, everything tends towards a huge mediority, pure entertainment.

On the other hand, like a huge system in dissipation, points of high density emerge, spread out through out the networks structure.

Transformation from *paradigmatic* mutations into *syntagmatic metamorphoses* – continuous changes in nonlinear framework.

The *human*, before related to *hummus*, to land, visual property, changed into *virtus* – dematerialized in total potentiality.

Old principles of organization in oral societies *designed* by small social interlinked groups, and literary societies consolidated in the form of *urbis*, give place to space-time pulverization: virtual groups overlaid in a large *real time* structure.

As the principle of *isonomy* is an idea of standardization, it gradually disintegrates itself.

The tax system, a little all over the world, starts to be inefficacious in relation to great companies or great wealth, striking on the average citizen, generating an effect of deep loss of political credibility. Accounting mechanisms immediately transfer resources from one to the other side of the planet.

In the name of security and welfare, everything becomes bureaucratic persecution – but mainly affecting the individual.

It is then in the beginning of the 21st century, a little everywhere, that ques-

tions about democracy emerge. Who is equal to whom? A miserable addicted would have the same value to the society as a scientist? A terrorist would have the same rights as a dutiful citizen?

Everything begins to be a place for judgments of value, because not all are equal before the Law – and the Law itself becomes unstable.

Inequality before an unstable system that ideally aims to submit everyone, produces the feeling of insecurity and persecution, as well as the aspiration – sometimes hidden – to control and create permanent vigilance.

While in isonomy and democracy there are no personal issues, in the universe of *real time* interactive planetary telecommunication systems everything is personal.

Deep sensorial transformation generates something similar, in a certain sense, to the ideas imposed by Justinian, in the 6^{th} century, justifying – on behalf of security and general welfare – the end of equality of all before the Law, the end of a stable *legal corpus*, and the end of the rights of the individual as we know it.

But now large planetary corporations, which gradually take place of elect governments, substitute the old figure of the emperor.

It is not to say that democracy or isonomy had simply disappeared. However in some aspects and some moments this affirmation can be true.

We deal with a world in continuous metamorphosis, where human values are always in transformation.

Observing this process of mutations and reflecting on the nature of changes.

It is not about changing the world. «How to improve the world: you will only made things worse», said John Cage.

It is about change in a changing world. To change it is necessary to know.

We became everything immediately: publishers, composers, photographers, typists, secretaries, redactors, writers and so on – everything without leaving home. Instead of freeing human beings from work, digital systems concentrated the most

varied forms of work in each person.

It is no longer necessary to negotiate, to orient, to establish strategies between people – but only to participate, to elaborate and to enter into flux.

There is no longer future, but everything here and now.

Thus, education, culture and health started to be considered, gradually, as goods to be acquired, and not as rights of citizenship.

The world of networks decreases the notion of urban collectivity; but it also decreases the notion of the super individual, both formalized by literature.

It is the paradox of earphones that transfer stereophony to the center of the head, and of the supports of music turning the sound environment a strictly individual phenomenon, but coined by the middle; or the continuous and superficial *real time* chats.

The individual passes to an unstable and floating collectivity without ethos.

Gradually, virtual revolution generates a new condition of the sacred, a new condition of free time, and a new type of poetry – mostly non-verbal.

A thought that makes us admire the phonetic similarity between the Latin word *mundus – world* in English – and the Japanese Buddhist expression *mondo*, that literally means "questions and answers".