



LOW POWER SOCIETY

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de melo pimenta

What

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LOW **POWER** **SOCIETY**
continuous hyperconsumption
and the end of the medium
class in a hyperurban planet

*to Giorgio Alberti
and in memory of Daniel Charles*

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Introduction to the third electronic edition ***Low Power Society***

Seven years ago this work begun. In 2003 I talked with Giorgio Alberti, walking near the Lake Maggiore in Locarno, Switzerland, and his ideas were the embryo of this work.

This book is dedicated to Giorgio Alberti and it is in memory of another dear friend, Daniel Charles.

This third edition includes new statistics, new ideas and new figures. It is interesting to see how along these past seven years those initial thoughts were confirmed, and many books on issues related to them have been published.

In this new edition the original text - continuous flux - was divided in chapters, to turn easier its reading.

This is not a pessimistic book, but a perplexed look to a world in quick and voracious metamorphosis. This is not a simple transformation, but a change of nature, a real mutation.

Low Power Society ends with a bright reflection by René Berger, another wonderful friend, who disappeared in 2009.

Emanuel Dimas de Melo Pimenta
2010

PREFACE

by Jon Rappoport, to the first edition

This book is a hammer that strikes a gong. The gong is a planet in the middle of the galaxy, and the ripples of sound launch – and yet, the book is extremely precise and acute; so magnified that it explodes every detail it offers and makes it into a new planet – so we are looking at a book that can and does turn itself inside out and reveal its own energy and process as it expands – and why should such a book be written, why should such a book appear out of nowhere – because the author, Emanuel Pimenta, and we were waiting for it, we were sitting in front of a screen watching the news and the avoidance of news and the cartoon of news hoping it would crack open and put an end to itself – and as we waited, we were doing something else, composing the interior ligaments of another much wilder story, and this is such a book, too, a poem that spirals and twists and unfolds past Consensus mazes and settles like a bird at the mouth of a flower.

The book discusses, in every paragraph, the world, the planet, the population as a whole, but it is always talking about the individual lurking behind and above and below every fascination with those sciences that define constant change with maps and better maps and faster maps and more urgent and determined maps.

So this is a book about the emerging future of the human who is, on one level, preoccupied with charting the collective transformation, and who, on another level, is staging a revolution of his/her own.

The book is made of air. It is all openings. It is all first sentences. It is, in that way, a hundred books, serially constructed – but on closer examination, the sequences are taking place from a core, and inhabiting 500, a thousand, 5000 dimensions.

Pimenta views an up-to-the-minute milieu-explosion outward of countless pieces of information, and in doing it, realizes that in order to give

sense to the process, he needs to enter it. So he becomes the explosion while commenting on it.

To do that takes a deep acquaintance with simultaneous rhythms and colliding sonorities, and the author is, of course, a well-known and well-celebrated composer. In this book, his music turns out to be serene and generous and sly and relentless and a recapitulation of copper and bronze ages when the shaping of objects was both a highly personal endeavor and a joy of first discovery – out of nowhere.

In other words, you cannot write a book about the titanic changes that have been taking place on the macro level on this planet for the past hundred years without emboldening yourself with draughts of magic. You can bring to bear all the science you want to, but eventually you come to the brink where you must MOVE currents of information like chords, and you make new music. Commentary without imagination fades away in seconds.

WHERE IS THE HUMAN RACE GOING? Pi-
menta answers this with his own invented process
of inquiry, and allows us to see that his invention
and the question and the answer can become
merged as they travel through space together. Is
it literal information? Most certainly. Is it poetry?
Yes. Is it music? Yes. Is it something else entirely?
Yes. Do we have a name for it? No.

And thank goodness for that.

[Jon Rappoport](#)

2008

Author, The Magic Agent

Introduction to the first electronic edition ***Low Power Society***

*How to improve the world: you will only make things
worse.*

John Cage

In the spring of 2003 I walked near the lake Maggiore, in Locarno, Switzerland, together with [Giorgio Alberti](#) – since many years a good friend.

[René Berger](#) had introduced us in the 1980s. Then, we all were involved in the celebrated *Locarno Video Art* and *Electronic Art Festivals*,

directed by Rinaldo Bianda, René Berger and Lorenzo Bianda. Many people, like Nan June Paik, Steina and Woody Vasulka, Bill Viola, Edgar Morin, Tim Berners-Lee, Pierre Levy, Francis Ford Coppola, Basarab Nicolescu, Joseph Brenner, Francesco Mariotti among others were present in those amazing festivals, whose also included lectures and debates on art, science and philosophy.

It was late afternoon, bright deep blue in 2003 and I peacefully walked with Giorgio Alberti, a PhD on informatics, MBA at Fontainebleau's INSEAD, former successful manager who became contemporary art collector and specialist on art and alchemy.

He was fascinated with studies that showed the modernity of John Kenneth Galbraith's thoughts, with whom he personally met some years before. «Today, everything is easy for children and teenagers. They have, almost automatically, computers, cellular phones, CD and DVD players, and almost unlimited quantity of software, music

or movies. Everything became fast and automatic. When these children will grow up our world will be profoundly changed. There is no longer the old idea of personal effort to reach something. Everything turns around low price. We created a *low price society!*».

He was right. After that moment, in the next five years, I developed this project, which is dedicated to Giorgio Alberti.

In 2006, we were together at the art and science International Meeting [*The Spirit of Discovery*](#), in Trancoso, a small and wonderful medieval city in Northern Portugal, where I had created the [*Arts, Sciences and Technology Foundation – Observatory*](#). In that Meeting also participated the philosopher and scientist Joseph Brenner, from the United States; the genial [*Roy Ascott*](#), from England, who is one of the most important artists and philosophers of the cyberspace all over the planet; Alex Adriaansens, founder of the legendary contemporary art nucleus

[V2 Organization](#) in Rotterdam, the Netherlands; Gyorgy Darvas, crystallographer and science historian, from Hungary; the architect [Marcos Novak](#), creator of the concept of *liquid spaces*; the Portuguese architect Gonçalo Furtado; the American conceptual artist [Dove Bradshaw](#); the Swiss Peruvian artist Francesco Mariotti; the Polish artist Monika Weiss and the Portuguese writer and artist António Cerveira Pinto.

In that Meeting Giorgio Alberti presented a lecture titled *Amores-Eros & Low Power Society*, which later was published in the *Technoetic Arts* in which I was the guest editor.

In one of the first evenings, we all were together for dinner on a large round table and started a brainstorm about Giorgio Alberti's ideas and the concept about a *Low Power Society* was born.

In the beginning of the next year, Giorgio Alberti made an International Meeting at the Monte Verita Foundation, in Ascona, Locarno, Switzerland, which turned around the ideas that founded the *Low Power Society* concept. That Meeting was titled *The End of a Belief, Towards an Era of Underdevelopment*.

In 2007, again in the same city, and once again during the art and science International Meeting [*The Spirit of Discovery*](#), also organized by the *Arts, Sciences and Technology Foundation – Observatory*, we continued our reflection about the concept, this time generating work and discussion groups. My lecture, then, was titled *Low Power Society* and it was the base of this book.

In that year, beyond Giorgio Alberti and I, other people were present: again Roy Ascott and Joseph Brenner – who also presented a lecture, very interesting, about the subject: *Transdisciplinarity, Logic and the Low Power Society*; the Spanish philosopher Carmen Pardo;

the Spanish philosopher and neurologist Pedro Marijuan; again the Portuguese philosopher and writer Antonio Cerveira Pinto; the Italian musician Leonello Tarabella; again the American artist Dove Bradshaw; Jay Kappraff, mathematician of the *New Jersey Institute of Technology*; the artist, also American, Rosemarie Castoro; and the celebrated English violoncellist Audrey Riley.

In those Meetings, René Berger was always present, participating from Lausanne, Switzerland, through electronic systems.

In the next year, in 2008, Giorgio Alberti organized an International Meeting especially dedicated to the subject, again at the *Monte Verita Foundation*, in Switzerland.

In that same year, 2008, in New York City, the plastic artist [Marcia Grostein](#) was wondered with the concept and appeared the idea to make a great exhibition unveiling questions that conventionally have been considered as exclusively pertaining to

economy or sociology but that in fact are esthetical ones. René Berger had already made it at the *World Economic Forum*, in Davos, in the 1990s, even if not specifically on a *Low Power Society*.

Nina Colosi, creator of the [Streaming Museum](#) in New York, quickly and enthusiastically embraced the idea. Soon, Paul Goldberg – who beyond expert on financial systems also is a recognized jazz musician – became the producer for a future contemporary art exhibition about the subject.

This is a brief history about how the *Low Power Society* concept was born. In the end of the book there is a timeline of the events that determined the concept until now.

When I finished the book, I received the sad news that Daniel Charles – a kind friend, great and generous philosopher who I always profoundly admired – had passed away. Even if he was not directly involved with the original project, I decided

to also dedicate this work to his memory. Giorgio Alberti is the true father of the concept.

The book is divided, without precise boundaries, in two parts – a first one more oriented to philosophical questions; and, then, a part more dedicated to the concrete world. Everything fluctuating in a flux, with no chapters or departments.

Images in books are more frequently placed on left pages and the text on the right ones – because our left cerebral hemisphere, more oriented to literature, covers more the right visual field. Here, that tendency is inverted. In its electronic version, the graphical design shows two pages in only one.

It is not a book about the future, but yes about the present, which already is past. It is not about judgments of value, if this or that is right or wrong – as I reinforce sometimes in the text.

Also, it is not an absolute approach – and yes, a door for new ideas, for new approaches.

It is not to improve the world. Only wide open eyes – on text and visual worlds – at the human scale of a universe in permanent metamorphosis.

Emanuel Dimas de Melo Pimenta
New York 2008



NEST, artwork by Marcia Grostein, New York 2008

Low Power Society

*That government is best which governs not at all;
and when men are prepared for it, that will be the
kind of government which they will have.*

Henry David Thoreau

*The fossil fuels took multimillions of years of
complex reduction and conservation, progressing
from vegetational impoundment of sun radiation by
photosynthesis to deep-well storage of the energy
concentrated below the earth's surface. There is
a vast overabundance of income energy at more
places around the world, at more times to produce
billionsfold the energy now employed by man, if he
only knew how to store it when it is available, for use
when it was not available.*

Richard Buckminster Fuller

Three civilizations – family, food, memory and energy

It's a poor sort of memory that only works backwards.

Lewis Carroll

In 1964, looking to define a criterion for the identification of extraterrestrial life and possible societies in other planets, the Russian astrophysical scientist Nikolai Kardashev created a classification table identifying different civilization stages in terms of energy consumption, which would later be popularly known as the *Kardashev Classification Scheme*.

His classification established three great categories.

The first category of civilization would be able to control all types of energy from its own planet. Thus, such a civilization could easily change and operate weather, tectonic movements, and extract all its energetic needs from the planet. In such civilization, the need of energetic resources would be so high that a very sophisticated system of communication between its inhabitants would be imperative – as the physicist Michio Kaku demonstrated always with great clearness.

The exploration of planet's energy would also implicate a great refinement of knowledge, turning possible for that civilization to manage the complex and chaotic chain of environmental events.

The second type would be the one for which planetary energy would no longer be enough, obliging it to control stellar energetic sources. Its

needs knew a big expansion, beyond the planetary capacity, leading to use its solar system's star as source of energy.

The third type of civilization in energetic terms would be the one for which even the energy from a star would not be enough for its needs, obliging to an expansion of consumption in a galactic scale.

If our energetic consumption will continue growing as it has happened at a rate of 3% per year, without acceleration, it is estimated that we will reach the *Type I of Kardashev Classification Scheme* in one to two hundred years.

Keeping, after then, stable the energetic consumption growth, *Type II* could be reached in about eight hundred to one thousand years, and *Type III* could be reached in a period of about ten thousand years.

It is an astonishing hypothesis if we consider

that only ten thousand years ago we still were in Paleolithic, giving the first steps to start the Neolithic!

That energetic classification also alerts us to the fact that along History every civilization leap implicated an increase of energy consumption.

Fred Cottrel, social scientist at the University of Miami, defined the thesis established in his book *Energy and Society*, dated of 1955, with a decisive statement: «the energy available to man limits what we *can* do and influences what we *will* do».

Any civilizational development implicates, in some way, an increase of energetic consumption.

Even the production of ideas implicates energy consumption through its supports and accumulators. Papyrus, parchment, paper and silica, in their most diverse uses, are clear examples of how it happens.

The structuring of ideas as a biochemical process in our brains also is energetic consumption.

Going a little beyond the abstraction of the world of *pure* ideas, the invention of clothing made possible a more efficient energetic storage inside our bodies and, thus, it also generated more intensive and efficient consumption of energy, liberating our time. Free time turns free thought possible. Without clothes, we would be obliged to eat larger quantities of food more times every day.

The control of fire surely was the first revolutionary factor that projected a logic of concentration and produced *Homo Sapiens*.

For years it was considered that the control of fire was reached for the first time around five hundred thousand years ago by *Homo Erectus*, *Homo Sapiens'* ancestral, in China – as it was

evidenced by archaeological evidences in a complex of caverns at Zhoukoudien, near Beijing, in 1930s.

Later, several archeologists challenged that possibility demonstrating that the controlled use of fire could be confirmed in archeological sites in Kenya and South Africa dating around one million and five hundred thousand years ago.

Adriaan Kortlandt, ethologist from the Netherlands, developed a fascinating a revolutionary thesis according to which big apes' ancestral were, in fact, very similar to human's. They were persecuted by proto-humans and obliged to take shelter in trees, conditioning their evolution. To Johan Goudsboum, sociologist at the University of Amsterdam, the control of fire would have exerted a fundamental rule in that event.

That is, the principle of concentration generated by the control of fire probably was one of the factors responsible not only for the emergence

of human but also for the appearance of apes, in a technological evolutionary process that projected different species.

Curiously, like what happens to the principle of molecular structuring in wood, the control of fire implicates a logic of concentration.

Fire is an unstable phenomenon, of easy propagation, with a strongly destructive nature, demanding great concentration of attention and knowledge for its manipulation.

Thus, fire control techniques not only implicate continuous attention, demanding immediate solutions for unexpected problems, but also their synthesis in terms of method as to make possible transmission of knowledge from generation to generation. The control of fire produces, inevitably, a process of education, of knowledge.

Michel Foucault said that «power must be

with it the sedimentation of the phenomenon we would call *family*.

But, mysteriously, the word *family* – derived from Latin *famulus*, which meant *servants* – would only appear in the 12th century, when Europe started intensifying the use of vision and phonetic alphabet through paper.

The expression *family* originally emerged to designate a group of people obedient to a *paterfamilias*, as if it would unveil, thousands years later, prehistoric seeds of that interesting concept, later transformed in *content* of a new medium.

In a certain sense, *mafia* and other similar criminal organizations in Southern Italy preserves the ancient meaning of the word *family*, for which all servers are members.

It would be only after the middle of the 17th century that the word *family* started indicating a group of people formed by parents and children!

Even under a cover of obscure past, the term *family* possibly recalls its etymological origin from two Latin roots: *fas* that means “divine law” and *for* or *fari* meaning “to speak”. Since a long time, diverse scholars have proposed a connection between these two roots, which was enthusiastically reinforced by Émile Benveniste, a French linguist who lived between 1902 and 1976 and who was a dedicated follower of Ferdinand de Saussure’s ideas.

However insistently attacked by other scholars, the connection between *fas* and *fari* would be definitively confirmed after a more attentive analysis of some Greek words older than Latin.

Despite even more distant in time, it is possible that another clue for the comprehension of a link between those two roots – connecting *speech* and *divinity* in the formation of the idea *family* – could be found in the Sanskrit *vac*, which

indicates, simultaneously, *voice* and *divinity*.

One of the Greek terms that unveils the enchaining of the Latin roots *fari* and *fas* is *pho.ōs*, which means “light” and that launches itself to the Indo European **bha* that, in its turn, indicated the idea of *energy*, of *movement* and of *light*.

Thus, even if hypothetically, it is possible that the word *family* have appeared from the fusion of the ideas of *divine law*, of the *speech* that connects people, and of *light* or *energy*.

The creation of ensembles of interconnected people, with more implicitness in their relations, the use of fire, a larger consumption of energy and the consequent increase of food production also meant the increase of calories absorbed by human being.

The average efficiency of a naked human body is about 20% – what means that for each hundred consumed calories, only twenty will be used. So,

nutrition and brain metabolism researcher at Sherbrooke University, in Canada, defends in his book *Survival of the Fattest* that the increase of calories ingestion was an essential fact for human survival in prehistory: «The human brain evolved because certain hominids stumbled serendipitously across solutions to two major constraints on primate brain size and function, one a *metabolic constraint* and the other a *structural constraint*. The unique cognitive potential of the adult human brain emerged as a direct consequence of evolving neonatal body fat as insurance against the metabolic constraint – the voracious fuel needs of the infant brain. Neonatal body fat improved the fuel supply to the brain by providing an alternative fuel to glucose in the form of ketone bodies. Ketone bodies magnified the potential for more sophisticated communication between neurons, but only because the habitat and diet permitting the development of body fat simultaneously provided a richer supply of brain selective nutrients. These nutrients met the need for additional membrane complexity, which

Along thousands of years we became used to deal with this phenomenon of increasing energetic consumption, at the point we considered it perfectly natural.

But, especially after the second half of the 20th century, in great part because of a global demographic explosion, the idea of increasing energetic consumption as civilizational indicator quickly became taboo. The justification was to avoid judgments of value and power games.

Thus, the narrow relation between energy and memory was left aside.

In fact, what we call *memory*, in general exclusively associated to some of our neuronal functions, is present in everything. First of all, it is a phenomenon of physical nature. Memory nothing more is than the establishment of *form* – what means, in other words, that it is about the establishment of *identity* elements.

When an animal prints a step on a piece of adobe softened by water, it becomes *memory*. The same happens when someone paints an image, when we write something, when a flash breaks a stone, when an earthquake draws a new landscape and so on.

Memory is the time, or duration, of what we call *order* or, simply, *differentiation*.

The exercise of memory, as the act of elaboration of *form* complexes, or *differentiation*, became more and more sophisticated along thousands of years.

Sophistication means reduction of scale, more acuity, something like knowledge *miniaturization*.

The word *sophistication* appears from the Greek *sophos*, which means “wisdom” and that also generated – perhaps through Pythagoras’ hands – the word *philosophy*.

Every question involving knowledge has a common denominator: *scale*.

But, memory is not only pure determination of a space time moment. It is a permanent act of creativity, because everything is changing, always. No differentiation is closed in itself. Anything different implicates the *Other*. And what we vaguely determine as the *Other* can only be vague, because it is of a dynamic and complex nature.

By the same reasons the system we call *life* is extremely dynamic, also any system of memory is the confrontation of different *formations* – or *attractors*. Therefore, memory and cognition are inevitably and strongly interlaced.

Any life is a kind of memory – and all memory implicates energy consumption, because all *formation*, all establishment of *form*, any *action*, essentially has an *anti entropic* nature.

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absurd acts constantly committed in environmental terms all over the planet along thousands of years, I believe in the human being, in what we call *Humanity*. And, I believe in the Humanity as an essential part of Nature, not isolated from it.

Energetic consumption does not obligatorily implicate global warming or pollution – but it means, always, transformation, change.

In the same way I consider *energy* as *memory*, part of the process of Nature, I also consider everything we call *artificial* as to be part of this same process – not something new and dangerous, but a dynamic and mutant process.

It is not about to be optimistic or pessimistic, good or bad, wrong or right, but, simply to observe History, the differential data we reached after thousands of years, and notice that, despite the horrors, the persecutions and the most varied tragedies, inquisitions, wars, murders, horrible crimes, all actions of desegregation, Humanity

also have had enlightened souls, poets, scientists, philosophers, musicians, architects, thinkers, fabulous artists – all them aggregation actions.

The mysterious network that gives us the sense of unity and reveals that formidable enlightened human face would be illustrated by the concept of *serendipity*: when discoveries happen by *chance*, so many times simultaneously, in diverse parts of the planet.

A phenomenon that, sometimes under different angles, brought Teilhard de Chardin to create the concept of *noosphere*; Wyndham Lewis to coin, in his classical *America and Cosmic Man*, dated of 1948, the expression *global village*, later popularized by Marshall McLuhan; and Jacques Monod to establish the concept of *ideosphere*, which would be lively embraced by Douglas Hofstadter.

What exists must obligatorily be different, because *only difference generates consciousness*,

Zero and Non-Zero Sum Games: judgment of values

Philosophy is a game with objectives and no rules. Mathematics is a game with rules and no objectives.

David Hilbert

Everything is, by different ways, interdependent.

In this way, as it was indicated by the ancient Roman god *Janus*, even in the planetary scale we always deal with two faces of the human being – an enlightened and another one obscure – in the

same way we count with two fundamental laws of thermodynamics and with two fundamental principles of games: *zero* and *non zero sums*, because, as the genial philosopher Charles Sanders Peirce showed, any concrete existence is founded on the number *two*.

A tennis match, for example, is *zero sum* game – there will always be a loser and a winner. A love relationship or when we are among friends is, or should be, a *non zero sum game* – with no loser or winner.

Any *zero sum game* implicates *dissipation* and, paradoxically, *concentration* – a value that transits from one to other state. When two warriors fight each other in combat, for example, they *apparently* are equal in the beginning, but will *apparently* be different in the end.

The first fundamental law of thermodynamics is that of energy aggregation, the second is that of dissipation, or entropy. *Entropy* implicates

In conceptual terms, every organism is nothing more than *non-zero sum game* – even if, in other planes, in different scales, *zero sum games* will be there. Darwin’s *Theory of Natural Selection* is an example of how it happens.

So, there is no date of birth for the *non-zero sum game* principle.

Sometimes we have the stereotyped image that the *zero sum game* can be understood as the fight for survival in a forest, for example, and that *non-zero sum game* is excellently represented by what we call *civilization*. But if those figures, even ideally, are very appropriated, we cannot forget that in any process both types of game will be present.

When we think about uncontrollable designs of fate, we touch the *non-zero sum* principle in a complex of interdependent particles, but simultaneously the *zero sum* one while *action* in dissipation.

Any memory articulation is creative par excellence, because it inevitably is about combinatory and dissipative complexes – after all, *creativity* nothing more is than different mixed things not completely associated before.

Even if the establishment of *form*, through the principle of *creativity*, is directly related to the first law of thermodynamics and with *non-zero sum game*, its aspiration to the universal, to the absolute determination of a state of concentration, is the expression of the second law of thermodynamics, the *entropy*, and the *zero sum game*.

The idea of *entropy* as fatal destiny of the Universe—in a process where, gradually, all energies would become equal, eliminating any possibility of more dissipation – was originally formulated in 1852 by the English physicist William Thomson.

In the first years of the 21st century, great part of people still believed that the second law of

thermodynamics – according to which everything would inevitably walk to a generalized disorder, differentiation or *entropy* – had already designed the terrible end of the Universe: everything disposed in equal particles... everything dead.

But, Ludwig von Bertalanffy, father of the *General Theory of Systems* – and who would be one of the spiritual founders of *transdisciplinarity* if the expression had not been coined by Jean Piaget only in 1970 – would argue in his book *Problems of Life*, dated of 1952, that «spontaneous order... can appear» in systems through which energy flow. Similar argumentation was also made, seven years before, by Erwin Schrödinger in his classical *What is Life?*, published in 1945.

«What is the most characteristic aspect of life? When it is possible to say that a part of matter is alive?» – Schrödinger asked – «When it ‘does something’, when it moves, when it changes matter with the environment... It is when avoiding the quick fall in the inert state of ‘equilibrium’ that

an organism appears so enigmatic; because of this, in the beginning of the human thought it was defended the idea of some special non physical power or supernatural acting in the organism...». The answer, then, would happen through a single word: *metabolism*.

The term *metabolism* appears from the Greek *ballein* that means “to throw”. From this word the expression *ball* appeared, meaning *to dance*, to *throw* bodies in movement. From that we have the term *ballet*. When to the Greek *ballein* the particle *sum* is added – forming *sumballein* – it means *symbol*, which brings us the idea of *to throw together*, of *co-incidence*. And it is also from there that the word *diabolic* emerges, from *diaballein*, which means to *throw through*, to *throw* something in the middle of people, provoking confusion and conflict. Added to the particle *meta*, which means *change*, it produces *metaballein*, or *metabolism* that indicates the idea of to *throw change* or, in different words, to deal with *change in movement*.

Such idea of *movement in action* quickly unveiled the principle of *exchange* as its basic meaning – *exchange* of energy or, more precisely, the capture of order from the environment, extraction of differential elements from the complex universe that composes each thing: *metabolism*.

Because of this, smaller the diversity fewer possibilities will be to capture order, and greater the tendency to *entropy*.

Later, Ilya Prigogine would make Bertalanffy's and Schrödinger's arguments even clearer when he affirmed that «the generation of *entropy* always has two dialectic elements: an element that is creator of disorder, but also an element creator of order. And both of them are always linked each other».

That is, the expansion inside a scenario of distribution and dissipation also generates

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differentiation, *order*. It is because of this fact that the Universe becomes each time more complex and differentiated. This is the very first nature of what we call *life*.

This is the very first nature of the interlacement of the *zero sum* games, the *non-zero* sum games and the origin of what we vulgarly call *discovery*.

If we reflect on the nature of the concept known as *free will*, it will immediately seems us a *zero sum game*, as the establishment of an independent and sovereign decision, but it will also be a *non-zero sum* game, while product of that dialectic force indicated by Prigogine – because from the complex environmental mass we have the emergence of chance. Thus, in last instance, *free will* is chance without intention.

Because of our strong Aristotelian logical tradition, which established the full dominium of the principle known as the *third excluded* according

to which nothing *can be* and simultaneously *not be*, we plunged into infinite discussions of *excluding* character, when we should have in mind that other non-excluding logics would also be possible – as the mathematician Stephanie Lupasco showed in a so brilliant way.

So, when we deal with those stereotypes – *zero sum games* identified as business concurrence and principles of *Natural Selection*; and *non-zero sum* games as symbiosis and civilization design par excellence – we must keep in mind that they are, in fact, profoundly relative concepts.

Even the Marxian principle of *plus-value* implicates the permanent interchange with the *Other*. If the question was a simple expropriation of value by the most powerful, the value itself could not exist.

Because of this, when Marx reveals *plus-value* as the clue for the comprehension of the process of capital accumulation, he immediately

imagines the utopia of communism – because *utopia* is not what is impossible, what doesn't exist, but yes what is surprisingly possible. The ideal of communism, as well as the concept of ideal itself, is inside the principles established by the *Theory of Games*.

It will surely be chocking to many, and even profane, to associate Marx to questions of *ideas*, like something *ideal*, because for him everything should be *action*. But both of them, action and thought, are a single thing. The idea without action – seed of the accusation against Hegel – is like a trap prepared by the *third excluded* principle.

There is no accumulation without consumption, and there is no exploitation without some kind of sharing, as well as there is no pure *non-zero sum game*, in its absolute sense. As there also is no absolute *zero sum game*.

In the same way, it is not possible to exist absolute *egoism* – a king only is a king with his

The genial scientist and thinker James Lovelock, responsible together with Lynn Margulis for the elaboration of the *Gaia Hypothesis* in 1970, said that «we have grown in number to the point where our presence is perceptible disabling the planet like a disease. As in human diseases there are four possible outcomes: destruction of the invading disease organisms; chronic infection; destruction of the host; or symbiosis – a lasting relationship of mutual benefit to the host and the invader».

In this way, we are always dealing with elements of differentiation, principles of order based on *aggregation* and *desegregation* – to what we commonly call *good* and *evil*.

The Latin etymological roots of the words *good* and *malefic* – that in all Romantic languages are very similar to *bon* and *mal* – are so surprising as elucidative.

The French world *bon*, *good*, has its

etymological root in the Indo European expression **du* that meant “usefulness” and “efficiency”. It passed to the Greek *dunamai*, which means “power”, and to *dunamis*, which indicates the idea of *force* and that generated our word *dynamics*. Then, it was transformed into the archaic Latin *duenos*, later producing the word *buenos*, which means “good”, and that passed intact to the Spanish *bueno* or the French *bon*. From this root it also appears the word *beauty* – after a diminutive form of the Latin *bonus*.

The English word *good*, by its turn, launches its etymological root to the Indo European **ghodh*, which indicated the idea of “to bring together”, to “unite”.

Both the English word *good* and the Romantic *bon* indicate, by different paths, the principle of *aggregation* – unveiling a straight connection to the idea of *beauty*.

On the other hand, the origin of the prefix

mal, as in the word *malefic*, is launched to the Indo European particle **m* that indicated the ideas of *limit* and *measure*. From that root many other words appeared, like the Sanskrit *manu*, which means “who thinks” and “who measures”, but also *measure*, *matter*, *mortification*, *mortis* that is *death* in Latin, *miracle* and *magic*.

The Indo European particle **m* also meant *creative energy*, indicating the impulse to establish concentrated relations of different ideas – and this is the reason why it was the generator of the words *measure* and *miracle*.

Such a strange and enigmatic etymological origin for the word *malefic*, revealing a strong connection between those various words appeared from the Indo European **m*, alerts us to the fact that all creative act is a construction, and that any *construction* implicates, in some measure, a *deconstruction*.

Everything bundled in the idea of *good*

refers to the principle of *usefulness*, of *efficiency* – revealing the first quality of *aggregation*.

When we deal with the *evil*, the *mal* – beyond of any judgment of value – we find in the deepness of its roots the principle of *desegregation*.

To *measure* we are first obliged to *desegregate*, and the same happens with the comprehension of *matter*. *Mortis*, *miracle* or *magic* are all them moments of desegregation of a determined reality.

So, in that so distant Indo European seed of our prefix *mal*, that is *evil*, we also have the root of the expression *man* – because any thought, any knowledge, implicates *desegregation*. And as the genial Portuguese poet Fernando Pessoa said, «what in me feels, is thinking». Fact that enlightens an ancient Vedic lesson: only difference produces consciousness.

How we deal with these principles, *how* we

Despite many popular negative impressions, that fact indicates that the universe of human relationships became more complex and richer.

The raise of energetic consumption at a planetary level implicates a civilizational mutation, an amplification of memory, in its vaster and most profound sense, but also, of course, a deep esthetical metamorphosis.

In general terms, this is not a new idea. In his celebrated essay *Energy and the Evolution of Culture*, published in the *American Anthropologist* in 1943, the anthropologist Leslie White defended that «everything in the Universe can be described in terms of energy».

White fought very aggressively, and sometimes taking as pure personal conflict, the ideas of another famous personage, Franz Boas, who was not only a genial anthropologist – so many times dedicated to questions of esthetical

nature – but also a celebrated physicist.

Boas, who would be recognized as the father of the anthropology that characterized the 20th century, was responsible for the concept of *ethnocentrism* and, so, also for the idea according to which it is fundamental to study each culture after its own terms. «All human activities may assume forms that give them esthetic values», said Boas.

On the other hand, *evolutionist* anthropologists – like White – defended that Caucasian races were absolutely superior because of an unquestionable evolutionary process. To Boas – even if sometimes his texts reveal a racist trace, common to the epoch – culture surpassed a pure biological reality. An idea that would give body to the idea of intelligence as a kind of dynamic collective and virtual organism – idea crystallized only in the end of the 20th century.

Leslie White found a direct identification

with the *socialist realism's* universe and dedicated great part of life fighting against Boas' ideas.

Curiously, as if he would be a contradiction with his strong conviction on a sovereign evolutionary factor, which put races ones ahead the others, establishing a single framework for human development, White defended that energy consumption – independently from the race – was the signal, par excellence, of cultural complexity and diversity.

To White, «culture develops when the amount of energy harnessed by people *per capita* per year is increased, when the efficiency of technological means of putting this energy to work is increased», or when both cases happen.

The famous conflict between White's and Boas' ideas generated a curious effect – White would be considered politically aligned to the *left*, because for him «culture evolves as the productivity of human labor increases» and – simultaneously

– with the *right*, because according to his world conception, it would exist superior and inferior races. On the other side, Boas would be considered in inverted terms, paradoxically.

In both cases – or, at least, in the judgment about White and Boas – the conflict seems to happen because the presence of orders of value.

But, when we leave aside judgments of orders of value and we stop considering that a race can be superior or inferior, the idea of cultural complexity and diversity directly related to energy consumption and transformation, being the establishment of form, emerges as a very interesting concept.

Later, other partisan of the *evolutionism*, the anthropologist Robert Carneiro, who was pupil of Leslie White, worked to *quantify* – and to *qualify* – civilizational stages demonstrating that all societies with formal law codes inevitably happened in urban concentrations larger than two

thousand inhabitants – even if not all societies with two or more inhabitants obligatorily have formal law codes.

Paradoxically, Leslie White’s thesis, according to which cultural diversity and complexity are directly related to energetic consumption, can perfectly fit in Franz Boas’ principle of *ethnocentrism*. And Boas’ ideas, who believed that all societies have their richness, can be perfectly understood under the energetic consumption approach, not implying the need to classify people as better or worse, inferior or superior.

What changes is the *scale*, and with it the whole structure of relations.

Peripheral sectors of megacities are a clear example of how it happens – places with high human density, where there is less energetic consumption and a dramatic simplification of cultural diversity, evident even in the speech, in the reduction of quantity and diversity of phonemes

used as well as in the consequent impoverishment of their relations.

But, *impoverishment* does not mean, here, a judgment of value, and yes a condition of less complexity.

The words *impoverishment* and *poverty* launch their ancient etymological roots in the Indo European **per*, which indicated the idea of *reduction, of synthesis*.

However, there also are situations where two societies with a same cultural diversity show different energetic consumption indicators, like what happens with Japan and Norway. With a practically identical Growth National Product per capita, Norway consumes around 60% more energy than Japan.

The difference can happens after a certain level, and indicates that there is more *implicitness* in the Japanese society, which is translated in

economy.

Even so, the asymmetry of energetic consumption in planetary terms is very impressive. According to 2004 data, United States and Canada have a per capita consumption of energy practically two times higher than that of Europe and twenty times of Africa's average.

But, we cannot forget that, in civilizational terms, energetic consumption – like memory – is not exclusively an immediate data, frozen in a determined moment, in a specific epoch. It is a phenomenon of accumulation and dissipation.

Energy consumption indicates the metabolism of matter transformation and transmission of ideas.

When we take energy consumption as the establishment of *form* and, therefore, of *memory*, everything is revealed as esthetics.

Treatment, accumulation and consumption of energy are, in last analysis, a question of *order*, a question with esthetical nature, about the *order of thought* – never being, however, about *judgments of value*.

Independently of the type of society we are dealing with, not evocating any kind of human psychic unity, the concept of *civilization* implicates, by its fundamental nature, the structuring of form, an energetic density. It is the same basic principle of organic formation: *symbiosis*.

Not for other reason the world *civilization* begins in the Latin *civis*, which indicated *city*.

From that essential idea it was born the celebrated text by Emanuel Kant – *Idea for a Universal History with a Cosmopolitan Purpose* – where he suggests that human history has a kind of *hidden natural plan*.

Then, Kant argued that as history unfolds we

will be able to notice that «how the human race eventually works its way upward to a situation in which all the germs implanted by Nature can be developed fully, and in which man’s destiny can be fulfilled here on Earth».

Wouldn’t be such *hidden natural plan* what we simply call *logic*, which was so brilliantly demonstrated by George Boole as to be the *form of thought*, still in the 19th century?

The increase of accumulation and the intensification of energy consumption do not obligatorily mean higher concentration of energy – concentration of energy is a data of form, a specific condition of differentiation, of nature of order. Energy can exist in large quantities but dispersed.

And the nature of order that designs human has suffered a continuous metamorphosis along thousands of years – as it is attested by the material culture, since the most remote times.

The transformation of the fabric of knowledge has been directly related to the logical structure of informational storage and interaction systems – that is, to what designs our *sensorial palettes*, to what projects a *sensorial design*.

A metabolic transformation that finds full expression in the two fundamental principles of thermodynamics and that leads us to a reflection with the words of the legendary American journalist Walter Cronkite when he said: «Unfortunately, security and liberty form a zero-sum equation. The inevitable trade-off: to increase security is to decrease liberty and vice versa».

Inventions – information and society

Information is not knowledge.

Albert Einstein

It is estimated that the average of technological inventions responsible for relevant social transformations was one in each twenty thousand years during the Middle Paleolithic. Archaeological data indicates that around fifteen thousand years ago, with the appearance of the first cities, or proto-cities, revolutionary inventions passed to emerge in a rhythm of one each two hundred years, in average.

In 1989, the writer Isaac Asimov, who became worldwide famous for his passionate science fiction works, dedicated himself to an exhausting research on inventions and discoveries that were, in some way, responsible for important changes and enrichment of human relations.

From 20000 BC to the year zero, in twenty thousand years period, Asimov detected around seventy-seven revolutionary inventions. From the year zero to the year one thousand, in only one thousand years, twenty-four inventions! But, the acceleration did not stop, designing an asymptotic curve and, so, the writer identified forty inventions in the five next hundred years, from 1000 to 1500; forty-three from 1500 to 1600, in one hundred years; ninety-four from 1600 to 1700; one hundred fifty from 1700 to 1800; more than four hundred forty from 1800 to 1900; and from 1900 and 1988, in less than one hundred years, about seven hundred inventions!

A true explosion of inventions and technological mutations!

Even if such kind of statistics can be questionable under many aspects, they show a notable increase of complexity of human systems.

And even if one can immediately establish, with apparent reason, an association between those events and demographic density, this will not be *per se* generator of inventions or discoveries. China has been, since a long time, overpopulated, but it passed through large periods without great discoveries or inventions, and the ancient Greece had a relative low demographic density in comparison with Egyptian and Mesopotamian urban centers at that time.

The quantity of scientific discoveries and inventions seems to be associated to mental structure, to a certain type of organization of intelligence.

What we call *intelligence* is *between us*, established in the dynamic network of differential elements that constitute the most diverse kinds of language.

The so-called *scientific spirit*, at least in its modern sense, seems to be associated to strongly predicative structures of thought, what means to say: *high concentration*.

The action of to plant, or to domesticate animals, brings in itself the principle of concentration.

The invention of wheel and its association to the horse, in the beginning of Neolithic, projecting long straight visual movements through the emergence of the use of the chariot, generated a new kind of visual environment, emphasizing peripheral vision. Until them, central vision was the main environment, as essential technology for the identification of the prey.

The dynamic articulation between the old use of vision, more oriented to central vision – because we are predatory animals – and the new scale of peripheral vision, defining long straight paths, generated writing.

This does not mean to forget Denise Schmandt-Besserat’s and Pierre Amiet’s formidable discoveries, according to whose first writing appeared from the intensive use of tokens made in small clay figures.

Schmandt-Besserat’s brilliant thesis explains how the debit produced in a commercial negotiation was registered through the use of closed clay packs where those small objects were kept. Three cones of clay would mean that one part of the business was in debt of three sacs of grain, for example. The proof of the compromise would be locked in the interior of the clay pack. With the intensification of such process, the small clay figures started being printed on the external surface of the pack, still

soft, as to make possible the reading of what was inside it, turning unnecessary its violation.

But, here, it is not about to investigate what characterized sensorial transformation, and yes its deepest roots at the level of knowledge, the mental paths that anticipated it.

Action is knowledge, one never anticipating the other. The question is to know the origin of *concentration*, at a logical level, which characterizes, for example, the representation of a debt – both in quantity and in quality – with small clay tokens.

Even if it seems us too distant now, the logical strategic principle that designs modern reading is the same, in general basis, of that which characterized the first writings.

It is about the dynamic articulation between those two basic kinds of vision, establishing a strongly directional structure, with hypotactical nature, which in many senses is similar to what we would call *perspective* after the Italian

in a less predicative order.

When, about two thousand years ago, Greek language lost importance with the emergence of Latin, gradually scientific discoveries also diminished – but it is important to keep in mind that such moment also coincided with the end of control by the Roman Empire on the production of papyrus.

It is the *article* what providences *prose*, unchaining *literature* and *tragedy*.

However, those changes are not obligatorily *positive*, as the believers of the idea of *progress* defended. Archaeological studies have showed, sometimes, that first sedentary agricultural people's life, with longer and heavier labor journeys, was more difficult than that of their ancestral hunter-collectors.

In a first moment of the passage from the nomadic universe to that of agriculture, stature and

even life expectancy seem to have diminished – as it is demonstrated by the archaeological studies of the anthropologist John Lawrence Angel, who lived between 1915 and 1986.

One can argue that the emergence of stable and sedentary groups represented an improvement of collective defense in comparison to other groups – but mobility also is an important strategic element of defense.

In this way, the nature of change does not happen according to the classical *functionalistic* teleological principles, but yes according to *teleonomical* principles, operating different principles of order, different principles of differentiation. By this way, the clue for the comprehension of the origin of the human mutation is what we call *esthetics*: mind organization.

Gradually, in the most different cultures, in the unfolding of mind structural metamorphosis and the planetary expansion of energetic

nothing more is than logic and, in last instance, esthetics.

Thus, the *Greek miracle* nothing more was than an esthetical revolution.

Curiously, the United States like we know, founded on the constitution adopted in September seventeen, 1787, seems to have born as a deliberated process of *informational design*.

James Madison, Alexander Hamilton and John Jay were the authors of the famous *Federalist Papers* – in defense of the constitutional text – which they signed together under the pseudonymous *Publius*, in homage to the Consul Publius Valenius Publicola, in a giant metaphorical leap to the Roman Republic where Publius was one of its founders.

For the personage Publius, in this case Alexander Hamilton, the new govern should be the *informational center* of the new nation. According

to his ideas, the entire structure of the State should pass through the solution of the flux information – transforming the famous statement of Francis Bacon and turning, no longer *knowledge*, but *information* as power.

Quickly, good part of the discussion about the American Constitution passed to turn around *informational* questions.

Anti Federalists, fiery critics of the constitutional text, feared that informational diversity would never be enough synthesized as to arrive, in a clear and unequivocal form, to a center of power. Anti Federalists operated an acoustical logic that was characterized by restrict intersected informational fields. They were not able to understand the literary and visual logic according to which everything is established inside a homogenous field where information is easily simplified and centralized. In the world of literature the whole reality can be quickly synthesized, like what happens to sound through letters.

Richard Henry Lee, one of the leaders of the American anti constitutional movement, manifested his incomprehension: «I have no idea that the interests, feelings, and opinions of three or four millions of people, especially touching internal taxation, can be collected in such a house».

On the other side, Madison and Hamilton had an interesting explanation for that question. Everything would be basically organized on the establishment of two great principal sets: a *majority* and a *minority*.

Both *majority* and *minority* could be divided in two categories: *factions* and *non-factions*. *Factions* happened when the objectives were opposed to the other's rights or to the common good. So, four great possibilities happened – majority groups, factious or not; and minority groups, also factious or not.

The problem was centered on how to avoid

factions – in majority or not – to be well succeeded. That is, to avoid desegregation forces to triumph.

It did not matter if one was in favor or against this or that idea, but if his ideas would be conflicting to general rights, to the general *ethos*, should be condemned. That is, one can criticize, but never eliminate the regime.

This was the principle adopted by the *middle class* spirit, whose values were determinant for the establishment of the dominium of the so-called Western culture along two hundred years at least.

While for the Federalists reality should obey to a hierarchical and teleological control of desegregation forces; for the Confederates, more profoundly involved with agriculture, reality was designed by an acoustic dimension, operating by physical proximity.

In opposite way, but similar to what so many times happened in the past when the

world of agriculture won the nomadic universe, Federalists dominated the scenario, the State became bureaucratic and the concept of war was transformed in statistics.

Winston Churchill created the first official team of Statistical Studies in the ambit of the Second World War. Churchill understood that the best tool, of visual logical nature, to control desegregation forces was mathematical statistics.

In this case, the control of desegregation forces nothing more is than the imposition of a *non-zero sum game* to a complex scenario.

Despite some historical exceptions – like what happened to Genghis Khan – if for the Eastern world the art of domination and conquest was, many times, immersed in the subtleness of agile movements between *zero* and *non-zero sum games*, the idea of *power* that characterized the modern period in the Occident, very evident in Adam Smith’s and Charles Darwin’s brilliant texts,

is the prevalence of the *zero sum* principles: a world made by losers and winners.

Inspired on the works by the English positivist philosopher Herbert Spencer – responsible for the creation of the expression *the survival of the most apt* and considered the father of the *social Darwinism* – the American journalist and science writer Robert Wright argued, in the first years of the 2000, that «war, by making fates more shared, by manufacturing *non-zero-sumness*, accelerates the evolution of culture toward deeper and vaster social complexity».

Even if at the level of military organization and action there is a *non-zero sum* reality, deaths, destruction and domination evidence the terrible prevalence of a *zero sum* reality.

But, would the nature of *power* – in all its amplitude and in all its subtle variations – inevitably be associated to war and to *zero sum* games?

Power, love, possession, Montaigne and Machiavel

Power has no limits.

Tiberius Caesar

The word *power* emerges from the Indo European **poti* that indicated the figure of the *tribal chief* – who submitted other people. His *power* was not only a question of force because in physical terms a person is not able to submit a group of other ones.

The Indo European root of **poti*, **p*, indicated the idea of *purification* – from that we have our words *pure* or *opus* – as well as the Latin

term *opera* that means *work*, but also *potency*, *peace* and *posterity*.

The idea of *purification* and with it that of the *tribal chief*, of the leader, indicates that *power* was generally established through the respect to whom assured a good relationship with the gods, that is: who detained a deeper knowledge of Nature and its way of work.

Power is control and, therefore, it is the clue for its understanding is in the principle of the *exchange*. Any power inevitably implicates an action without exchange, without equilibrium, without compensation.

Power is always asymmetric.

According to Marcel Mauss' thesis, there is no gift without exchange. Always when someone gives something to other person, he is automatically negotiating a kind of debt, even if not conscious and even if the phenomenon is

Following the steps designed by Charles Sanders Peirce, the nature of *power* is generally revealed through three paths, three great trends, or three great categories of thought: *quality*, *knowledge* and *possession* or *domination*.

In other words: emotions, especially in a kind of spectrum between terror and love; the capability to establish useful strategies to a person or community; or the possession of material goods.

Feelings and emotions are processed in the limbic system of our brains, our mammal neuronal sector.

In that universe of feelings and emotions, power implicates voluntary agreement or coercion – generally provoked by fear or love.

The called *punitive religions* establish *power* with the combination of those two faces: fear of

God but paradoxically manifested as infinite love.

Such double face of power – terror and love – was developed practically intact from prehistory to the end of the 20th century, as it is evident in Sumerian myths, ancient texts like Gilgamesh or even in contemporary history.

We have attended, along thousands of years, loved leaders and cruel despots – in all scales, from tribal societies to cities, inside schools, industries or even inside families – categories that non rarely are mixed inside human soul’s mysterious secrets.

In those two great quality tendencies it will always be a high degree of *identity*, of who detain power or of who is subject to it.

When power is established through terror paths, allowance brings in itself a structure of treats, hidden or nor, like a structure of potential dangers that numbs the capacity of reaction. In general, a society is non violent under the yoke of

In this case, the game essentially is *zero sum*, in a dynamic chaining of losers and winners.

But there are people who freely submit themselves to a despot, for love.

Terrible dictators like Hitler, Mussolini, Stalin or Mao Tse Dong are interesting examples about how millions of people can feel love in terror.

There is no power without identity, without difference.

When power is established by *repertoire*, by *knowledge* – as Francis Bacon defended – there is another kind of numbness, more unstable, volatile and powerful.

Here, allowance emanates as a kind of free will of the subject and, if not everybody, at least many of us already experimented it together our most loved masters – it is another level of *love*.

than another person, considering himself more experienced and, therefore, superior. The consciousness of *knowing more* about something does not confer superiority. Many times, who judges himself in possession of such power is simply considered arrogant. The word *arrogant* means exactly who *calls to himself* values he does not have. The etymological meaning of the word *arrogant* is exactly that: to *call some value to himself*.

The fact that *repertoire* has two faces, a *positive* and a *negative*, happens simply because everything that *exists* has a dual nature.

This does not mean to say that the dominium of the repertoire automatically implicates *high power*. Many sages simply disappeared forgotten and never had any power during their lives.

Positive power emanated from *repertoire* will be in something that enriches the community, a friend, a leader – *content*, as literature evidenced

pure superficiality.

A *famous* person has a disembodied power: he is what it is *spoken* about him, like what happened to *Fame*: when placed in front to her enigmatic, enchanting and ethereal presence, like the *voice*, many simply do what she desires, obeying without need of any exchange.

Contrarily to the superficiality that characterizes *fame*, the *repertoire* – while domain of ideas and strategies – implicates a continuous exercise of discovery, unveiling the relations between all things.

Machiavel said that «a prince must not be feared of the bad fame to be cruel, since through it he is able to keep his subjects united and loyal...» and put a serious question: «is it better to be feared than loved, or the opposite? The answer is that both things would be necessary; but, as it is difficult to join them, it is much safer to be feared than loved».

with *fame*, *possession* also implicates a kind of omnipresence, since everything that is owned brings in itself laces of signification with other things, traces of identity.

Beyond violence, a very common solution for the search of identity is consumption.

Because of this, many times, societies with low sense of identity among their individuals – in general more violent – many times unveil themselves to be strongly consumptive.

A fashionable car, for example, is part of collective imaginary, part of the intelligence network. Who owns many things becomes a true accumulator of references. When identified, those references are taken as indicators of knowledge, not in personal terms – because, in some sense, the objects become *content* of people.

Identity generated by consumption is degenerated, a second instance phenomenon,

the aborigines, himself a chief, proudly answered: the privilege is to be the first to walk to war.

In certain Brazilian tribes the fundamental rule of the chief is to own nothing. Thus, he becomes the exclusive receptor of all gifts to the tribe and assumes the function of *distributor* among the members of his community. He knows well each one, and can easily detect the most different needs among the most diverse personalities.

Accumulation of goods as manifestation of domination happens in a more evident way inside literate societies where *content*, *predication* and the *illusion of contiguity* are manifested as fundamental cognitive traces.

By this way, along thousands of years, such mysterious and complex phenomenon known as *power* has suffered the most varied combinatory articulations of all those elements.

However, there is another face of power,

even more subtle, which in certain way is related to fame but even more superficial: the simple *presence*. The quantity and quality of *presence* can generate another degree of *fame*, even more superficial.

It is about what Andy Warhol said when he argued that in the era of television everyone would be famous for fifteen minutes.

It is curious to remind some texts by Abraham Moles – like *l’Affiche dans la Société Urbaine*, wrote in 1969, and *Psychologie du Kitsch*, dated of 1971 – where he alerted to the phenomenon of an automatic association between person and object. So, more intense the love for the object is, more intense the love for himself will be, and vice versa – deeper the love to the object, more narcissism.

The relation between person and object would be, in this way, designed by a kind of more or less intense *loop*.

looking for novelties.

So, the dispute for the nomination for presidential candidate of the Democrat Party in the United States in 2008 gave a great advantage to Barak Obama, who had the image of a revolted teenager, in opposition to Hillary Clinton, who made the old figure of the nation's mother. Obama learnt with Bill Clinton and his saxophone, and even with Richard Nixon when he appeared in television playing piano like a teenager showing his unexpected talents.

The *possession* of an object implicates a kind of *presence*. Because of this, consumption implicates power and generalized super consumption implicates low intensity power distributed in continuous flux.

This is the logic of the *low cost* universe, of digital real time networks of networks or of the global tendency of energy distribution – everything bundled in a same process.

To deal with *power* means to operate an intricate combinatory process between all its essential natures: an unstable complex non-linear process.

From the most superficial to the most complex, all faces of power indicate some kind of hierarchical structure.

There is no power without hierarchy, even in its simplest configurations. When power is largely distributed we have a kind of *explosion* of particles forming, in its whole, an unstable and volatile complex of *nano attractors*.

Because of this I wrote, in the beginning of the 1990s, about the emergence of a *nano decisions* society. For the same reasons, even before, still in the beginning of the 1980s, I wrote about the some interesting similarities between the medieval period and the hyperconsumption society; and also about the *end of history* – not

like Francis Fukuyama would defend, inspired on Hegel's ideas one century before, but about its overcoming while technology through super information.

On the other hand, *high power* – being from a liberal, totalitarian, democratic or religious nature – indicates the design of *history*, the emergence of the *personage*, the constitution and evolution of the city – what we find, for example, in the figure of Imhotep, in the ancient kings from the most diverse civilizations, in Julius Caesar, Napoleon Bonaparte, in governors, business leaders, artists and so on.

As Theory of Games teaches us, the structure of game determines the nature of power.

We forget, many times, that the structure of such a game nothing more is than an essentially esthetical question, because the order of what we perceive, the structure of what we know, is the general order of what we are, indicating the

Writing, city and high power: carbon, gas and hydrogen - war

Power never takes a back step - only in the face of more power.

Malcolm X

It is the emergence of writing and the appearance of the city that establish the first moments of a *high power society*. There is no high concentration of power without some kind of writing.

Writing begins as a projection of *figuration*, of image and sound fixation, as an extension of our long-term memory systems – the first nature of

profile of a bull. His back disappeared in the stone, as well as the extremity of its posterior feet. But, the line of its back was firmly engraved, with a clear protuberance together the shoulders. As it frequently happens in prehistoric artworks, the head was vigorously modeled. At a first sight it was as if the animal was pasturing in a lightly convex plot of land, with its frontal feet strongly marked in an inferior level. When I brought up the stone to put it back in its place, by chance I turned it in an angle of one hundred eighty degrees. This made me to notice that the curve of the land composed the neck and the chest of another animal that, depending on our way to see a painting, would be described as to be up side down. (...) Apparently, the animal was portrayed in free run. The frontal straight foot was at the side of the bull's head which, also because of the change of lighting, disappeared, at least from our sight. But the prehistoric human's eyes were free. He did not consider necessary to translate all compositions in vertical parallels».

Giedion would make, still, another important observation – «Prehistoric human could apprehend things in their totality, with no need to organize them according to a static point of view...».

Prehistoric human's eyes were free from the rules and laws that would be established by the specialized exercises of vision, determined by writing.

Sumerian and Acadian worlds still breathed some of that sense of freedom. In cuneiform – especially in the archaic period – the meaning of the message depended on the disposition of the elements in each tablet, taking it as a complete universe of events in action.

Later, phonetic writing would assume the diachronic universe of hearing as its *content*, and the discourse passed to be frankly linear and directional: *one thing after the other* – what transformed, for example, the entire mythological universe. Even if the Greek mythological universe

is built on some paradoxical conflicts, they are incomparably more profound as we dive in the past. In fact, they are incoherent only for the dominant logic of predication – but, they survive in poetry, for example.

The *linearity*, or *directionality* – with which predication would quickly emerge – coined all Western societies along thousands of years. It was its intensification what turned possible the emergence of ideas like *isonomy* and *democracy* in the ancient Greece.

It is this esthetical phenomenon that draws the ancient Greek principles of *freethinking* and *freedom* – each person responsible for his own *limits* – principles that are the base of what we call, in its modern sense, *art* and that implicate the privileged projection of *non-zero sum* game: symbiosis.

It was this logical phenomenon, intensified by the use of paper and by Gutenberg’s metal

movable types press, what generated *flat perspective* technologies.

It is a logical metabolism that indicates a process of concentration and abstraction.

In general, we are so addicted by literary thought strategy that we automatically believe that those sensorial revolutions obligatorily happen obeying to a principle of *local causality*.

But, sensorial and cognitive revolutions happen more like space-time pulsars, projecting their tentacle roots to all directions.

We are always dealing with esthetics – because it is about sensorial strategy.

Any manifestation of power – of any kind – emerges from logical structures, from sensorial and cognitive strategies.

After Aristotle's thought we passed to

believe that any logical system will obligatorily be founded in one of two excluding principles. They will be *concentration* or *dispersion*.

Writing, elements of what we vulgarly call *painting* or *sculpture*, and even *architecture*, implicate a high level of concentration tending to *synthesis* – but, paradoxically, any concentration provokes, in its intensification, some kind of dispersion.

Phonetic alphabet synthesized the representation of all basic sounds of speech in little more than twenty symbols, in a process of great implicitness that made possible a formidable informational concentration, generating a true explosion of dispersion.

Both papyrus and paper are light, inexpensive and one-way media. The velocity of use made them powerful informational accumulators. With the use of papyrus – and, later, even more with paper – writing was very simplified and a true planetary

wave of dispersion happened.

In the sequence of a long process with some centuries, Johann Sebastian Bach and Jean-Philippe Rameau promoted the synthesis of the musical scale through *temperament*, implicating a kind of concentration of resources, synthesizing the number of frequencies used, what brought to a great expansion of tonal music.

Even the invention of the bicycle in the 19th century, turned possible by the use of rubber in pneumatics, meant a great power of synthesis and an impressing dispersion – it is estimated that a little more than one hundred fifty years after its invention the number of bikes in the planet surpassed one billion of unities in use.

When such process of synthesis and concentration – but without dispersion – happens, what we call *aura* emerges.

Aura can also occurs in negative terms like

what happens with the value gave to antiques, for example. It is the value gave to the unique object, but never a vulgar one.

Such *aura* – so exuberantly evidenced by Walter Benjamin – indicates us another essential element pertaining to all ancient kinds of writing: *abstraction*.

When we admire walls and ceilings in Lascaux, Altamira or in Foz Coa Valley we wonder with those two elements vibrating as a birth: concentration and abstraction.

Once information is concentrated, all elements explode in multiple references, abstractions – which would become so common to us through the most different kinds of non verbal language.

Thus, the meaning of a sign is another sign, of different nature – fascinating phenomenon that can be clearly identified even in prehistoric

paintings.

With writing not only an era of high concentration of power, but also of high concentration of energy begins. With writing it is about the appearance of a power that is beyond the physical element, the thing in itself, like wood, oil, solar or Aeolian energy.

When we consider the transformation from prehistoric universe to the first agrarian societies, we note with lucidity that two elements designed the whole process of metamorphosis: *concentration*, in its most varied forms, and *abstraction*.

Sovereign expression of this process is the appearance of the figure of the *king*, bearer of divinity, abstracting what was already abstract and seeming to concentrate in himself the entire power.

The phenomenon, about which Sigfried

Giedion alerted as to be a dynamic and non-linear complex, reveals us about how the passage from a system of relative low concentration and strong interaction happened, like the prehistoric pictorial universe, to another one, of high concentration and strong hierarchy, like what passed to happen especially with the emergence of the Sumerian world.

This is also the clue present in the passage from the cuneiform writing, established on clay tablets – and more specifically in archaic cuneiform – to the revolution promoted by the phonetic alphabet writing.

In archaic cuneiform, information is present between dispersed signs, everything happening by *approximation*. In this way, the meaning depended over the position and distribution of the signs. Its interpretation, more than simple linear reading, implicated a spatial knowledge, providing multiple associations in an unstable and open system.

This also is an essential element of the prehistoric parietal paintings.

With the appearance of phonetic writing each sound passed to be represented by an image, revealing a powerful factor of abstraction and concentration.

Any concentration implicates fewer possibilities for free interpretation – like what happened with the *temperament* in Western music, or even with the invention of the bicycle.

With concentration, information became denser, more complete – more distant from its object and, therefore, more abstract.

Such esthetical mutation implicates an energetic and spatial mutation – everything being even more concentrated and abstract.

Inside forests, among animals and insects, or also when we deal with groups of hunter-collectors,

energy is fully distributed. Even constituting biological niches, the general structure is designed by dispersion – and this is the essential logic of the nomadic world.

Along centuries, Bororo aboriginal tribe settlements, in Central Brazil, were constructed on a diagrammatic circular structure of shelters that should be destroyed and rebuild in a different area, in cycles of around seven years.

A complete representation of the cosmos is present in each Bororo village’s design, or circular design, with the projection of the solar movement and a whole refined system of social relations.

Thus, villages were deconstructed and reconstructed in different areas, spreading out through the entire region.

There, we do not find a process of concentration and transformation – the villages remain practically the same along hundreds of

years.

When we pass to the universe of agriculture, to the first cities, we start a gradual process of concentration – in all senses – and metamorphosis accelerates.

One of the most fascinating, revealing and intriguing questions that emerged from the reflection on that process of civilizational concentration and transformation is to know how the strategy of energetic use happened along the centuries.

Two elements characterize, by their abundance, great part of the known Universe – *carbon* and *hydrogen*.

Carbon, with its uncommon properties leading to the formation in polymers, constitutes the base of all known life – it is the fundamental element of organic chemistry.

The very first signs of the carbon atom are aggregation and high concentration.

When carbon is associated to oxygen we have dioxide of carbon, which is the essential source for the growth of vegetables. When it is associated to hydrogen, diverse inflammable composites knew as hydrocarbons are formed, which are the base of what we know as *fossil combustibles*. When it is associated to hydrogen and oxygen, sugars, celluloses, alcohols and fats appear, among others. If it is associated to nitrogen, alkaloids are formed, which once associated to sulphur generate, among other elements, proteins. If these elements are associated to phosphorus we will have the emergence of DNA and RNA – dioxide ribonucleic and ribonucleic acids, the chemical codes of life.

Everything in carbon implicates concentration. And the word *concentration* indicates, precisely, that everything is attracted to a *center*.

City and writing seem to obey to carbon's logic.

With writing, cities and phonetic alphabet, a gradual concentration of energy through the use of carbon also emerges.

During Paleolithic, great part of energy consumed by human being was lost as heat. The chemist and environmentalist George Tyler Miller showed how in the act of hunting and to devour the prey, the predator generally loses in heat around 80% to 90% of the consumed energy.

In a forest, energy is dispersed and the most characteristic element, in terms of the *Theory of Games*, essentially is the *zero sum game*: losers and winners.

In the city, energy is concentrated and its essential element is the *non-zero sum game*: symbiosis.

evident trace, the effect is dispersion. On the other hand, when *non-zero sum games* – where the fundamental characteristic is distribution – become the principal element, the effect is concentration, with the appearance of the city.

Paper, wood, carbon, fossil combustibles, proteins, sugars and alcohol are powerful energetic accumulators structured in the carbon atom – elements always present in large scale in any writing civilization.

A writing civilization without an intense consumption of carbon never appeared. The intensification of carbon consumption seems to be directly associated to the emergence of writing and of other civilizational elements of concentration. This is the history we have designed along several thousands years.

Any human act of concentration points out to a *systasis* – logical visual element that makes us to approach *everything in a single shot*. Hearing

has a totally different sensorial nature: *one thing after the other*.

With vision we have informational concentration and with it also the emergence of long-term memory accumulators. With its domination, the old aspiration to absolute knowledge of everything simply disappears. With vision in the rule of main sensorial faculty – and, consequently, *systasis* – it became enough to have *key ideas* to access specialized sets of information and with them unchain always new discoveries.

The ancient aspiration to universal knowledge – typical trace of acoustical societies – passed as *content* of religion in literary cultures.

In this way, the nature of hearing is distributive – by its logical nature – generating the process of continuous change in time, of nomadic and gregarious universe but, paradoxically, projecting a strong idea of *tradition*, which is a kind of concentration.

Like what happens with the forest and the *zero sum game*, each configuration generates its opposite as effect.

Vision, with its *design* of strong concentration, establishes the aspiration to continuous change and dispersion, to novelty, through overcoming; while hearing and its fragility in terms of memory makes to emerge aspirations to continuity and centralization.

The process of concentration established by esthetical principles – perception and cognition – started in the passage from Paleolithic to Neolithic, knew all kinds of fluctuations.

The gradual concentration in Sumerian, Acadian and Egyptian worlds, to the Greek State Cities and to the Roman universe knew a reversion during the medieval period and a new and overwhelming wave of concentration after Romanesque and Gothic, continuing until the 20th

century.

It is a metamorphosis that can be detected in buildings, cities, in all kinds of artifacts and artworks along the centuries.

While in prehistoric dynamics elements floated in a dispersion system – in a certain way still relatively present in the archaic cuneiform writing – the design of the first cities and the plastic representation in their context revealed a strong coherence related to concentration.

We can admire this phenomenon in crescent intensification until the end of the Roman Empire, when the mosaics became more popular and a new period of dispersion emerged and we penetrate into the called *Age of Darkness*, or of the *non-vision*.

In informational terms, *concentration* indicates what Edward T. Hall, and after him also Marshall McLuhan, called *hot medium* – when all

information is so concentrated that imagination is relatively less requested.

Mosaics *explode* information, making everything *cooler*, transformed in particles to be freely associated by imagination – emptiness filled by what we already know. So, with mosaics, also graphic representation becomes less *hot*, as if figures were established inside a more distributive and less concentrated informational complex.

Later, the gradual emergence of *flat perspective* technologies indicated a new wave of concentration – coinciding with a formidable *explosion* in book production as true information accumulators.

That formidable concentration, which initially took plastic representation as abstraction of Nature – or *imitation* of Nature, as it is generally said – reached its climax with *conceptual art* in full 20th century – high concentration in pure abstraction.

In this way, conceptual art nothing more is than a criticism, in terms of process, of the whole informational path since Neolithic, with special emphasis on the Italian Renaissance revolution. Because of this, any conceptual art inevitably implicates an *a priori* knowledge of its context.

In the same way, we have been spectators and actors of an *explosion* of energy and urban concentration since the beginning of the Neolithic.

Circa 7000 BC, Çatalhöyük – where today is Turkey – probably was the highest urban planetary concentration with around seven thousand inhabitants. Five thousand year later, Ur already counted with seventy five thousand people. In 650 BC, Nineveh had a population of around one hundred and twenty thousand people. In 430 BC Babylonia had about two hundred thousand people. In 200 BC, Alexandria had more than three hundred thousand. In the year 100 AD, Rome

counted with four hundred and fifty thousand people.

Like what happened in other fields, after that moment the Western world started a process of reversion of concentration. Cities passed to count with less people, population became dispersed.

In the year of 775, Baghdad already had reached one million inhabitants.

But the European continent would continue with low urban concentration until the end of the Middle Age, and it would be only in 1700 that Paris would reach six hundred thousand people.

One century later, London surpassed the number of one million inhabitants. In 1900, the capital of the United Kingdom would reach six million and five hundred thousand people. In 1950, New York would have twelve million people. And in the end of the 20th century, Tokyo already had around thirty-two million inhabitants, surpassing

the number of thirty-five million in the first years of the 21st century.

In 1950 eighty-three cities all over the world had more than one million people. In only fifty years, just after the passage of the year 2000, this number was of almost five hundred cities!

With the emergence of *megacities* and the transformation of the planet into a *hyperurban* system with the interactive telecommunication networks of networks, the urban dimension reached a scale in which the phenomenon of concentration as we knew until then simply stopped to exist.

The large urban conglomerates in fast fusion with the countryside passed to design a great dissipative fabric of discontinuities: Earth as *hypercity*.

In 1800, only about 3% of the world population lived in cities. That number passed to 14% in 1900. In the end of the 20th century around

50% of the people all over the world lived in urban structures and it is estimated that this number will reach the 75% of the world population in the first twenty years of the 21st century.

Megacities are urban centers with more than ten million people. In the end of the 20th century there were eighteen megacities in the planet – in 2015, little more than fifteen years later, they will be more than sixty.

What it was known as the countryside was transformed and, in a certain sense, urbanized – annulling even the classical phenomenon of city as a condition opposed to *urbis*, through multiple *real time* connections, making the planet to dive inside a *hyperurban* era.

Paradoxically, *superconcentration* – not only physical but also informational – produces a reversion, eliminating the condition of *concentration*.

With the expansion of virtual systems at the end of the 20th century, gradually but quickly, we started a metamorphosis transforming the old wave of concentration and distribution of informational singularities into a wave of dispersion in massive density.

Artworks anticipate this phenomenon and, also gradually, stopped *representing* and passed to be their own object, getting closer, in a certain way, to what happened in the prehistoric world.

From Neolithic to modern world, the increasing process of concentration and abstraction was the very first sign of the called *Western civilization*. During all that period the *form* of war – wisely understood by Napoleon Bonaparte as being the conjunction of *strategy* and *tactics* – was an excellent representation of that sign.

The Latin term for *war* was *bellum* – from where we have our word *belligerent*. It indicated the fight between organized armies, between high

concentration groups. In the beginning of Middle Age, with the end of the Roman Empire and the constant attacks by German peoples – that *worked* with a different logic, many times established by the dispersion of small groups or non-homogenous groups of warriors – the expression *bellum* left to be applicable.

Thus, already in the 11th century, the word *war* appeared from the Franc term **werre*, in Northern France, and from the Germanic expression *werra*, both with an Indo European root **wers* indicating a state of *confusion*, of *dedifferentiation* – a very curious reference to *entropy*.

The eleventh century knew the beginning of papermaking in Europe, indicating a greater use of vision and the reversal of the medieval non-concentration process. What was the condition of war fighting in the Middle Ages, designed by dispersion and ambush, became content of the new reality, as a symbol, illustrated by the new word for *war*.

When we have a scenario of dedifferentiation, of disorder, provoked by destruction, we also have *confusion*. Therefore, the word *war*, in its etymological sense, seems to indicate the consequences of the disaster, or the action's *content*. This could only have happened after the 11th century, when Europe already produced paper and plunged into a directional and *hypotactical* strategy of thought.

But, what we started seeing in the beginning of the 21st century is no longer about *wars* in their old sense – it is about another nature of conflict, many times no longer established between armies, but confused with civil wars alike, apparently disordered violence, many times without clear objectives, brutal massive attacks in defense of the interests of small groups, principally in the defense of specific and private business, everything working as a new kind of *process*.

Several thinkers in the first years of the 21st

hackers working for governments aiming to affect enemy countries.

The *cyberwar* may consist of industrial, militar, political or even personal espionage; propaganda, the sending of messages not only via the Internet, but also through mobile phones, PDAs and smartphones among others; attacks on network systems, distribution of viruses and Trojan Horses; alteration or destruction of websites; attacks on military computers responsible for coordinating satellites; attacks on infrastructure such as transport systems, urban systems, radio stations and television networks, telephone networks and so on.

According to the Internet security company McAfee, in 2007 one hundred and twenty countries actively worked on the development of virtual instruments on the Internet in order to reach computer systems in other states and financial markets among others.

In April 2007 Estonia accused Russia of promoting a cyber attacks against the country. The Russian government denied.

In 2003 the government of the United States reported a continuous and coordinated cyber attack against their computers – the attacks were initially classified as having been perpetrated by China, although many of them escaped origin detection.

The mistrust towards China continued with attacks carried out over the years – to the point that those continuing and coordinated cyber attacks have been termed by the U.S. government as Titan Rain.

Titan Rain’s hackers even managed to gain access to NASA computers!

Netwar concept was elaborated by David Ronfeldt and John Arquilla, both experts on war strategies.

Netwar means a form of continuous virtual conflict in low intensity, exactly as it happens the low power society. A widespread conflict, without identification, distributed by communication networks through viruses, Trojan Horses, false information and identity theft among others, terrorists, criminal organizations, activist groups, social movements or even unrelated people, creating flexible and decentralized structures of attack, in low intensity and continuous spectrum.

John Arquilla was not only an expert on international conflicts, with several works developed in partnership with Ronfeldt, but also a longtime collaborator of Donald Rumsfeld and, like him, a declared supporter of the *Revolution in Military Affairs* – movement that aims to turn war into a total event, involving all technological, information and communication resources, and, therefore, no longer being restricted to the figure of the army. The origins of this movement launch roots in the armed forces of the former Soviet

Union in the 1970s, especially in the figure of Marshal Nikolai Ogardov. Orgadov was quite known for defending that the country should spend less on consumer goods and to maximize investments on research, development and manufacture of weapons.

The principle of the *Revolution in Military Affairs* was absorbed, in the first years of the 21st century, by the doctrine of China's People Liberation Army.

John Arquilla and David Ronfeldt were researchers at *RAND - Research ANd Development*, independent think tank on global policy formed by the Douglas Aircraft Company for the armed forces of the United States.

In the introduction of the book *Networks and Netwars: the future of terror, crime and militancy*, Arquilla states that «netwar includes conflicts waged, on the one hand, by terrorists, criminals, gangs, and ethnic extremists; and by

civil-society activists – such as cyber activists or WTO protestors – on the other. What distinguishes netwar is the networked organizational structure of its practitioners – with many groups actually being leaderless – and their quickness in coming together in swarming attacks».

The same phenomenon happens with commercial structures. From the tendency of crescent concentration that characterized Western society along thousands of years – and the Industrial Revolution is a clear example – we passed to live an inextricable complex of gigantic business conglomerates distributed all over the world.

The Canadian American economist John Kenneth Galbraith alerted, already in 1976, for the existence of two very distinct types of companies – the big conglomerates and the small companies. Then, he said, the first kind of them becoming each day bigger, and the later becoming smaller and smaller.

In the beginning of the 20th century, American economy was dominated by some gigantic companies, like *Ford*, *US Steel*, *AT&T*, *General Electric*, *General Motors* or the *Standard Oil*. In 1994, almost one century later, more than half of the active companies in the United States, according to the *Fortune* magazine, were created in the passage of the 19th to the 20th century.

Three hundred multinational corporations represented, in 2003, more than 25% of the world financial movement. The annual values of sales of the six largest transnational corporations were exceeded by the Growth National Product of only twenty-one countries. 40% of the world trade happened within transnational corporations – as showed by Noreena Hertz.

The classic economic principles still in use in the beginning of the 21st century turned around the reality of small companies, which were the early 19th century's reality, when great

economic theories received *body*, establishing the supremacy of the control on credit restriction and rigor of public deficit. But they do not work in big transnational conglomerates reality.

In the end of the 20th century, among the hundred largest world economies, more than half were companies. The sales of each one of the five biggest companies in the planet surpassed the Growth National Product of one hundred and eighty-two countries of the world. That is, the sales of the five largest companies were bigger than the Growth National Product of around 94% of the existent countries!

Profoundly interlinked, in their great majority those business complexes not even have an owner, as it happened in the past. They are no longer the concentration resultant from any personal or familiar wealth.

And *family* is a strong element of *concentration*, which is the ancient and original

element that gave substance to the emergence of Western universe.

Just to have an idea, in 1970s only 16% of the Americans owned shares of companies. Fifteen years later, in 1985, that number was of about 20%. But, another fifteen years later, in the beginning of the 2000s, the great majority of the American people owned, in one or other way, shares of companies.

This curious metamorphosis also happens in relation to energy production and consumption.

Contrarily to carbon, hydrogen is an element that obeys to a logical principle of ample distribution. Around 75% of the mass of the known Universe is composed by hydrogen – which constitutes around 90% of its molecules.

By the beginning of the 21st century there were two essential types of energy from hydrogen. One of them happened from the fusion of hydrogen

meters, already equivalent to around 10% of the petroleum production in 1999 – in a process of clear evolution.

Hydrogen represents three times more energy by unity of weight than gasoline – factor that jumps to fifteen times if we have in mind that 80% of the energy produced with gasoline is lost in heat.

It is curious to imagine how a civilization process based on the control of fire is substituted, in a certain sense, by water – exactly when, ironically, it becomes a good each day more and more rare to Humanity.

The process of passage from a logic of high *concentration* – which characterized the last thousands of years – to one of *distribution* can easily be observed in terms of energy consumption. Wood gave place to carbon; this, to petroleum that, by its turn, passed to find in natural gas a serious competitor, with crescent consumption.

Another form of energy which nature is frankly distributive is the called *solar energy*, based on the use of solar heat and light. However this energy is produced in our star, the Sun, it can be considered as a typical form of energy of the *Type I*, according to Kardashev’s classification, as it is captured inside our planet.

Photons – called *light quantum* by Einstein, the term *photon* would be coined only in 1926 by the Physicist Chemist Gilbert Lewis – are not only generously distributed, like what happens with hydrogen, but also are the maximum expression of the non-concentration principle, because they have zero atomic mass.

We departed from strong concentration methods of energetic accumulation, which implicated a relation of ten atoms of carbon for each atom of hydrogen, passing to two atoms of carbon for each atom of hydrogen, following to one atom of carbon to each atom of hydrogen and,

finally, with natural gas, to one atom of carbon to each four atoms of hydrogen.

Then, we included light, wind, gravitational force with the use of tides, and geothermic energy.

Since the middle of the 1980s to the end of the 20th century, in only fifteen years, the consumption of natural gas growth about 26%. In the end of the 20th century, natural gas consumption already represented about 60% of the world oil consumption according to the *World Energy Council*. Only forty years before, in the 1960s, that percentage was of about 40%.

In circa 1000 BC, in Greece, it was observed at Parnassus Hill that fire blazes appeared from the rocks – produced by gas in combustion. Believing to be a god, ancient Greek built a temple to the *god of fire*, later known as the celebrated Delphi Oracle. Coincidentally at the same epoch, cults to the *god of fire* appeared in India and Persia.

Five hundred years later the Chinese would be the first to systematically use natural gas – distributed through bamboo tubes – which was used to warm seawater in an efficient process of desalinization.

British were the first to commercialize natural gas for urban and housing lighting around 1785. During the entire 19th century natural gas was applied almost exclusively for lighting.

The peak of natural gas production coincides with that of petroleum – both happening in the first years of the 21st century. And the same can be said about the atom energy production from uranium.

Jeremy Rifkin predicted in 2002, in his book *The Economy of Hydrogen*, a new planetary economic revolution through the intense use of hydrogen. He even imagined the creation of a *hydronet*, an energetic network regulated by

millions of users online all over the planet.

Everything following to a strategy of order in change – what Kant called *natural hidden plan*.

When, sometimes, we are surprised by popular movements that apparently do not follow to objective data, as if they were emotional manifestations of subterranean affects, of an overwhelming subjectivity – like what happens with public manifestations that degenerate into violence – we are in fact facing to structural elements of a great game.

A great game in continuous metamorphosis.

Hyperurban consumption, law and leisure – gold standard and communication

*Conspicuous consumption of valuable goods is a means of
reputability to the gentleman of leisure.*

Thorstein Veblen

We enter in a supermarket and easily find, many times with very low prices, classical movie works stored in high informational concentration system in high definition known as DVD – initials of *digital video disc* but also of *digital versatile disc*, in this case specially when the system is not used for video.

In the slums, *favelas*, old buildings in ruin with high concentration of very poor people, we find miserable, extremely precarious life condition, many times even without clean water to drink. But, it is not rare to also find television sets, video, CD and DVD players, radios, microwaves, freezers, mobile phones and computers.

It is even more relevant that those people are located, many times, in the largest cities, spread out through the planet.

In 1958, in his famous book *The Affluent Society*, wrote in Switzerland, Galbraith announced – manifesting a notable capacity of forecast, anticipating a reality that would be evident fifty or more years later – that the old laws of economy had been made for a world of *rich and poor*, but not for the new universe that was beginning. He also strongly criticized the idea that the generation of material goods would be an unequivocal indicator of social and economic health.

Then, the *memory* of that culture, which typically was based the *middle class*’, described by Galbraith, was structured on a universe characterized by poverty – as it happened in the Middle Age and great part of the world until the 20th century – where necessity turned clearer ideas and judgments.

According to Galbraith we would be passing – in 1958! – from a society of *rich and poor* – and, therefore, a society of differences and consciousness – to a society of *affluence*, of generalized consumption, where an unimaginable quantity of artifacts would be consumed in a scale never saw before, even if it couldn’t represent the old idea of progress.

In this way, a society of continuous consumption could not be characterized by *clear ideas*.

To him, the only way-out for the hyper consume universe would be a hyper education process – curiously, in apparent opposed movement to what would characterize the *low power society*.

The passage to hyper consumption finds direct reference in the hyper production. While *Ford T* production in 1910 passed from one car each twelve hours and twenty eight minutes to one car each one hour and thirty three minutes four years later; each one of the Ford industries in 2003 produced an average of one car per minute.

The change of scale, in all senses, was vertiginous.

In a world of affluence the city stopped to be the representation of high concentration of power, revealing a fabric of surprisingly discontinuities, many times opposed to the classical figure of center and periphery.

In the Antiquity the city had a king – who was the maximum local authority. This concept remained almost intact until the 20th century, when the political leader was incontestable in many cities.

But in big cities of the last years of the 20th century, many times transformed in megacities, great part of the population not even knew who was the political leader – generally transformed in mere bureaucrat of taxes and rich steward of public works.

In parallel to the old *high power* now transformed in a gigantic disembodied structure without the human figure of the individual – like what happens in huge companies spread out by diverse countries, with no identifiable owners, for example – it was associated a *low power* spread out through millions of voracious consumers.

So, inside large corporations – like inside States – and in opposition to a generalized low power society, a new *aristocratic* class appeared, relatively independent of their merits or competences, but strongly supported on political affairs.

Cities passed to be dynamically interlinked, transforming everything, even the fields in countryside, into a *hyperurban* complex. In this way, the planet is transformed into a *hypercity*.

The intense distribution of resources, of the most diverse natures, in material and immaterial artifacts, accessible to a large number of people projected a new society, with new types of relationships, expectations and fears.

The same happened with *art* – before concentrated on a principal personage, the artist, and focused on a single moment, now transformed in an *explosion* of people and moments.

After the end of the 19th century, coinciding with the appearance of telephone, photography, movie and radio, the artworks – which until then were characteristically *representations* and, therefore, abstractions of what it was taken as *reality* – became gradually transformed in their own objects.

The amazing works by Marcel Duchamp, Dada, Jackson Pollock, Joseph Beuys, John Cage, Nan June Paik, Jasper Johns, Robert Rauschenberg and, later, William Anastasi, Dove Bradshaw, Rosemarie Castoro, Marcia Grostein, Roy Ascott or Bill Viola among others are, in themselves, their own meaning.

It is no longer *art for the art's sake*, but the elaboration of objects that are themselves what they mean – in a certain measure coming closer to prehistory through a post-history.

Not a political post-history, as presented by Francis Fukuyama after Hegel's ideas, but the disintegration of history while technology of thought, provoked by the creation of a scenario of multiple truths, closer to the maximum and impossible aspiration of history: its total meaning – as I've written since the beginning of the 1980s.

The conceptual universe inaugurated such path – and Marcel Duchamp was its maximum figure in art, in a wave that designs complex galaxies of signs generating the dematerialization of the artwork.

High concentration in pure abstraction appears as the last stage in the transition to a logic of dispersion – taking, however, the previous reality, of high concentration, as its content.

Artwork's *aura* – as essential element of the *single piece* – gradually stops to make sense. It is no longer about *technical reproducibility*, as

Walter Benjamin brilliantly alerted, but about the appearance of artworks in *real time* interactive telecommunication networks.

Not only, artworks passed to be freely expanded through graphic arts, movie, television and the called industrial design – which is no longer purely industrial – among others.

The value of artwork in the mechanic era obeyed to the principle of rarity – the single object, difficult to be reached. The value of artwork in the *low power society* obeys to the principle of visibility – more visible, more desirable.

In the 1980s, Alvin Toffler coined the expression *prosumer* – indicating the producer of artifacts of his own consumption, phenomenon that gradually has characterized good part of human activities in 21st century's first years.

Quickly, art finalists, secretaries, musicians, sound technicians, accountants, photographers

In various restaurants, both people who attend the public and, many times, those who participate in food elaboration, are there by mere chance, looking for a long track activity, but never being prepared for and great part not loving what are doing.

The dream of each one passed to be in the image of movie or television heroes, indicating – in the superficiality of such aspiration – no work and total recognition if possible.

Inside a *prosumers* world everything is transformed in permanent improvisation.

Such volatility of the *job*, and especially of the *profession*, is also intensified by the increasing movement of people on the planet.

It is a phenomenon that dramatically reduces the sense of identity and promotes, on the other hand, an increase of violence. Violence nothing

more is than search for identity.

Many times we forget that what we call *corruption* also is an act of violence. The word *corruption* etymologically means to *break together*, indicating *destruction*, the *rupture* of a previous condition.

Societies with lower identity become more violent and more corrupt.

With fast changes the sense of identity becomes volatile, increasing violence and corruption. It was what happened in the 13th century in Europe, when the expansion of paper production generated a profound social metamorphosis.

Then, temperature used in metallurgy quickly increased, the production of glass knew a great and unexpected expansion, the use of mirrors became popular, prison gradually substituted physical mutilation as form of punishment

for committed crimes, quickly streets and roads were paved, *plan perspective* appeared, and what surely was the most famous set of popular poems of the epoch, *Carmina Burana*, described in this way the world of the end of Middle Age:

*Honesty is dead,
Virtue is buried;
Generosity is rare as never,
Greed is expanding;
Who is sincere, lies;
Truth becomes lie.
Everyone disrespects laws
and is free do illicit actions.
Greed is sovereign;
Each one is only attentive to be rich...*

It is a poem that would be considered by many as a fair portrait of the early 21st century!

The quick change of mind strategy in the end of Middle Age implicated a volatilization of identity.

When a person has a *profession* and exerts it along the years, he builds an identity. But, if he floats between jobs of different natures – like what happens in a *low power society* – his sense of identity will tend to decrease. It is not only unemployment and lack of money that produces violence, but also lack of *profession*, of *identity in the action*.

Gradually, the only relevant social preoccupation passed to be to survival, *zero sum* game, like animals in the jungle. A situation so unstable that many started to prefer a dictator in place of freedom, or to consider acceptable dictatorial regimes like the Chinese in the beginning of the third millennium.

The world of *deconcentration* also projects, in parallel to consumption, entertainment as a basic social element. Entertainment implicates, by its own nature, a strong dissipative character – searching for a great average and a large

audience.

In last analysis, consumption and entertainment pertain to the same logical phenomenon of dispersion.

Shopping places – like supermarkets, hypermarkets, shopping centers or specialized large-surfaces like *FNAC*, *Déathlon* or *Ikea* among others became true centers of leisure where continuous consumption is explored in all its forms, with shows of popular music, cafes, movie projection, interviews with famous people or even free distribution of the most varied kinds of gadgets among other tricks.

Only in France, specialized large-surfaces – true entertainment parks moved by sales – represented more than 40% of the gardening market and around 65% of electrical appliances and telephones commercial transactions in 2004.

Airports and railway stations were

transformed in big shopping centers, sometimes including swimming pools, restaurants, saunas, hotels, bookshops or health and beauty centers.

Even hospitals were gradually metamorphosed into consumption and leisure centers – substantially changing what Michel Foucault so brilliantly alerted as the emergence of the modern concepts of hospital and prison, in the end of the 18th century, establishing a clear standard of power.

For the universe emerged in the 18th century, health care was related to the principle of control and domination of the illness, amplified to the control of behaviors.

In São Paulo, in 2008, hospitals like the *Santa Catarina*, which received patients with a long piano at its entrance, the *Albert Einstein* or the *Syrian Lebanese* hospitals, in almost nothing can be differentiated from the comfortable hotels of international standard. Among the many

in continuous mutation. Changes become so fast, so accelerated, especially in fiscal terms, that even very experienced lawyers and jurists sometimes find themselves perplexed with the appearance of new and contradictory laws.

People no longer really know exactly what Law says.

In this way, in several countries, a new social behavior emerged. Managers comfortably making everything intentionally illegal, because court's efficiency was dramatically reduced by the complication resultant from frequent changes in Law. Business people acting dishonestly, as to avoid bureaucracy's traps that would condemn their efforts. Companies of any size that systematically do not fulfill their compromises, because only a few clients will assume the hard work to complain – again because of the flagrant inefficiency of tribunals. A situation that generated a question, common to the most different societies: would be a place for honest people yet?

The word *honesty* appears from the Latin *honor* – and honor is directly dependent on the individual!

On the other hand, bureaucracy eliminates the need of credibility. With it there is no longer importance to believe, to trust in people. Bureaucracy erases the old value given to honor. Everything passes to be established through formal and impersonal compromises, numbers and files.

In a so strongly bureaucratic environment, the solution of survival to many people became immobility – because when one does nothing, there are fewer reasons to be criticized and, in some way, prejudiced.

Such reality also *designed* public services behavior, and a new police component appeared: to oblige the fulfillment by force, what was established by bureaucracy.

In several countries it was created a principle that few years before would have made people tremble with horror: when a wrong tax collection appears, the citizen is obliged to pay it in anticipation to have the right of defense! This was a common situation in countries like Portugal in the beginning of the 21st century, for example.

Not only, the quick appearance of new laws implicates, many times, situations of serious contradictions. And, as Claude Pascal alerted, *lex dubia non obligat, when the law is not clear it does not oblige*, opening large doors for all kinds of legitimate contraventions.

What before was *control* – privilege of a society characterized by high concentration of power – became unstable and unpredictable, but also generalized and paralyzing.

ThomasFriedmanshowedhowtheworldwas gradually transformed into a *horizontal structure*, what he called *flat world*. The States – since their

origin structured on a *concentration basis*, vertical and hierarchical par excellence – become more and more inoperative and without function in a *flat world*, which works by coordination.

In large sense inoperative, the State started fighting to save itself. Bureaucracy is one of the most visible effects of this phenomenon.

Other of its effects is the emergence of the concept of *gross national product*, or simply GNP as sovereign reference to the understanding of the economic development of a country.

It is not possible to determine a clear paternity to the invention of the GNP concept, which happened only in the 20th century. But, the figure of Simon Kuznets, Nobel Prize in 1971, surely is the strongest related to the origins of that principle.

Kuznets was born in Pinsk, Byelorussia, in 1901, and died in the United States in 1985.

His life, always oriented to the phenomenon of economic growth, was specially dedicated to statistic researches. After the Second World War he helped the American Department of Commerce as to establish standards for the GNP, however he always disapproved its use as universal measure for the determination of a nation's wealth.

In works published in 1955 and in 1963, he discovered, yet, an interesting economic phenomenon: in poor countries, economic growth increases the disparity between rich and poor; while in rich countries that disparity is reduced by economic growth.

The most important thesis of his life was the demonstration that, in the second half of the 20th century, poor countries had very different original conditions than those knew in the previous centuries, ending the tendency to consider that any economic evolution obeys to a standard movement, uniform, as it was believed until then.

The time for implantation of the principle of GNP as basic element for the comprehension of economic growth and the levels of wealth in countries coincides, *grosso modo*, with the establishment of the Bretton Woods System.

According to Angus Maddison, in *The World Economy: A Millennial Perspective*, the world economic growth was only around 14% between the year zero and the year one thousand; around 500% between the year one thousand and 1820, when the Industrial Revolution starts; and more than 4500% in little more than one hundred and fifty years, from 1820 to 1998!

Still, according to Maddison, among the governs that more intensely absorbed the national production in 1913 there were France, Germany, Netherlands and Great Britain with expenses that represented around 12% of their GNP. In that same year, expenses of the American government were of about 8% of the GNP, and in Japan they were around 14.2% of the GNP. In less than one

hundred years, in 1999, the consumption of the governmental machines of those European countries increased to 45.9% of the GNP! In the United States the governmental expenses jumped, in the same period, to around 30.1% of the GNP and in Japan, to around 38.1%!

Not only the gross national product of the countries increased in an exponential scale, as the gains of their governments on the GNP increased even more!

Paradoxically, one of the official resources to disguise this increasing domination of the States on the wealth production passed to be exactly the GNP!

Basically, the calculation of the gross national product of a country is the sum of the private consumption, the total of investments made, the governmental expenses and the volume of exportations, subtracting the volume of importations.

Quickly, governments noticed that, like magic, their expenses could be transformed into incomes, generating a positive impact in the increasing of the GNP, even when those expenses were unproductive, like payment for ghost services of advising, the contracting of counselors, for example. For that, a simple accounting maneuver would be enough. In this way, governmental expenses passed to be included in the calculation of the growth national product as if they represented, directly, generated wealth! – a manipulation that could be called the “GNP fraud”.

Other element of positive impact in the GNP values is the private consumption, which passed to be strongly related to credit.

Thus, despite all justifications according to which the strict control of interests turn possible a more stabilized world, the fact is that the quick tendency to make the director interest rates, in a worldwide basis, near to zero, or even negative in

real terms, implicates the elimination of a society based on savings and the establishment of a society based on credit.

Associated to the free manipulation of the GNP, to the increase of taxes and very questionable participation of the States as wealth producers, to the reduction of interest rates, to the free and illegal intervention of governments in markets, to the uncontrolled increase of bureaucracy – many times disguised in technological developments – and the increase of credit, we also started a true falsification of inflation values, which passed to be exclusively determined by a very restricted basket of products, easily manipulated, even through subsidies.

On the other and, the string amplification of credit reinforced the abstraction of capital.

In 1971, Richard Nixon announced the end of relation between dollar and gold, that is, the end of the called *gold standard* that was originally

established in 1717 in Great Britain.

Gradually, practically all countries in the world abandoned the *gold standard* principle. The growth of capital in the last two hundred years was so huge that few economists could support a return to the old financial standards.

But the abandonment of the *gold standard* generated an interesting question: how much capital really exists in the world?

Some voices indicated that only around 15% of the worldwide capital had some kind of support. That is, great part of the capital all over the world nothing more was than pure abstraction.

The planetary crisis started in September 2008 created the fear of a collapse of the world financial system. In December 21, 2009, Miguel Angel Fernandez Ordonez, then governor of the Bank of Spain, alerted to the fact that the world was in the imminence to face a collapse of the

years before, made that any person be able to buy weapons or drugs, anywhere, with relative easiness, in the same way that any person started to can freely buy mini cameras of surveillance to control other people. Efficient computer programs that permit crime in cyberspace became equally of easy acquisition.

When the author of the classic book *Small is Beautiful* – published in 1973 and in many ways prescient about what would happen a few decades later – the great German economist Ernst Friedrich “Fritz” Schumacher said that «infinite growth of material consumption in a finite world is an impossibility», the planet was not yet strongly interconnected by communication networks of networks, designing a world made of infinite interactions.

Schumacher believed that the world was heading for a scenario of degeneration losing the sense of responsibility. He accused three personages as major culprits: Sigmund Freud, Karl

Marx and Albert Einstein. Interestingly, they are three people of Germanic origins.

For him, Freud would have turned subjective the collective perception because his view of a world articulated between the *ego* and the *id*, generating the *superego* had transformed the collective imagination making it highly subjective. Marx, because he had given to bourgeoisie the rule of guilty of all evils in the world, eliminating, in this way, the responsibility of people, of the individuals – from then on, the culprit would always be the Other. And finally, Einstein for having transformed the vision of the world into a continuous relativity – and where everything is relative, nothing is absolute, that is, nothing is open to criticism.

In fact, Schumacher perceived the forthcoming changes, identifying the thought of Freud, Marx and Einstein as symbols for the image of the world around him: everything more subjective, without individual responsibility and strongly relative – essential data for the understanding of

the low power society and a low cost culture.

Schumacher was a great philosopher, economist, who loved gardening. He died on the fourth day of September 1977, at sixty-six years old, during a series of conferences in Switzerland.

Surveillance, control, crime, terrorism, fraud: paradigm and syntagma

...skeptics, liberals, individuals with a taste for private life and their own inner standards of behavior, are objects of fear and derision and targets of persecution for either side... in the great ideological wars of our time.

Isaiah Berlin

The environment of hyper commerce, continuous consumption and electronic money, new equipment, programs and behaviors appeared evidencing a substantial transformation of what people until then called the *right to privacy*.

In the winter of 1992, the French philosopher Gilles Deleuze published, at the *MIT Massachusetts*

Institute of Technology, a short essay on what he called *Postscript on the Societies of Control*. In it, Deleuze described the emergence of a new type of society, which he called “societies of control”. Revealing the phenomenon generated with an intensive and specialized use of vision and its gradual disarticulation with the new virtual media, his text was a major impact among intellectuals around the world: «Foucault located the *disciplinary societies* in the eighteenth and nineteenth centuries; they reach their height at the outset of the twentieth. They initiate the organization of vast spaces of enclosure». – *Enclosure* is a term that came to be generally translated in different languages as “closing of the map”. «The individual never ceases passing from one closed environment to another, each having its own laws: first the family; then the school (“you are no longer in your family”); then the barracks (“you are no longer at school”); then the factory; from time to time the hospital; possibly the prison... (...) Foucault has brilliantly analyzed the ideal project of these environments of enclosure, particularly visible within the factory:

that existed before, to a world made of acoustic cultures.

If, on one hand, we launch ourselves to the past as to explain the future we do not understand yet, on the other hand the universe of virtual cultures hold some curious traces of resemblance with ancient oral cultures – even because they are two-way communication systems.

Any acoustical society is a society of control. But now, the global scale and diversity of sensory palette produced by virtual systems changed the entire reality, creating something different of the oral universe.

In the 1950s, the great American anthropologist Edward T. Hall called *environment* what would later be termed as *enclosure* by Deleuze.

Enclosure seems to be not appropriate either for acoustical societies or for virtual ones – because,

in both cases, what we have is a continuum. *Enclosures* are established by *departments*, which are typical in mechanical and literary cultures.

The concept of *enclosure* is typically a product of a literary thought.

In May 2002, Brandon Mercer – journalist of the television program *TechLive*, in the United States, which was on air between 1998 and 2004, launched the article *Can Computers Read Your Mind?* There he presented an interview with the engineer Dave Schraer who developed to NCR a new kind of ATM machine that was able to detect people’s mood. So, the machine could change its own appearance and offer products of different natures depending on the mood of the user in that moment. On the other hand, the detected mood fluctuation could be registered in data banks, in a way to elaborate a profile of that user as well as of ensembles of users.

Depending on the mood of the person,

special information would appear on the screen, *mediocrizing* even more the entire communication system, eliminating important aspects of privacy and establishing a new step in the development of video surveillance.

In 2008, the Japanese company *Omron* presented a photographic machine that beyond taking pictures was able to identify the gender and the approximate age of a person.

In his book *2020 Les Scénarios du Futur*, published in 2008, Joël de Rosnay traced a curious image of what already was a reality when the book was launched: «Imagine entering inside an environment that identifies you personally. The environment immediately adjusts temperature of the place, starts playing the music you like or download in your personal computer the software on which you had worked if you have been in that place». In fact, the environment started knowing everything about the person.

In Brazil, illegally, since the beginning of the 2000s, security systems of several buildings only allow people enter after leaving picture, copy of an identification document, signature and fingerprints in their database.

Each time a site of sales like *Amazon* is accessed, a *cookie* is automatically installed in the user's computer, and it starts scanning all his movements but without his authorization or knowledge.

Digital surveillance programs such as *Spector*, are sold in large quantities through the Internet. On *Spector's* site, for example, there is a description of its many benefits: «Imagine a surveillance camera pointed directly at your monitor, filming away everything that is done on your Macintosh (or PC). That is the idea behind the number one selling Internet Monitoring and Surveillance software, *Spector*. *Spector* works by taking a snapshot of whatever is on the computer screen and saves it away in a hidden location on your computer's hard

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drive. A few seconds later, Spector takes another picture. In fact, Spector can automatically take a picture of your computer screen as frequently as once per second. You get recordings of all chat conversations, instant messages, emails typed and read, all web sites visited, all programs / applications run, all keystrokes typed—EVERYTHING they do on the computer and on the Internet. You can come back to the computer a few minutes, a few hours, a few days or weeks later and SEE EXACTLY what they were doing, because Spector has recorded it. Spector is appropriate for parents concerned about what their children do online, or worried about protecting their children from the dangers of the Internet. Spector is also ideal for businesses concerned about how their employees use company computers. Are your employees goofing off too much online? Sending sexually or racially offensive e-mail jokes? Spreading company confidential information in anonymous chat and message boards? You'll find out with Spector. And, if you're concerned about what your spouse or mate is doing online at all hours of the evening,

there is no faster or more accurate way to find out than with Spector».

On the same site, the company adds its commitment to governmental authorities: «It is our mission at Spy Chest Inc to provide government agencies with equipment in a timely manner. By streamlining the procurement process to meet individual agency needs and resources, equipment can be obtained as needed within one of several avenues purchasing. We understand the urgent need of our government clients, therefore we insure orders are processed accurately and timely. We look forward to providing you equipment with unsurpassed professionalism and accuracy».

In addition to the virtual surveillance systems, Spy Chest offers a large number of espionage equipment, which could be in a James Bond movie, for extremely low prices.

Another American company of espionage is the Spy Associates: “We are dedicated to

providing you with the finest surveillance and detection equipment on the market today. SpyAssociates.com supplies surveillance equipment to individuals, corporations, schools, private investigators, agencies and religious organizations. Our in stock inventory includes: hidden cameras, nanny cams, wireless mini spy cameras, CCTV, surveillance systems and covert recording devices, listening devices, digital phone recorders, wireless microphones, hidden digital and analog voice recorders, bionic ears and audio jammers, passive and real-time GPS equipment for tracking your car and / or assets; detection devices, home drug, alcohol and infidelity test kits, radio frequency detectors, hidden camera detectors, wireless camera detectors, counter surveillance monitors, voice changers, cell phone voice changers, professional voice changers and voice transformers, telephone security, tap Nullifiers, bug detection, notification wire tap, spy gear, spy equipment, metal detectors, book safes and can safes', among others».

interface, or accessed for playback through a voicemail-type system. The service is purchased in a pre-paid format, currently available in 250 and 500 minute increments».

That, not counting with the called *malicious software*, like *Trojan Horse* programs and *network worms*, for example.

In 2005, in a news release reported that “Israeli police have uncovered a massive industrial spy ring that allegedly used Trojan horse software to snoop into some of the country’s leading companies. The case will have major implications for the business community in Israel - and possibly beyond - as all the companies accused of having used the software are themselves leading companies. A report in Ha’aretz details how a wide range of businesses – including TV, mobile phone, car import, and utility companies – used a Trojan horse program, believed to have been written by two people living in the United Kingdom, to spy on their immediate business rivals with a high degree

of success».

In April 2009 the website with the suggestive title *Go Hacking* taught all the steps to make a Trojan Horse using C language for computers. The author explained that «this Trojan works pretty quickly and is capable of eating up approximately 1 GB of hard disk space for every minute it is run. So, I'll call this the Trojan Space Eater. Since this Trojan is written using a high level programming language it is often undetected by antivirus».

Between April 6 to August 6, 2009, specifically related to the instructions about how to build a Trojan Horse, the site *Go Hacking* received dozens of messages from more than sixty people from different countries, clearly all teenagers, one of which took on the nickname *Hitler*. The author of the site, said to be someone called Srikanth, apparently was a brilliant young student of engineering in India.

The same site also offered: a virus program

to disable USB ports, a Virus Program to Block Web Sites, a Virus Program to Restart the Computer at Every Startup, other Trojans and backdoors.

At that same epoch there was also the *Sniffer* – besides many other tools of the network espionage. *Sniffer* records the data traffic, capture parts and decode its contents. It is an instrument that has been often used by hackers to obtain copies of files during their transmission, to obtain passwords and even to capture conversations in real time.

If, on one hand, active spy, like the use of cameras or computer programs, achieved a tremendous expansion in the early twenty-first century, passive spy – which operates with data voluntarily supplied by the people – was no less exuberant.

Every time a credit card is used, large quantity of information about the user runs through computer networks. Each time we

connect to digital networks the serial number of our computer and its location are automatically identified – and the same happens when we use our cellular phones and even fix phones.

In July 2009, Brazilian newspapers announced a new wave in the country: the use of mobile phones also as credit cards. Such was already very popular in Japan. When a person makes a payment over the cellular phone, he is not only immediately sending all his personal data, but also his geographical location.

Glenn Hastings and Richard Marcus – two false names – knew a great editorial success, especially in the United States, with the publication of the book *Identity Theft Inc.* The book tells the story, presumably true, of how the authors became millionaires through theft and criminal use of identities. Throughout its more than three hundred pages, the entire process of identity theft is carefully described, step by step.

«Even at the beginning of the 1990s, federal and state banks operated a highly efficient computer network that stored oceans of detailed banking data on virtually everyone in the United States who'd ever had in the account. The system worked much like the FBI's National Crime Information Center. By punching in your name, bankers would have instantaneous access to every tidbit of information concerning your banking history, in addition to personal details such as your Social Security number, date and place of birth, and last known addresses. They could pry into your tax behavioral history as easily as credit bureaus viewed your \ credit files. They would know if you'd ever written a bad check, if your account had ever been overdrawn, if you'd abused any bank services such as overdraft protection and, of course, if you had ever been linked to any type of bank fraud or questionable banking activities», and the authors added that «the Federal Trade Commission estimates that more than ten million Americans have their personal and credit information stolen or misused in one way or another each year», in

2006.

In the end of 1997, the Swiss police secretly tracked the location of mobile phone users through telecommunications companies that record billions of movements every year. They were able, through Swisscom, to identify the location of users with an accuracy of a few hundred feet.

With ITV or interactive TV, also known as digital TV, the first time television was transformed into a two-way medium. All movements of the audience are recorded in real time by the transmission network. Thus, it is known, device to device, preferences for programs, movies, newspapers, timetables, services like message boards, buying theater tickets or games with others, creating a user profile with data that can be crossed with others of different nature – even fiscal.

So, what was once “blind” transmission has become *port surveillance*.

The same happened with the regular telephones, which passed to automatically record all calls, regardless of the authorization of the user.

In November 2002, William Safire published a startling article in *The New York Times* under the title *You Are a Suspect*: «If the Homeland Security Act is not amended before passage, here is what will happen to you: every purchase you make with a credit card, every magazine subscription you buy and medical prescription you fill, every Web site you visit and e-mail you send or receive, every academic grade you receive, every bank deposit you make, every trip you book and every event you attend all these transactions and communications will go into what the Defense Department describes as “a virtual, centralized grand database.” To this computerized dossier on your private life from commercial sources, add every piece of information that government has about you, passport application, driver’s license

and bridge toll records, judicial and divorce records, complaints from nosy neighbors to the FBI, your lifetime paper trail plus the latest hidden camera surveillance, and you have the supersnoop’s dream: a “Total Information Awareness” about every U.S. citizen. This is not some far-out Orwellian scenario. It is what will happen to your personal freedom in the next few weeks if John Poindexter gets the unprecedented power he seeks».

TIA, or *Total Information Awareness*, was designed to be a system controlled by computers, operational condition that would become known as *COMPUTINT*, and not controlled by humans, or *HUMINT*. Thus, like what happens with cameras and systems for speed detection on the roads, all information collected on people would be superficial and non-subjective, pretending to respect the rights of privacy. But, in last instance, humans would operate final data, after several previous levels of digital analysis, which were extremely unreliable – in some sense like what happens with Internet translation engines. That is,

digital analysis could produce strong distortions in the crossing of information later be manipulated by humans. Furthermore, the whole project would be heavily outsourced, with an operation centered on the hands of private companies.

Poindexter's project – who years before had been the leader of the disastrous Iran-Contra operation (Irangate), causing a scandal in Ronald Reagan administration – was called *TIA Total Information Awareness*, and finished to not be approved by the American Congress after a great wave of popular protests in 2004.

Although the American Congress have not authorized *TIA*, other similar operations, often specialized on specific environments and conditions, with identical aims and methods, would eventually be created not only in the United States, but virtually in the entire planet.

DARPA Defense Advanced Research Projects Agency – created in reaction to the

launch of Sputnik in 1957 and responsible for the appearance of the Internet – has a project that is totally independent of the *TIA*, called *LifeLog*, and intended to put in a fantastic database all kinds of possible information on human beings – from audio visual data to biomedical information. It is a so powerful database that its aspiration would be the establishment of true human memory banks.

In 2003, an anti-terrorism institute named *CAT Eyes* was created in New Jersey, United States. According to Reg Whitaker, a sociologist at the University of Victoria in Canada, «the program’s founder ambitiously envisions an eventual one hundred million informers, the ratio of watchers of about one to two, as compared with the East German Stasi of one to eight».

Like these, many other similar projects have sprung up all over the world, such as the *Bio-Surveillance* and *BioAlert – Bio-event Advanced Leading Indicator Recognition Technology*.

in November 2007 that the British government had lost personal data of twenty-five million citizens, because of two compact discs lost or theft! In London, few days later, despite the scandal, the same English government reinforced its firm determination to impose to everyone who wishes to travel abroad the obligation to give to authorities fifty-three different kinds of information to obtain the travel authorization! Justification, as always, was the defense against terrorist attacks.

In July 2008, according to the newspaper *El Mundo*, seven hundred and forty seven computers were stolen from the British Defense Ministry, containing top-secret information. Days before, the United Kingdom Secret Services had announced to have lost important digital information about *Al Qaeda* and the second Iraq war.

In August 2008, a new lost shocked the British public opinion: the government had lost personal data related to almost one hundred fifty thousand criminals. The information was stored

in a *pen drive* that simply disappeared, sold or stolen.

To make everything worse, few days later a computer sold in the site *eBay* for symbolic price contained bank information of one million British citizens, including addresses, phone numbers and even signatures among other data.

Between the summer of 2005 and the summer of 2008, British government officially announced to have lost or to have been stolen forty-three portable computers and ninety-four cellular phones, with all information they had.

Between 1998 and 2008, authorities in Britain, specially the Ministry of Defense, announced that six hundred portable computers had been stolen from their installations.

Database managed by governments became true scenarios for a *Kafkian* novel.

Another British control and surveillance project called *ECCO*, which was tested in Edinburgh in the end of 2007, provoked a strong reaction among the local population. The system will put online, in free access to any social assistant, updated confidential information about people who had had problems with alcoholism, domestic violence or mental disturbances, permitting a permanent monitoring and flash interventions, even against the personal wishes – everything in name of the social comfort.

One of my dearest masters on architecture, beyond an unforgettable friend, Eduardo Kneese de Mello, who lived between 1906 and 1995, was not only responsible for a good number of excellent projects, but also the chief architect in the construction of the city of Brasilia, together with Oscar Niemeyer, Lúcio Costa, Burle Marx and Juscelino Kubitschek; he also was the first president of the *Brazilian Institute of Architects* and great friend of Alvar Aalto, Kenzo Tange, Marcel Breuer and Walter Gropius, and relatively close to Frank

Lloyd Wright and Le Corbusier among others.

Eduardo Kneese de Mello told me about his strange feelings when he visited the United States in 1965. After some years not traveling abroad, he was invited to receive the honorary member medal of the *American Institute of Architects*, in Washington DC. «Before there were practically no commercial aerial lines. There were relatively few routes. We always traveled by ship. Going to Europe from Brazil, the travel took weeks to cross the Atlantic Ocean. When we entered in the ship, people aboard already knew who was who. When we arrived at the destination, everybody knew each other very well. At the exit of the ships the presentation of passports was never requested. The document traveled with us just in case of an accident, of an emergency, only this. When the ship landed, local authorities knew well the commandant and trusted him. On the other hand, he knew us. So, it never appeared any problem. But when I arrived at the United States in 1965, flying from Brazil, the first think the authorities

asked me was for the passport! I felt myself like a criminal. Why should I identify myself? I had not committed any crime!».

In the United States, passport was only established in 1914 and its use became regular only after the First World War, like what happened in European countries. Even so, the exhaustive control of its presentation at the entrance or exit of countries, especially the United States, only became a regular procedure after the 1950s.

John Torpey, a sociologist at the University of California, details the creation and development of the use of passports along the centuries in his book *The Invention of the Passport – Surveillance, Citizenship and the State*, published in 2000.

In a world where, in a more or less general way, the scale made personal knowledge impossible, official obsession has become security and control.

to exist. The information was registered and automatically sent to the authorities, establishing a total control.

In September 2008, some critics considered the overwhelming financial crisis, announced as the beginning of a new and devastating international depression, as a violent mass manipulation in a planetary scale with the aim to create a better environment for one of the candidates fighting for the American presidency. With chaos spread out all over the world, an older and more conservative figure would have more chances to win. The tremendous world crisis happened exactly seven years after the terrible attacks of September 11.

But, Barack Obama – the younger and less conservative candidate – won the elections, making intensive use in his campaign of the effects of the crisis.

However, there was another scenario. Gradually after the nomination of George W. Bush

in 2001 for the American presidency, and quickly after September 11, power changed in diverse countries, establishing a more conservative structure aiming to reach standards of control and surveillance never saw before. It was thought that if the 2008 elections would change the groups in power, those heavy – and many times illegal – systems of control and surveillance would tend to gradually disintegrate. But, it was not what happened.

In very few days, in the middle of confusion and financial panic of September 2008, several governs, in diverse countries, illegally intervened in the markets, creating instruments of control and surveillance that were established for long term, not only for that specific moment. The American government changed its orientation, but the control and surveillance tools became even more rigorous and comprehensive.

Thus, the 2008 world financial crisis would have served, in fact, to reinforce and turn definitive

those instruments, eliminating old democratic procedures, erasing citizen’s rights and establishing a reality closer to heavy controlled markets, like what happens in dictatorships – but oriented to intense credit and continuous consumption.

In September 26, 2009, newspapers around the world announced that the countries of the so-called G-20 had decided to create even more rigid control mechanisms, intervening even in private companies, in executive salaries, reminding old Marxist ideals of social intervention in the production means. Germany and France even urged for the establishment of limits for salaries of managers in large private groups. The British Prime Minister, Gordon Brown, stated that those measures of control would save “millions of jobs” – even if few months later, in early 2010, Europe and the United States reached record levels of unemployment.

In the middle of the 2008 financial hurricane, Durval de Noronha Goyos, a

would implant in few days, in practically the entire planet, a heavy structure of laws and regulations – permitting the intensification of even more control and surveillance – that could survive for decades, practically immune to the oscillations of political power provided by a democratic system!

Probably, the nationalization of the bank system – that characterized the measures assumed by the States in September and October 2008, was a practical step as to complete annihilate any bank secrecy and establish another toll for total control on citizen’s private life.

However, forces of control and surveillance divorced from public benefit are not new. In 1913, Charles Lindbergh – a Republican Congressman – was a firm opponent to the establishment of the *Federal Reserve Act*: «This Act establishes the most gigantic trust on earth.... When the President signs this Act, the invisible government by the money power, proven to exist by the *Money Trust Investigation*, will be legalized.... The

a vehicle owned and operated by the Los Angeles branch of the *Federal Reserve Bank* of San Francisco, California. Three years later, the Ninth Circuit Court of the United States, established that «Examining the organization and function of the *Federal Reserve Banks*, and applying the relevant factors, we conclude that the *Reserve Banks* are not federal instrumentalities for purposes of the *Federal Tort Claims Act*, but are independent, privately-owned and locally controlled corporations».

In June 17, 2009, president Barack Obama announced the launching of a «new system of financial regulation that increases Federal Reserve’s powers and created an agency for the defense of financial products consumer».

But, total surveillance and control are no longer an exclusive prerogative of the State and of the companies. One of the problems with which Law, in diverse countries, has dealt with difficulties – because of its increasing and large scale – are *non-wished pictures*, many times made with the use of

cellular phones even in balnearies or bathrooms and later sold in the virtual world's black market.

Other times, *hackers* steal images from personal communication, which are later transferred to several people inside network – many times pornographic or erotic images – and start a process of blackmail.

Even the *personal image*, which along centuries counted with the rigor of shame and honor, passed to value almost nothing when inserted in the context of low cost universe, even when they are intimate images of sexual relations.

According to a report made in 2008, the *Suisse Romande* television showed that pornographic and erotic images stored in the memory of teenager's mobile phones, many times images of other teenagers colleagues, were considered by them as true trophies, strong signals of power. And those images existed in great quantity, non-rarely

counting with the agreement of the other part.

Such scenario of a low power society or, a society of generalized power in low concentration, indicates a population oriented to entertainment and consumption.

The formation of groups of criminals and terrorists stopped to happen in a concentrated way, as it was common until the 19th century and good part of the 20th century, but started dynamically participating in all social spheres – even inside governments and police institutions.

Hollywood’s movies give us always very good examples about how it happens.

In the same way, people pertaining to that new social dominium of criminals, where many times there is great poverty, non-rarely make use of the most advanced technology – and have access to the most advanced of what before was called *erudite culture*.

This complex phenomenon characterizes, yet, much of criminals' networks all over the world.

In 2006, the Brazilian filmmaker and writer Arnaldo Jabor launched, as true, a fictitious interview with Marcola, a dangerous criminal, leader of the most powerful syndicate of crime in the city of São Paulo. The fake interview was characterized by great intellectual refinement, showing in the fictitious figure of the real criminal a person with profound knowledge on philosophy, economy and sociology. The revelations announced by the interview were shocking, creating a national scandal. The objective defended by the criminal was to destroy medium class society and establish a dictatorship leaded by cruel murders. Even if the criminal proudly said that he had read more than three thousand books, nobody imagined it could be a fiction.

In a certain sense, the Brazilian filmmaker

reedited, through the *old* medium newspaper, Orson Welles' great radio success with *The War of the Worlds* by H. G. Wells, which originally was destined to a *new* medium of communication.

People believed on what the text said because it revealed a real fact, which was absolutely clear to everyone: the medium class was being destroyed.

The most interesting fact is that, along several months, nobody put in cause the authorship of the interview. Practically nobody even cogitated that it would be impossible for someone like that prisoner, born in a miserable family, criminal since childhood, having lived practically abandoned in his whole adolescence, living in the streets when he was not in prisons or *houses of correction*, to suddenly reveal himself as an intellectual of such importance. But! Everyone considered that phenomenon a very natural thing! However, that would not be natural a few dozen of years before.

he affirmed that «nobody has ever seen Big Brother. His function is to act as a focusing point for love, fear, and reverence; emotions which are more easily felt towards an individual than towards an organization».

On the other hand, *Unabomber's* manifest, after have argued that there are three kinds of human drives – a first one that requires a minimum effort; a second that requires a great effort; and a third that is simply unreachable – defended that «social needs, such as sex, love and status, often remain in group two in modern society, depending on the situation of the individual. But, except for people who have a particularly strong drive for status, the effort required to fulfill the social drives is insufficient to satisfy adequately the need for the power process. So certain artificial needs have been created that fall into group two, hence serve the need for the power process».

Literature as *content* of a new medium.

The old condition of high concentration and high power, that led to the ideal of welfare in the defense of a relative social stability, and that designed a clear separation between honest and criminal people, simply tends to disappear with a low power society. The old barriers between classes, education or technological development finished to exist.

In many countries, police passed to have less sophisticated weapons than those used by groups of criminals and, in certain cases, even less powerful than the weapons used or hidden by population in general. It was estimated to exist about one weapon per habitant in the United States, in the beginning of the 21st century!

Even in the most developed countries, many times, murders and drug traffic networks are organized from inside prisons where they are detained. In some countries like Brazil, gangs of criminals even transmit illegal videoconferences in real time, connecting different prisons using

computers and cellular phones.

In the early 2000s, drug traffickers transformed the Frederick Douglas Towers – a social housing in Buffalo, United States – into a center for illegal drugs commerce. Then, the monitoring system of that institution, composed of a large number of surveillance cameras, has been used to control the movements of police.

Data from the *World Health Organization* shows that, only in the United States, more than thirty-one thousand groups of identified criminal organizations were in frank operation in the year of 1996. A number that would surely impress someone like Al Capone. In that same year there were an identical number of groups producing clothes in the United States with around eight hundred thousand employees.

Organized groups of criminals compared to industrial complexes.

In 2008 the German company *BASF* was a cyber-extortion victim. Attacked by a devastating virus, they were obliged to pay an amount for a “release”, that is, for the tele-liberation of their digital systems and the elimination of the virus.

New types of *cybercriminality* appear, like the *clickjacking* –when a pirate is able to activate at distance the camera and microphone that are part of the majority of computers all over the world.

From time to time, young cybercriminals are arrested and have their sentences annulled in change for works to police, in the search of other hackers or in the spying on common citizens.

In 2004 it was announced that identity theft would have exceeded drug trafficking as the main criminal problem in the United States.

Between April 1998 and April 2003, as reported by the Federal Trade Commission of the United States, more than twenty-seven million

cases of identity theft happened in the country, and of them around ten million had happened just in the last twelve months between 2002 and 2003. It was estimated that such number would exceed the seventy-five million in a near future. The same report showed that half of the victims simply did not even realize they had been stolen.

Henry N. Pontell and Simon A. Cole – Professors of Criminology at the University of California – explained, in 2005, the ease with which it was an identity theft in the United States, a process that is very similar if not identical to other countries: «With just a name and Social Security number, the “specialist” can order a copy of a victim’s credit report and obtain information on open credit lines. Credit card personal identification numbers can then be accessed, changed addresses to reroute fraudulent billings to addresses, and multiple users added to an existing account. The mother’s maiden name can be obtained through contact with vital-records bureau. The final financial transactions usually

In 2009, a hacker apparently hired by the French government stole from a Swiss bank in Geneva banking information on thousands of people – data that would later be used by the government of Paris to pursue French citizens. The theft led to the Swiss government to announce the suspension of the convention of double taxation with France. This agreement would allow the exchange of information in case of tax evasion. Once established the evidence of tax fraud, the government would provide the information, as the Swiss constitution requires. But the convention no longer makes sense in the context of theft by the other State.

To Nicolas Arpegian, it is about the explosion of a third World War, this time virtual, spread out through all sectors of society: the cyberwar.

In May 16, 2008, *Financial Times* announced that around seven hundred and fifty thousand computers pertaining to German companies would be contaminated by spy software.

human beings or pirate actions against copyrights, and to establish universal procedure rules for the cyberspace».

Beyond the establishment of universal rules on a medium that is open by its own nature, the question is also to know how it would be possible to establish a Law that escapes from the principle of land property, legacy from the Roman universe, an immaterial, transnational and transcultural Law.

Like the digital virus, surveillance systems known as Closed Circuit Television, or CCTV, equipped with facial recognition programs passed to be spread out around the world and would not be unknown by planetary criminal networks.

Only in Great-Britain it was estimated in 2002 to exist around four million and two hundred thousand CCTV systems in activity – what represented one camera to each fourteen people. They represented around 25% of the surveillance

police solved less than 3% of the crimes with the aid of surveillance cameras, accordingly to a report dated of 2008.

In New York City, since 1997, the Central Park, subway stations and other public places passed to be controlled by hidden cameras twenty four hours a day. One year later, in 1998, there already were more than three thousand surveillance cameras working in the city.

Great part of the surveillance video systems passed to count with the technology known as VCA – Video Content Analysis.

Sometimes, though rarely, a reaction against the movement for super surveillance and control appeared. In the end of August 2009, an article published by France Presse reported that the Swiss government had ordered the immediate suspension of the Google service called Street View – through which a person, anywhere in the world, can virtually walk in the streets of virtually

any city. According to the Swiss government, that service was not meeting the legal requirements to protect people’s privacy.

Most impressive, however, it was to note that some reactions of people in Europe – through comments in newspapers – was to classify of the attitude of Swiss government as hypocritical and reactionary!

Those people did not have in mind the principles of freedom that designed the Western world for centuries forging the aspiration to what Karl Popper called the *open society*. Neither were they aware that the Swiss government strictly follows the determinations set forth by the people and not the opposite, like what happens in all other countries.

Surveillance, as a generalized phenomenon, counts yet with systems like the *Total Information Awareness*, or simply *TIA*, which is design to detect behavior – many times considered absolutely

normal and perfectly acceptable by great part of people.

So, the Australian government announced, in 2009, the definitive installation of the *Smartgate* system in the airports and other transportation stations of the country. It is a system that automatically identifies the traveler through sophisticated facial recognition processes among other process of identification.

In the airport of Schiphol, in Amsterdam, the Netherlands, it has been installed the identity recognition system known as *Privium*. Through it, captured data are automatically shared with the American government in an extension that is kept under the usual State secrecy.

In its page on “privacy policy”, the Schiphol airport promises to not use the information about the visitants of the site, but makes no reference about the information about the adherents to the *Privium* system! It also informs that is automatically

installing a spy cookie in each computer that opens its site.

Even more impressive is the fact of the airport “sells” that service in the form of a club for special members. Who become member of the *Privium Clublounge* at the Schiphol airport will have right to faster admittance to the gates through iris image scanning, priority in the use of car parking, exclusive discounts for use of car valets, business class check-in, special assistance at the airport and several other discounts. They are benefits that aim, as it is obvious, to establish a new standard of surveillance and control on passengers.

There were no protest or relevant public manifestation against those actions by the Dutch government.

Despite the draconian measures announced by the airport of Schiphol, it was there that a Nigerian terrorist embarked in a flight, in December 26, 2009, to the United States. The deflagration of

exhausting control and surveillance on all citizens is the cabal proof of complete bankruptcy of the secret services systems all over the world.

Because of this, in January 2010, Gilles de Kerchove, coordinator of the anti-terrorism policy of the European Union, declared that the European Commission was already convinced of the validity of body scanners use in airports – equipment that allows to electronically “undress” people. After its use, everybody will be obliged to go electronically naked before boarding – a procedure that resembles security measures in prisons.

A little as part of the almost collective hysteria that conquered great part of the world immediately after the September 11 2001 attacks, Larry Ellison, president of Oracle, offered to the government of the United States a free software for the creation of identity smart cards to the American population.

In Peru, the government established

technology, for governments, private entities or even individuals.

As the sociologist David Lyon says, «surveillance records, once kept in fixed filing cabinets and dealing in data focused on persons in specific places, are now fluid, flowing and global. (...) The delocalised border is a prime example of globalized border».

In 2006, David Stork, scientist at the *Ricoh* in California, said: «Soon, when taking a picture with our mobile phones, it will be able to discover who is the person, based on its location and contact list».

That is: facial recognition left, since a long time, to be an essentially human question.

That competence of human recognition, including the detection of all kinds of preferences, crossing information with bank account balances, consumption habits, preferred books, preferred

The appearance of the appeal to *downsizing* in the 1990s transformed the structure of thousands of companies all over the world, distributing functions and eliminating social benefits—*deconcentrating* and distributing risk. But *downsizing* also increases *rotation* of precarious labor force, eliminating much of the old concept of *profession*.

Social exclusion is no longer about a *total idea*, a *paradigm*, but yes about a *syntagma* – a phenomenon of complex nature indicating non-linear distribution to all sides and diverse dimensions.

In his famous work *The Structure of Scientific Revolutions*, of 1962, Thomas Kuhn established the principle according to which civilization metamorphosis happened in *paradigmatic leaps*, kinds of phase shifts, like what *Gestalt* showed many years before, in the beginning of the 20th century.

Like the laws of *Gestalt*, *paradigmatic revolutions* have a very strong visual nature, working very well in the industrial reality of literary society.

Not by chance Thomas Kuhn recalled from linguistics the expression he used to designate the revolutionary leaps of knowledge transformation. Ferdinand de Saussure started using in the 19th century the word *paradigm* to indicate a homogenous set of meaning.

The word *paradigm* appeared from the contraction of two Greek words, *para* and *deiknynai*, which respectively meant *side by side* and *to show*, indicating the idea of *model*, of *example*.

A glass, for example, is a *paradigm*. A car is a *sintagma* – because it is formed by diverse *paradigms*, like pneumatics, engine, doors, seats and so on.

Paradigmatic, visual, literary and strongly

designed by the emergence of medium class, the industrial world was transformed into a world of services, which is trans-sensorial, transdisciplinary and *sintagmatic*, where metamorphosis happens in the most varied levels, in a turbulent and unstable way.

A universe where the image itself has become ephemeral and volatile. In the beginning of the twenty-first century, for the first time, it became impossible to identify a photographic falsification. David Brin said in his *The Transparent Society* that «one of our scariest predictions now circulating is that we are about to leave the era of photographic proof».

As an elegant paradox, the planet is take by unprecedented memory systems, with a countless number of images – but one will never be able to know which are true, because what we call *truth* essentially is a literary question.

Often, people seem to have difficulty

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in understanding the extent of the serious implications arising from the absence of privacy, naively believing in increased safety. It is enough, however, to imagine what would have been if a regime like the nazi had the general control of information, to tremble facing to a devastating scenario.

verbal logic happened, brilliantly captured by the physics as *mechanics*.

It is when the book *Universe*, defended by Bacon, passes to be described as a perfect clock mechanism.

Surely, one of the most curious and fascinating works that illustrate such phenomenon – specially regarding the surveillance – is the book *Civitas Solis*, or *The City of the Sun* by Tommaso Campanella, written in 1602.

In it, Campanella shows the ideal city, where peace and love are sovereign, place made of multiple circles, and directed by three chiefs. The first one, the *Power*, deals with surveillance. The second, the *Knowledge*, which is information, obliges all arts, sciences and schools. The third, *Love*, commands human reproduction, establishing criteria of selection like the color of the eyes, the stature or the color of the hair, for example.

In the imaginary City of the Sun, nobody can be owner of anything because, explains Campanella, «the love for the public thing increases accordingly to the degree of renounce to the particular interest». Thus, nobody can receive private favors.

Music is permitted only to women and, sometimes, also to children. Workshops are directed by old men and women who punish or command the punishment of who refuse to obey. Young people are obliged to serve those who are older than forty years. It is forbidden to make any noise in the moments dedicated to meals.

Doctors command cooks about what they can or not prepare. Sex is only permitted to women older than nineteen and to men older than twenty-one. Sexual relations of who had surpassed limit ages were regulated by the chief doctor.

Even the names of the newborn were determined by the general director. All people,

in this imaginary city, were obliged to regularly confess, being permanently controlled in their thoughts.

Tommaso Campanella’s description portrays an ideal city as a prison! Everything in the *City of the Sun* is architectonic and permanently submitted to a continuous process of surveillance and control.

Almost three hundred years after the intriguing work by Campanella, it would be the time of Jeremy Bentham, through a collection of letters written in 1787 in Russia to “a friend in England” – possibly inspired on his brother’s invention – to establish ideal principles of society based on permanent surveillance.

It is about the celebrated architecture project *Panopticon*, which became famous through Michel Foucault’s book *Surveiller et punir: Naissance de la prison*, published in 1975.

Similarities between Campanella’s ideal city

and the Bentham's ideal building, which would permit an equally ideal society, are flagrant.

However the *Panopticon* have been almost always taken as a design for an ideal prison, it originally was much more than that.

In his proposal, Bentham names the *Panopticon* as the Inspection-House – an architectural concept applicable to penitentiaries, but also to social housing, industries, hospitals, hospices and schools among others.

When referring to the *Panopticom* in his first letter, Bentham says that it is «a new mode of obtaining power of mind over mind».

In the second letter, he gives a detailed description of the architectonic concept, not only evidencing the relations with Campanella's city as establishing logical links with plane perspective technique, making everything controlled by light:

«The building is circular. The apartments of the prisoners occupy the circumference. You may call them, if you please, the *cells*. These *cells* are divided from one another, and the prisoners by that means secluded from all communication with each other, by *partitions* in the form of *radii* issuing from the circumference towards the center, and extending as many feet as shall be thought necessary to form the largest dimension of the cell. The apartment of the inspector occupies the center; you may call it, if you please, the *inspector's lodge*. It will be convenient in most, if not in all cases, to have a vacant space or area all round, between such center and such circumference. You may call it, if you please, the *intermediate* or *annular* area. (...) Each cell has in the outward circumference, a *window*, large enough not only to light the cell but, through the cell, to afford light enough to the correspondent part of the lodge. The inner circumference of the cell is formed by an iron *grating*, so light as not to screen any part of the cell from the inspector's view».

Bentham's ideas and words are the base of what would be popularly known as *fiscal terrorism* in the twenty century.

The word *Panopticon* means "seeing all". It indicates the idea of control on the actions of many people by a few ones.

One of the aspects of Bentham's *Panopticon* is the solitude. In its architecture, all are solitary and permanently controlled.

In a certain sense, this condition of solitude under continuous surveillance illustrates one of the aspects of the cyberworld as it was established in the beginning of the 21st century: millions of people more and more solitary, permanently surveyed by artificial intelligence systems in the capture, identification and treatment of data.

Panopticon launches itself to the Greek myth of Argus Panoptes, who saw everything, never being seeing. In one of versions of the myth,

Argus would have only one eye, but omnipresent. In another one, he would have four eyes, each one turned to a cardinal point. Finally, he would be a body covered by eyes.

Panoptes—that means “who see everything”— was a giant with an extraordinary force that had freed Arcadia from the terrible attacks of a furious bull. More than this, he finished to be a kind of police force that protected shepherds and farmers.

Hermes – Toth in the Ancient Egypt, god that would have Mercury as his correspondent in the Roman world – was the murderer of the giant Argus Panoptes.

It is important to understand who was the murderer of Panoptes as to comprehend something about its mythical dimension.

Toth was the god of writing, of the literature; the one who made possible the existence

of all other gods, because is him who allows the emergence of *history*.

It is the *history* – which in the Greek Hermes means the function of a guide of thought, of psyche – that eliminates the monster who sees everything, without being seen, overwhelming demonstration of power, of control.

The word *Argo* etymologically means “bright” and “fast”. When we asked ourselves about what would be, in logical terms, the sensorial universes that implicate in their very first nature the absolute control, without possible defense, the passage of information without barriers, they are hearing and smell.

We can close your eyes, not touch and not eat. But there are no barriers in smell and hearing. We enter inside an environment and feel, inevitably, its fragrances and its sound.

Each space has a sound.

Because of this, hearing and smell are very first references of power, of control.

Thus, in non-visual cultures, strongly acoustic, everything must be controlled at all time. What emerges as the concept of freedom in the independence of decisions, free of control, appears with the establishment of a more strongly literary and historical culture.

It is that culture what *kills* the giant Argo Panoptes, but it is also it that succumbs to the same monster that controls everything when the sensorial palette is changed in the end of the twentieth and beginning of the twentieth-first century through virtual media.

If Campanella depicts the *City of the Sun* as the perfect city in the form of a prison; it is Bentham's prison what aspires to be everything, to condition and forge a perfect society.

Like Argo – and not without a good reason –

Bentham’s prison is called *Panopticon* and appears seven years after Luigi Galvani’s discovery that electricity could *control* muscle movement. Thirty-five years before, Benjamin Franklin had argued that light was a form of electricity and invented the light bulb, known as *lightning rods*, announcing the beginning of what would be an electronic world two hundred years later. That is, the human being controlling nature in its *modus operandi*.

In a sense, Bentham was prescient, in logical terms, about what would be the end of the so-called verbal imperialism and, therefore, he was a utopia in his time.

Jeremy Bentham’s system was never put into practice and ended up almost forgotten for nearly two hundred years – when it was picked up by Foucault in 1975, in the beginning of the global digital revolution.

To Bentham’s *Panopticon* opposes *Synopticon* – a concept elaborated in 1987 by Thomas

Mathiesen, Norwegian sociologist, indicating a society of *voyeurs*, where few control many, like what happens with public figures and media.

To these two concepts, we could add another one: the *omniopticon* – when monitoring becomes articulated inside a framework operating by coordination, incorporating both the panopticon and the synopticon effects, but also the control of everybody by everybody.

It is exactly what we see in the hypercommunication global networks real time structures.

Messages are constantly captured by government agents, especially in terms of fiscal terrorism; millions of people seeking information of any kind about their idols – being possible even to see where they live through *Google Earth* or *Google Maps*, for example; and systems like *FaceBook* or *MySpace*, but especially *Twitter*, establish a network for continuous exchange of superficial information.

In all these cases information is always superficial.

The old hierarchy of control, aiming specific groups, began to be extended to all – according to a *low power* logic.

State espionage passed to recall, among other information, numbers, indices of transactions or evidence of illicit enrichment – but never *knowing* the person. This condition has made that gross errors started to be regularly committed in name of an apparent but false isonomy.

Espionage of the State against the person went so far as the French government determined in 2006, a price to pay for telecommunications companies for each person being spied upon. Arguing that these prices would prevent the explosion of costs in telecommunication services – given the huge amount of bugged out - France established a free trade of espionage.

to be stripped by a police officer.

But now, the expansion of spying on citizens went far beyond the old division that existed between gangs and the State, between democratic and dictatorial regimes, or even between individuals.

In all these conditions, values and intimate story of the person, which is strategically transformed into number, hasn't great importance. This erasing of personal history is one of the central elements in the concept known as "crime".

I met one case, for example, of a person who received a heavy fine for speed excess in Switzerland. The person did not live in the country, but knew the route and knew there was a fail in the signaling – as often happens, though rarely in Switzerland. He knew that to deal with the fine, would be required to hire a lawyer and get into a lawsuit that would cost much more than the expensive fine.

An automatic sensor detected speed excess. There was no consideration for the person, or for any conditions of its action. The result has been automatically notified and in fact, there was no possible defense – even because the person was living in another country.

Complaints about sensors that record wrong speeds are not uncommon, but it is not possible to prove. The only evidence that authorities present is a photograph showing that the vehicle was there, but there is no way to prove that there really was an infringement.

A low power blindly applied, operating in low intensity and large spectrum.

In May 2009, the BBC announced that «thousands of Automatic Number Plate Recognition cameras are already operating on Britain's roads. Police forces across England, Wales and Scotland will soon be able to share the information on one

most cases, the transit police abandoned its old education role and started worked practically only for invoicing with the aim of increasing revenues. In many cases, the police started to receive a commission on the collected amounts – and this also passed to happen with good part of civil servants.

A press news of June 2009 clearly illustrates the phenomenon: a van was badly parked under an overpass in New York City. Repeatedly, for several weeks, officials of the traffic police fined the offender. But he was dead! For weeks, no police officer even noticed that there was a dead person inside the vehicle. It was George Morales, who died of a heart attack. Even with a strong odor of putrefying body, he was only discovered when the car was towed. For weeks, various police officers that went there had a single function: to raise money through fines. For them, the citizen, the man in the car, was not the main objective.

Just a month earlier, in May 2009, the BBC

denounced that there was a surveillance system and a DNA database - then with genetic information of nearly five million people - controlled by the British authorities.

Surveillance systems in Britain were already so developed and refined that they had even smaller flying objects for capturing images and sound, known as aerial robots or drones, remotely controlled by computers, «Unmanned surveillance drones were first used by the police in 2008. The drones are lightweight weighing around 1.5kg, relatively quiet being battery powered, can carry different cameras and are remote controlled. They can fly or hover while transmitting live images to an operator on the ground and can operate during the day or at night. Unmanned aerial vehicles or UAVs can be used for many different activities such as searching for firearms or missing persons, road traffic accidents and surveillance after a terrorist attack. The police are already using drones for aerial surveillance in Merseyside, Essex and Staffordshire».

the transfer. An official from the bank started, then, the conventional interrogation asking his full name, tax ID number, credit card number, address, date of birth, place of birth, telephone number, mother's name, as well as the answer to a security question previously established for the identity verification. All these data were kept in the bank. When all questions were satisfactorily answered, he was transferred to another person, who initiated a new interrogatory in order to validate the previous identification. Then the person asked him if he had a car, what kind, year of manufacture, when it was purchased, its color, the state the vehicle was, its registration number, the model and how much he paid annually for its insurance! The same could have happened in relation to his house, or anything else. The bank and, of course, its employees, had access to all this information!

China was preparing to launch in the first years of the twenty-first century, an Internet network fully controlled and kept under strict control by the government, extending the espionage to other

global networks.

In 1998, astrophysicist and author David Brin, author of *The Transparent Society*, said: «No matter how many laws are passed, it will prove quite impossible to legislate away the surveillance tools and databases. They are here to stay».

The argument that the control of information is a democracy condition for the benefit of all and that is something free for people of any social class is false, because in a police State few control the information on many and such situation always generated all sorts of abuses and corruption. Must not forget that the nazi regime made extensive use of IBM Hollerith punch-card machines, mastering the information in order to oversee, control and select those who should die.

In a post literature world there is no history – key factor of identity from the Renaissance to the twentieth century. Thus, under the bureaucratic point of view the constraints of ethical action

– children passed to be constantly monitored.

With the growth of children, parents passed to use beeps, GPS location systems and mobile phones in order to control their movements.

In several amusement parks around the world, has become common for parents to rent bracelets or location straps with GPS chips, to control the children who were apparently free. The removal of surveillance equipment was only possible with the use of special instruments. In fact, on behalf of their safety, children began to be treated much like prisoners.

One of the most controversial instruments of control was the *VeriChip*, the first FDA Food and Drug Administration approved human-implantable RFID radio-frequency identification microchip to be implanted in children.

And, paradoxically, as the geographer and environmentalist Cindi Katz says, «these

technologies also represent the “defense” against the absence of the State», in a hyper State world!

Other surveillance and control instruments, such as kits for the collection and analysis of hairs of children, looking for traces of illicit drug use, began to be freely traded.

Virtual surveillance programs controlling step by step all movements of the children with their computers were added to wiretapping and location technologies through mobile phones.

With those tools, parents started knowing with precision all *sites* visited by their children, the time of each visit, the content of all exchanged messages, all passwords, telephone conversations, identities of people with whom they talked and geographical locations, turning children into real prisoners – in the name of their safety: people who will grow up inside a kind of informational and virtual concentration camp, unable to understand what the concept of freedom means!

In the *Synopticon* universe, voyers have access to a huge amount of superficial information about their idols – most of which is pre-fabricated, like kinds of avatars or “virtual masks” – once again revealing literature as the content of a new medium.

Sprout out all over the world, television reality show programs known as *Big Brother* were a curious phenomenon of sublimation of this phenomenon. There, a group of strangers is obsessively observed, as if they were famous movie stars. They enter in the process as mere strangers, people watch them knowing that, in some way, they are simulacra of actors and actresses, though in real life scenes – which are also fake. Curiously, in several cases, they eventually become stars – but without any function, without any background or history beyond having indiscreetly been seen by millions of other people.

What happens with the emergence of a *omniopicon* is not only the incorporation of a

panopticon process – through multiple systems of espionage on people in general – and of a *synopticon* phenomenon, with a generalized voyeurism that is responsible, for example, for most the design in television programs, journalism in general and the political world, but the intensive crossing of voyeurism, control and narcissism among masses of self proclaimed common people.

Millions of web-cams were installed in diverse countries, broadcasting in real time the most intimate images of the most varied type of people.

Suddenly, much of what before could be the target of espionage surprisingly started to be generously offered by millions of people for whom secrecy and intimacy are irrelevant elements.

On the other hand, the commercialization of small video cameras and high definition digital photography at low prices, often installed in mobile phones, enabled the expansion of images of people

around the world without their consent, and most of the time without their prior knowledge.

Thanks to this, a countless, and sometimes contradictory, bureaucratic cast of laws self-proclaimed defenders of image rights appeared.

Everything passed from the sphere of the observer of the art, to that of laws and repression. Many of the photographs made by the great Henri Cartier-Bresson would not have been possible in the context of such intense rigor of bureaucratic of rules and prohibitions.

In 2003 around fifty million digital cameras were sold in the world. Over one hundred and fifty million cell phones with video and photography cameras incorporated were sold in the next year. In July 2008 Sony celebrated a record of one hundred million cameras sold since the beginning of its commercialization. Two months later Canon beat the same record. That year, around the world, over one hundred and fifty million digital cameras

had been sold.

According to the *Picture Business Magazine* of May 2009, only in the first four months of that year almost two hundred million mobile phones had been sold throughout the world, of which about 90% incorporated both video and photography cameras.

Still in 2009, about half of one hundred and ten million families had cameras attached to their mobile phones and they took a photo a day on average – meaning more than five hundred million photos each month.

In 2007, Daniel J. Solove, a law professor at George Washington University Law School, launched the book *The Future of Reputation*. The book begins with the story of a world famous event that happened in the subway in Seoul, South Korea, in 2005. In it, a young woman brought a dog that defecated in the carriage. The passengers next asked her to clean. She refused simply saying that

it was not their business. Someone photographed the scene, using a mobile phone. The image was quickly placed in a popular blog.

Don Park told the result of that incident: «Within hours, she was labeled *gae-ttong-nyue* – dog shit girl – and her pictures and parodies were everywhere. Within days, her identity and her past were revealed. Requests for information about her parents and relatives started popping up and people started to recognize her by the dog and the bag she was carrying as well as her watch, clearly visible in the original picture. All mentions of privacy invasion were shouted down ... The common excuse for the behavior of the people was that the girl does not deserve privacy».

Here, the right is immediately transported to a public trial – and it is important never to forget that the greatest tragedies of humankind were always made on behalf of large majorities.

Howard Reingold argued that «the shadow

side of the empowerment that comes with a billion and a half people being online is the surveillance aspect ... We used to worry about big brother - the State - but now of course it's our neighbors, or people on the subway».

One of the possible scenarios as a result of the expansion of the images captured by thousands of millions of people around the world will be a radical change of the Napoleonic law, which designated legal principles in many countries, mainly the Latin, establishing an environment of unstable and volatile jurisprudence.

When the trial is public, jurisprudence becomes volatile. Paradoxically, when this happens, reaction against change grows. Judgments in the public square, all over history, have always been the most reactionary – Socrates is a good example.

Our concept of privacy, as well as those related to copyright, are supported on the logic of the *excluded middle*, or *third excluded*, which fundamentally is an Aristotelian principle. Even

so, they are departments related to specific environments. I can do things in a restaurant that I would not do in a friend's house, for example. As I can authorize the publication of a text under certain conditions and not under other ones. Such relativity implicates a kind of territorial diagram, which is something characteristically visual.

But virtual systems set a new logical universe, a new aesthetic, where the inclusion and convergence replace exclusion and departmentalization.

An essential issue presented by Solove is related to the question of memory: the entire structure of Law, not matter its nature, is based on the duration of memory, a biological condition. The establishment of sentences, social reintegration, the criteria for the prescription – everything is directly related to the time we remember the facts.

But in a universe where everything is

recorded forever and remembered at every moment, changing the biological nature of our own memories, the root of what we understand by “Law” is compromised.

Not only the foundation of Law, but also all human relations are changed. More than tolerance, understanding draws the principles of human relations, and for this to happen the design of memory is vital. The old proverb according to which *truth is daughter of time* illustrates this phenomenon.

A world where there isn't some kind of oblivion is fertile ground for expansion of nano conflicts.

Data presented in a study by the *Consumer Electronics Association* titled *Digital Imaging: Focus on Sharing* showed, in 2009, that about 55% of the digital photos taken were sent to other people via email and more than 40% were placed online.

In June 2009, *Photobucket*, considered the most important website exclusively devoted to free storage and distribution of digital images, with great impact especially for users of cameras in mobile phones, founded in 2003 by Alex Welch and Darren Crystal at *Fox Interactive Media*, announced they received about fifty million visitors per month throughout the world, with approximately eight billion archived images with growth of around a thousand new images every two seconds.

In the main structure of this phenomenon are the so-called *social networks*.

In 2009, *Facebook* – created five years before by Mark Zuckerberg, then a student at Harvard – announced on its front page what was his central goal: «Giving people the power to share and make the world more open and connected». Through *Facebook*, quick updated information about a person could be seen by millions of people, who would know habits and preferences of all kinds, always described by the person.

Like *Facebook*, *MySpace* is a information database, often confidential and intimate, of a great number of people who happily proclaim the end of privacy.

Privacy and avatar – the projection of an ego ideal, a mask...

In May 2009 *Facebook* and *MySpace* were considered the most widely used social networks distributing digital photos.

In 2006, *MySpace* already had over one hundred million members. At that time, their growth was of almost two hundred and fifty thousand new members per day.

Only in April 2009 about one hundred and fifty million people had visited the three most important social networks – certainly a negligible number considering its thunderous growth rates.

connected in networks, where what before was taken as private and personal information was now transformed into free public communication.

In Brazil and India the social network *Orkut* – created by Orkut Büyükkökten – was quite popular, with millions of members. In Japan was *Mixi* – meaning “I mix”. In South Korea, *Cyworld* was the most important social network, counting in the middle of the first decade of the twenty-first century, with 92% of young people aged around twenty years and 30% of the total population in the country as its members!

Even social networks for dogs – Dogster – and cats – Catster – were created!

In June 2009, *Time* magazine – which was known for keeping the covers to major world figures – had an issue devoted to the phenomenon *Twitter*, in a moment when the world was still vigorously suffering the economic crisis that seemed to announce a mutation at a planetary

level.

Twitter only allows short messages of up to one hundred and forty characters, but has a dynamic communication inversely proportional to its informational synthetic design – seemed to confirm the maxim according to which the less information the better the communication.

Steven Johnson described, then, a case that illustrates not only the success of *Twitter*, but also how an *omnioptic* society works: «Earlier this year I attended a daylong conference in Manhattan devoted to education... about the future of schools. Twenty years ago, the ideas exchanged in that conversation would have been confined to the minds of the participants. Ten years ago, a transcript might have been published weeks or months later on the Web. Five years ago, a handful of participants might have blogged about their experiences after the fact. But this event was happening in 2009, so trailing behind the real-time, real-world conversation was an

and the Chinese government began to exert all sorts of pressures of censorship to prevent similar events may occur in the country.

On the other hand, in October 2008, *Wired* magazine published an article questioning whether *Twitter* could possibly be used as an ideal tool for planning and conducting terrorist attacks.

The experience Steven Johnson lived at the conference about the future of the school, in Manhattan, passed to be a concrete planetary reality for a growing number of people who intentionally distributes freely personal information, like the choice of a dish in a restaurant or a simple experiment to walk the streets of a city, all done in real time.

What a person is wearing at that moment? How is she feeling? What is she looking at?

In a sense, the information becomes to work like what happens in the acoustic universe, where

there are no barriers, that is, low intensity power distributed in large spectrum.

In the early 1990s, the beginning of the popularity of the caller ID – which allows the person who receives a phone call to know what number is calling – provoked a large negative reaction of the people. They considered an intrusion into their universe of privacy.

Gradually, and especially after the widespread use of mobile phones, those identifiers have become commonplace and the protests simply disappeared.

With the knowledge of that simple number, quickly a gigantic amount of information became accessible. As explained by Marc Rotenberg, law professor at the Georgetown University and executive director of the *Electronic Privacy Information Center*, the Caller ID is a mean of obtaining personal information without prior consent or knowledge.

Many marketing companies, dedicated to the sale of most varied products, started using information from telephone calls to identify new market niches.

Not only phone calls but also cookies without the consent of the person being spied upon, information through the use of credit cards, frequent customer cards, registration fitness centers, membership programs of trade discounts, magazine subscriptions and almost everything that characterizes the daily life of a person, has become a collection of true police interrogations, where large amounts of personal information – confidential few years before – began to circulate freely, and analyzed not only by fiscal officers but also by vendors of all kinds of products.

Everything passed to be controlled, a little everywhere, without knowledge of personal history, through a strongly *omniotic* reality.

the ideas that they will serve to ensure democracy and individual rights.

Still in the 1960s it was estimated that each person in the United States was submitted to a bombardment of about one thousand and five hundred advertisements every day! Investments in advertisement, not only in the United States, were multiplied many times in the second half of the 20th century and it is estimated that such number of the 1960s *bombardment* per person would be augmented to more than two thousand and five hundred advertisements of products and services everyday!

In the 1950s, in the United States, Milton Berle’s celebrated television programs, every Thursday evening, reached 80% of the audience share. There were commercials in the program’s intervals and the authorities noted that water pressure in the supply system in diverse cities was remarkably reduced in those moments – people took advantage of breaks to go to the bathroom as to avoid publicity.

using the network for about three hours per day, in average. Since then, that number did not stopped to increase. Many of those people were relatively poor – even if a comparison with heavy poverty plots spread out on the world would not be possible.

In the 1980s, every year, around sixty thousand new books were published in the United States. That number jumped to more than one hundred and sixty thousand books in 2003. But, levels of functional illiteracy were alarming.

It is estimated that around 25% of the world population in the beginning of the third millennium was *totally* illiterate, not only in *functional* terms.

The *American Management Association*, in a survey dated of 2001, indicated that around 64% of the immigrants who arrived in the United States had few or no reading capacity. The *National Adult Literacy Survey* indicated, then, that about 60% to 75% of the American people were *functional*

illiterate.

In 2007, according to *Unesco*, there still were around one billion totally illiterate people, representing 26% of the world population.

Since Mesopotamia, more than eight thousand years ago, education methods have been coined by the principle of concentration. However, in the last years of the 20th century, several countries started adopting educational strategies turned to dispersion. Those strategies determined, for example, that students should no longer be subject to tests with the objective to authorize the passage to another school period. The proof of capacity passed to be automatic without need of any test.

In 2007, parents of thousands students in Brazil protested, by the most varied ways and in the most diverse places, because their children, already teenagers, were no able to read, to write or even to solve the simplest arithmetical

inside the American market.

In 1997 there were about nine hundred DVD titles in the United States. In 2003 there were more than twenty-seven thousand DVD titles in that market.

In such scenario of hyper communication, in the United States, Europe, Canada, Japan and Australia among other countries, more people died of too much food than of hungry in the beginning of the 21st century. On the other hand, in that same epoch, around half of the planetary population, more than three billion people, still lived in the most absolute misery, with the equivalent of only two dollars per day.

According to the *1999 Human Development Report* by the *United Nations Development Program*, the relation between poor and rich people in the planet in the year of 1820 was of 3 to 1. In 1913 that number passed to 11 to 1; in 1950, 35 to 1; in 1973, 44 to 1; and in 1992, 72 to 1.

But this picture of crescent poverty brings countless contradictions. In Africa, the poorest continent in the world, a true *explosion* of consumption of cellular phones started in the first years of the 21st century. In 2007 a research showed that 97% of the population in Tanzania had access to mobile phones. In South Africa, half part of the users of cellular phones was located in the poorest layers of the population.

In 2008, in China – a country that only two decades before was classified as poor – there already were more than three hundred and fifty million cellular phones in continuous use.

As Gilles Lipovetsky showed in his already classic book *Le Bonheur Paradoxal*, of 2006, «before, popular and medium classes saw luxurious labels as inaccessible goods which, destined only to the social elite, were not part of their real world, not even in dreams. It happened a rupture in relation to such form of culture: the acceptance of social

fate gave place to the *right* to the luxurious, to the superfluous, to the quality labels».

Around 1.1 billion people practically had no access to potable water; and almost half of the world population, around 2.6 billion people, had no access to basic sanitary treatment, according to the *2006 United Nations Human Development Report*.

Then, almost one trillion dollars were annually spent in weapons all over the world – and only six billion were dedicated to basic education programs in the countries in development. This means to say that the expenses in weapons were almost two hundred times higher than those dedicated to education.

Disseminated power, in high distribution and low concentration, generates a subtle and generalized numbing.

Terror – in its most diverse manifestations

– is equally disseminated in discontinuous space-time logic. It is what happens in the unpredictable streets of the most violent cities of the world, or practically anywhere with terrorist groups.

Post urban violence has no alibis – it does not need motivators. It simply is there, in a context where identity is almost eliminated.

In the streets of the larger Brazilian cities, some years ago, it was inaugurated a new kind of crime – the assault generated by chance. The criminal does not know exactly what will happen or even who will be the victim, everything is surprise – eliminating, in this way, all vestiges and, thus, becoming practically immune to the process of police investigation.

So, threat becomes a continuous spectrum event. *Tyranny* penetrates the system as a whole, without person or personage, freely distributed. With the spectrum of continuous threat, there equally is a continuous numbing.

Nobody has absolute power, but everyone has some power – and all become little *tyrants*.

You go to a shop, for example, and – with rare exceptions – if you do not behave like the expected, the seller can aggressively correct you, what would be an unimaginable experience for a client in the first half of the 20th century.

Also consumption passes to reveal a continuous spectrum – everybody tending to consume permanently. In the same way, everything is quickly transformed into continuous entertainment.

There is no longer the critical division between producer and consumer. In the same way, artifacts of long permanence tend to disappear.

In digital systems, the existence of memory – as a kind of prosthesis for neural systems of long term memory – passes to be potentially infinite, or

of very *short life*, simultaneously. A paradox that practically eliminates the old concept of *life cycle*. It is enough to experiment a computer failure to live this paradoxical phenomenon.

Fame became more and more generously distributed – and there are each time more famous people in the world, in the most diverse scales.

In the past, figures like Dante Allighieri, Luis de Camões or William Shakespeare were famous in small circles of connoisseurs, and when fame reached an enlarged scale it rarely surpassed the frontiers of their countries. Even Johann Sebastian Bach needed to be recalled by Brahms to become more popular and widely known.

In a society of entertainment where billions of people participate, thousands *Goethes*, *Schopenhauers* or *Leonardos* would need a process of intense concentration for a consequent expansion, or they would simply disappear in the whole.

known as *bourgeoisie*.

Three years later, Jean-Marc Vittori stated at his book *l'Effet Sablier*: «the middle class will disappear».

The ideals of that *medium class*, which founded the concepts of economic and social development in the 20th century, were established on the sense of a crescent expectation: everyone should fight to *win in life*. Then, elder's aspiration was to live under a true protection of the State.

The old *medium class* was quickly substituted by a *low power society*, where *low cost* companies and services revealed a new economic and social model.

If for the old *medium class* it existed the right to claim and to indemnity, such a right practically left to make any sense in a *low cost* reality.

In November 2003 the *IATA – International*

Air Transport Association established the *Montreal Convention on the Unification of Certain Rules for International Carriage by Air*, eliminating the old *Warsaw Convention* as well as all previous protocols and related treaties. The *Montreal Convention* practically eliminated all rights of the passengers related to the transportation of their luggage. That Convention determines for each pound of lost luggage a right for indemnity that is insufficient even to buy one shirt or a good sock! With it, the right of claim is practically annulled.

Before, the bureaucratic systems selected claims to be attended according to the level of urgency and need they presented – when the claim was long, personalized and hand written, its *degree of insistence* automatically led to a quick response. When the claim was short and non-personalized, it generally was left to oblivion. That was the general criterion used by claim departments in big companies.

But, with new electronic media, what is the

sense of urgency and need? More than this, in a society leaded by the spirit of continuous *low cost* consumption, claim is no longer possible.

In 2008, in New York, I called a car company to put me in the airport, as I always did along more than twenty years. It is a very common habit in the city. Twenty minutes delayed, a driver was at our door. I noticed how, along the years, the services of that company were deteriorated. In that afternoon a driver dressing big colorful pieces of fabric, with long beard, practically not speaking English, surprised me. He had left the car in another block. He took several minutes to appear again. When finally parked the car, he almost crashed with a policewoman who came in a small vehicle. Then, he started an incomprehensible discussion. The police gave up and disappeared. I should not be more delayed, if not I would lose the flight. When we went out, already about two blocks from my home, he informed me that his car had no fuel. He started screaming at every corner, looking for someone who could tell him about the location of

a gas station in the neighborhood. It was extremely hot. Summer. I noticed that both the windows and the air conditioning did not work. Some minutes later the car simply stopped, at the other side of the city. It was broken. The driver turned to me and said that I should go out. I would be left there, under the sun, with my luggage. I called the company and they sent another car – but I already had lost the flight. I asked the driver what he thought about his job. He dryly answered me saying that he was not caring about anything. I tried to know, later, what would happen, if I would have right to indemnity. It was almost impossible to speak to anyone at that company. There was no right to indemnity – the only thing I could do was to enter with a legal action against the company, what made no sense, considering the value of the service and the high costs of lawyers, as well as in lost time, of legal procedures – which were extremely bureaucratic. I asked how they could hire someone like that driver. I knew that they had hundreds of drivers and that it was not possible for the company to know all them. Everything was

automatic. Anyone who attended to initial basic requirements could become, automatically, driver in that company. Quality control worked through claims, which no longer existed. I asked if they were not disturbed to lose a client. «Lose a client? It makes no difference. We have thousands of clients everyday» – was the answer.

The new reality substituted indemnity and technical assistance by silence or by pure and simple exchange of the product – because it is *low cost*.

One thing is to claim about a high price product with defect. Another one is to claim about a product with defect sold in millions of unities which price is almost zero. When that happens, in the majority of cases, even the right to claim left to exist.

In the same way, the gigantic quantity of low cost products also turn impossible, because of its scale, the old concept of technical assistance.

Because of this, the old idea of products that last practically an entire life simply ended. Nothing works rigorously well. Everything started working well in terms of large numbers, in statistical terms.

With a society of continuous consumers, any act of legitimate defense of individual rights passed to be considered a reactionary action contrary to the intensely massive low power universe. Thus, associated to the numbness generated by continuous consumption, public protests practically disappeared – they started to happen, in general, only when the appeal indicated a similar content, in some way, to that of the low cost culture. It was a phenomenon well manipulated by old pacifist and left oriented groups.

That is, large protests emerge when the mobilization passed to happen *from cellular to cellular phone or from computer to computer*, with a low defined, general and superficial appeal. There

are a great number of definitions and approaches, even contradictory, for the phenomenon known as *globalization* – even so, great part of the few large protests occurred in the first years of the 21st century had the low defined concept of *globalization* as their flag par excellence.

When the subject of the protest is not something oriented to a low cost universe and to general participation – and when mobilization doesn't happen from person to person through a virtual network – it simply doesn't work. The appeal to an idea or stable set of ideas became non-sense to many people in a low power society.

Protests against meetings of the richest countries of the world, like what happened in Genoa with the *G8 Meeting* in 2001, or in international forums like that of Porto Alegre can happen. But, protests against the Iraq war were relatively few and isolated – a war that in few years killed more than one million people, whose original motivation was proved to be false and whose development,

according to a countless number of articles in newspapers and magazines, beyond many books, was supported on economic interests of a small group of large corporations.

The same is valid for protests against the clear degeneration of education, salaries, health care, justice, corruption of the governments and so on. When they happen, it is with relative small impact involving a small part of the citizens, even when the reasons for protest are overwhelming terrible.

Taxes levels knew dramatic increase, politicians passed to be each time more frequently accused of fraud and illicit enrichment, educational standard was clearly degraded, justice became more bureaucratic, politic and slower, the States eliminated much of what was the individual right for privacy – but only rarely people vehemently protested against those events.

Sagely, John Stuart Mill said that «there is

not a natural relation between strong impulses and a weak consciousness. The natural relation is in the opposite sense».

Narcissus and Narcosis: bureaucracy, *low cost and format*

*Every revolution evaporates and leaves behind only the
slime of a new bureaucracy.*

Franz Kafka

To start a small company, in great part of the countries, it represented to assume taxes and bureaucracy costs equivalent to more than 50% of the incomes. This level of taxes and bureaucratic costs imposed by the State practically made impossible the appearance of new companies with safe and long life.

detected that a company had fiscal benefits in a third country, started to determine compensatory taxes, as a way to punish the company because of the benefits.

Until the 1980s, countries with strong socialist orientation generally imposed to the companies the obligation to assume the State as majority partner, without any kind of counterpart. This was a fact considered scandalous by the called “free” countries. However, in the beginning of the 21st century, all countries did the same, in a disguised way, never declared. In practically all countries of the world the State became obligatory principal shareholder of the companies, through direct or indirect taxes.

The old socialist countries, behind the called *iron curtain*, argued that the State gigantism was a way to collect funds for social development; the countries in the 21st century argue that it is a way to collect funds for development.

Of course, in the beginning of the twenty-first century, the fiscal pressure worked only on small companies, which did not have enough resources to deceive the System.

In many countries, when a commercial transaction was not completed because lack of payment, the related taxes remained collected by the State, bringing thousands of small companies to bankruptcy. By the side of the States, authorities justified with the argument that if in such case the taxes were not collected, countless cases of fraud would emerge. The relationship between the citizen and the State stopped to be characterized by participation and became continuous persecution. Gradually, the old condition of citizenship was disintegrated.

But, we did not have strong and massive protests against that situation. Apparently, people were *numbed*. As Marshall McLuhan alerted, the words *narcissus* and *narcosis* share the same etymological root, revealing a deep connection

between both.

The word *narcosis* derives from the Greek *narkê*, which indicated the idea of *lack of breath*, a light asphyxia like when we are in love. The Greek term *narkê* launches its origins on the Indo European particle **n* that was related to *water*. To ancient Indo European peoples the idea of *negation* was implicit in the experience inside the darkness of nocturnal waters: negation of the concrete world. Because of this, *Narcissus* sees his own image in the reflection on the dark waters of a lake, and becomes profoundly numbed, *narcotized* by it.

From that old Indo European root **n* other words appeared, like *anima* meaning *soul*, *nó-os* that means *mind* in Greek, *night* which is so important to understand the mystical world of Orpheus, *naked*, *Neptune*, the Latin *nebula* that means *fog*, the term *new* and curiously, even the word *name* among others. Expressions that keep in themselves old and mysterious relations.

Each one manifesting a certain aspect of negation: the soul negates the body; mind, the matter; night, the day; new, the past; and name detaches the person or the thing from a whole.

Even the words *no*, *negation* and *negotiation* – which is the negation of laziness, from the Latin *otium* – appear from that old Indo European particle.

«The Greek myth of *Narcissus* is directly concerned with a fact of human experience, as the word *Narcissus* indicates. It is from the Greek word *narcosis*, or numbness. The youth *Narcissus* mistook his own reflection in the water for another person. This extension of himself by mirror numbed his perceptions until he became the servomechanism of his own extended or repeated image» – said McLuhan.

Narcissus negates the Other and *narcosis* negates reality. The negation of the Other and of

the reality reveals a state of ignorance, negation of knowledge.

There is no indignation in the ignorance. Indignation and protest requires culture, and culture implicates interaction.

Curiously, the equipment that characterized low power society, like personal computers, cellular phones, freezers, television sets, DVD players, digital photo and video equipment, PDAs or microwaves are – all them – prosthesis that permit not only a personal and individual management of everything, as well as a great isolation of people.

In this way, the old dependency in relation to the cooker, to the secretary, the editor or a countless number of professions and activities ended – they were transformed in dilettantism within everyone’s reach.

This is the low cost logic, which also projects the phenomenon of the end of profession in

diverse sectors.

Everything becomes dilettantism.

In the accelerated world of each time lower salaries and self-explained products, the need of a specialized intermediary disappears. Anyone can sell a computer, a telephone or even a book – it is enough to smile and to know three or four basic rules, all rest will be managed by the digital system itself and by instructions inside the product.

So, a quick rotation of people changing job many times per year starts to design much of the labor force specially in services, turning each person, in general, into the most disqualified worker possible.

In Switzerland, shortly after the September 11 2001 attacks, the great composer and conductor Pierre Boulez, a world-famous personality, who directed the Philharmonic Orchestra of New York, founder and director of the celebrated *IRCAM* –

Institut de Recherche et Coordination Acoustique / Musique de Paris, was detained for several hours on suspicion of being a terrorist! In May 1968, Pierre Boulez, a young composer, had proclaimed that opera houses should be burned. At the time, someone wrote a statement about it, indicating – in adjectives – that he was a “terrorist”. Swiss police simply did not know who he was and was unable to distinguish what would have been the outburst of a police officer less careful about thirty-five years before and the description of a real terrorist! Invited to a festival, he was recognized and released, with many apologies.

The story lived by the French composer reveals us various facets of the contemporary world – the superficiality of the data, the incompetence of the operators and the fragility of a extremely volatile surveillance system.

If it would be a different person and not the famous Pierre Boulez, surely he wouldn’t have the same luck and could be condemned to an even

cruel injustice.

And if it had happened in another country – because Switzerland was still considered one of the most rigorous and serious countries in the world – the disaster would surely be even more overwhelming.

In the United States, only in 2006, around sixty million people lost their jobs and another sixty million people started a new job, in a rhythm that would annually repeated – not being restricted to the American reality.

That turbulent fluctuation of the American society represented change and new job for around 40% of the economic active population every year!

Never before a so huge quantity of qualified labor force was at disposal of the production systems and never before the political discourse was so oriented to professional education. But,

mecenas or of the court. At the same time, athletes of football, basketball, box, auto racing pilots and tennis players among others – people that many times were not able even to correctly speak as to express a thought – became millionaires.

Low power society's essential aim is not qualification, but the highest disqualification possible.

With the intense rotation among jobs with different functions, the sense of identity is diminished and what was a great value to the old medium class is over: *loyalty*.

In his book *The Crisis of Global Capitalism*, criticizing the planetary transformations in the end of the 20th century, George Soros said that «in a society in which the stable relations are dominant» people need to be honest as to reach success. «But, when there are full freedom (...) society becomes unstable».

In fact, it is not about to have more freedom, but yes about a crescent regulation that, paradoxically, is strongly unstable. Everything became regulated, but one never knows exactly what is what, because everything constantly changes.

After the 1980s, in practically all over the world, it was created the idea that a strong and irreversible wave of total *deregulation* appeared, liberating the commerce, and eliminating all kinds of controls and barriers.

In fact, the celebrated *Bretton Woods* agreement, signed in 1944 by the most industrialized countries, generated a heavy regulation of financial markets – following the ideas of John Maynard Keynes, for whom the State had the duty to intervene in the economy.

Later, the United States and England promoted a worldwide wave of price and commerce liberation in which Ronald Reagan and Margaret

Thatcher were true paladins in the 1980s. Thus, European countries eliminated frontiers, the *World Trade Organization* established new parameters of free commerce, television channels passed to be controlled by private entities, the same happened to energy and telecommunication companies, international agreements determined criteria for free transit of products and people, the control of prices was practically eliminated and so on.

In 1980, the average tariff for imports and exports was 26.1%. In 2002, it was only 10.4%.

What it is not said is that, simultaneously, a tentacular bureaucracy emerged, establishing all kinds of control and surveillance, a police universe made of general and *globalized* information. Such complex of bureaucratic surveillance established a new *regulatory* phenomenon replacing the previous one, and operating in a *nano* scale.

The emergence of this complex bureaucratic surveillance has one of its main landmarks in the

gradual computerization of state administrative systems after the 1970s, in global terms. The initial appeal was precisely to eliminate bureaucracy! Curiously, this was a global phenomenon.

The process of digitization and automation of bureaucratic procedures began, with the promise of reducing its impact on people's lives. But then, in addition to a tremendous increase of bureaucratic control through increasingly complex systems, the principles based on the *welfare* were dismantled with an overwhelming increase in individual risks.

What David Garland called, in 2001, the emergence of a «culture of control».

In the early 1990s, the central government of Canada operated more than two thousand and two hundred databases with about twenty files for every citizen!

As David Lyon has pointed out, «fewer and fewer transactions and interactions are based

on face-to-face relationships. (...) Human beings, embodied persons, are thus abstracted from place and are siphoned as data into flows, to be reconstituted as ‘data images’ in surveillance systems».

The tentacle bureaucratic universe, like the emergence of an Argo Panoptes, tends to eliminate the individual, like what happens in the acoustic universe, where only the collective is substantial – because the ear has no eyelids.

Thus, many critics have observed that such a universe of bureaucratic surveillance and control would make any change not only unnecessary but also seemingly impossible, perpetuating the existing policies and their actors.

In 1996, the American Senate approved the *American Telecom Reform Act* looking to control and limit the freedom of expression in all communication media. John Perry Barlow – who in 1990 co-founded the *EFF Electronic Frontier Foundation*, entity dedicated to the defense of

free speech and free thought – said: «the Telecom ‘Reform’ Act, passed in the Senate with only five dissenting votes, makes it unlawful, and punishable by two hundred and fifty thousand dollars fine to say ‘shit’ online. Or, for that matter, to say any other seven dirty words prohibited in broadcast media. Or to discuss abortion openly. Or to talk about any bodily function in any but the most clinical terms».

In fact, everything passed to be even more regulated and controlled, but no longer by a *single central of high power*.

To make everything worse, in September 2008, just after the beginning of the terrible wave of crash in the world finance system, the *New York Times* announced «Goldman Sachs and Morgan Stanley Shift Marks End of Era in Finance», revealing the companies as the two last independent investment banks on Wall Street, then subjected to strong regulation by the State!

Everything passed to be controlled by a complex web of interests, much heavier than the previous *paradigmatic* sets of interests.

Interestingly, reflecting a general expectation, the newspaper *Le Monde* of November 6, 2008, announced through the words of Hubert Védrine: «Everyone is in favor, nowadays, for the reintroduction of controls on the financial system. The States should strike while the iron is hot and not let the “deregulators” to hold».

If we take this question as a whole, in historical terms, we see that the world has moved, since the last decades of the twentieth century, in direction of increasing regulation, tending to put on a new form of authoritarianism – a kind of dictatorship of the system itself without the figure of a specific tyrant.

And one of the faces of such metamorphosis is directly related to the emergency of a low cost economic model.

Robert Reich, former Secretary of State at Bill Clinton’s administration, explains how the containers were an important element in the transformation that would lead to the low cost universe. «The containers – boxes in steel with around six to twelve meters long, able to transport more than twenty-eight tons – already existed since the half of 1950s, but were not intensely used until the end of Vietnam’s war, in which the American army needed an enormous system of distribution to satisfy its insatiable objectives in the Southeast Asian forests. Traditional boxes for transportation were too small and unsafe. Thus, the navy created a port for containers in the Bay of Cam Ranh and the American ports were equipped to support merchant ships. One of the unpredictable consequences was the increase of Japanese exportations to the United States. To not go back to America with empty containers, the expeditors discovered that they could make money sending from Japan tons of watches, television sets and utensils... In 1967 there was no service of sea

transportation linking Japan to the United States. In the next year, there were seven companies. (...) In 2005, there were more than three thousand and five hundred merchant ships crossing the sea, with more than fifteen million containers aboard».

Such curious origin illustrates the process that designs the low cost reality, following a *distribution* logic against that of *concentration* which characterized the old medium class.

Thus, a world articulated by ideologies – strongly literary – forged on the principle of *paradigm*, is disintegrated in a complex of *syntagmatic* nature. It is no more about a concentration of ideas designing a coherent and stable political action, but about a *confusion* of actions that projects the most diverse political actors.

Thus, in journalistic communication, the old job of the reporter was radically changed. Centrals that sold, at low price, standard information

with guaranteed success together the audience, controlled great part of the news.

In this way, good part of the newspapers, television and radio channels passed to diffuse the same news, with minimum variations. It started to be almost no difference between this or that newspaper, this or that magazine – in journalistic terms – when a few years before that difference was fundamental. The *content* left to be important.

In January 2000, when *Time Warner* and *American On Line* merged, the general secretary of the *International Federation of Journalists*, Aidan Whilee, commented about the new reality: «We are now seeing the dominance of a handful of companies controlling information and how that information reaches people. Unless action is taken to ensure journalistic independence, we face a dangerous threat to media diversity... Otherwise we will have corporate gatekeepers to the flow of information, who will define content to suit their market strategies».

The old twenty-four hours news life cycle was substituted by a low information superficial continuum – identical image that characterized the low power society.

Publishers of newspapers, magazines or television passed to be a kind of market animators, operating an intense process of collage of information that is continuously received. The old control on what stories should or not be published practically left to make any sense.

While the old mass communication media – and specially television – were able to orient the attention of a great number of people to individual events, Internet made exactly the opposite.

In the change from a logic of *concentration* to another one, of *dispersion*, as it is typical in Internet, hundreds of channels of radio and cable television appeared, not to mention online newspapers and magazines, or even those newspapers freely

distributed in the corners of the cities, news and information in cellular phones – giving to those old media a logical design in certain sense similar to that of Internet: great quantity of information fully distributed and chaotically accessible.

In 2005, Joël de Rosnay and Carlo Revelli created the online newspaper *AgoraVox*, which is made on a collaborative basis and is totally free. Less than three years after its start, *AgoraVox* already had more than one and half million visitors per month.

In the core of such process, the phenomenon of *zapping* in television, with its strong non-linear nature, was generated by digital contamination – the transformation of an old communication media by the emergence of a hyper medium: personal computers in network, a medium for the transformation and use of all other media.

The hierarchical order that designed old journalistic communication determined the type,

size and location of texts and images in newspapers and magazines, projected the called *noble time* in television, oriented television news in a very hierarchical order and determined, in this way, the best *format* for each medium.

Format is a product of single direction in communication media. When they become interactive, as it is the case of Internet and telephone, *format* simply disappears or passes to a second plan.

With the gradual disintegration of *format*, political figures became less defined and less credible. The credibility of a political figure is founded on his capacity of synthesis and stability in time. A system in dispersion is highly turbulent, volatile and unpredictable.

On the other hand, the emergence of large conglomerates of companies without specific owner, spread out through different countries, attending to a gigantic massive consumption

audience avid for less expensive products in great diversity, generated another phenomenon – the quick and easy transference of costs inside departments of the companies, but in different countries.

The old fiscal system – and even the old techniques of accounting founded in the 19th century – stopped to work in this new universe, but continued to be used, even if inside an unstable low power society everything is more and more oriented to improvisation. This is, among others, one of the reasons of the big financial scandals that started happening in the passage of the third millennium – which, in a revealing way, practically did not count with any relevant manifestation of popular protest.

Inside a legal context in continuous metamorphosis, the world plunged inside a universe *without limits*.

Thus, it also became practically impossible

to regulate a credible tax system and the great conglomerates of companies became, in fact, exempt of taxes.

Rupert Murdoch’s News corporation, which controlled the American television network *Fox* among others, paid only 6% tax worldwide in 2003, and up to the end of 1998 it paid no net British corporation tax.

Such an exemption – which, however legal, was paradoxically contrary to the determinations by Law – generated a strong degeneration of the State’s credibility.

On the other hand, the levels of income taxes on individuals, small and medium companies, and taxes on consumption among others raised in dramatic way – in France, in the beginning of the 21st century, the level of direct income taxes on individuals reached the mark of 75%!

In Europe, in 2008, the daily cost of car rent

was, many times, lower than the taxes established in highways for travels with more than five hours.

The promiscuity with transnational corporations practically eliminated the old sovereignty of the States, transforming politicians – of any level, even when not exerting a public function, into true employees of large companies.

John Perkins, who became famous in 2004 with his bombastic book *Confessions of an Economic Hit Man*, described, in 2007, his meeting with an important Brazilian governmental authority: «He went on to explain that in Brazil and many other countries, the corporatocracy essentially controls all political parties. ‘Even radical communist candidates who appear to oppose the United States are compromised by Washington’».

In fact, in many countries, even tribunals and legislative power passed to be controlled by economic interests leaded by big corporations, which simply stopped to have a nationality, no

longer being American or European, and spread out through the planet transforming States into disguised extensions of their aims.

By that way, in a low cost universe, not only good part of people assumed intense superficiality, as everything of political nature became little credible.

As if we were dealing with a notable paradox, another curious phenomenon was associated to the disintegration of the political universe's credibility: bureaucracy.

Bureaucracy nothing more is than a tool of wealth distribution to non-qualified labor force.

In a society with more asymmetry and increasing wealth, bureaucracy seems to be a natural consequence.

One of the most used resources of the States to contain waves of economic recession

was the *subsidy*. Subsidies create something like a support for a continuous economic flux, relatively invulnerable to the dramatic market fluctuations.

The subsidy can only happen in a centralized society, like what happened in the literary culture. Only then it is possible to define specialized departments in precise temporal scale as to receive a money that apparently is “free”.

When social structure left to be visual and departmentalized, subsidies pass to be considered as iniquitous benefits that will provoke unbalances in the ensemble of the community – what is an illusion. So, a moral justification emerges – through the argumentation that the money of subsidies does not implicate work. But, that moral justification happens *a posteriori*, as *content* of the process.

Thanks to that, bureaucracy gradually substituted the resource to subsidies in low power societies. However, the cost of bureaucracy

is immensely higher than that of subsidies – bureaucracy implicates, beyond the salary of people, citizen’s time. Each excessive bureaucratic worker can represent the cost of many people, with a huge lost of time.

But, in low power society, unemployment passed to be one of the central governmental targets, in the most varied countries, pushing ahead bureaucracy.

With the obsessive aspiration to larger quantities of products more and more inexpensive, all kinds of automation passed to be intensified, associated to the increase of rotation of the labor force. This projected more and more less qualified people, and also implicated an increase in unemployment.

In a low power society the State passed to assume, directly or indirectly, the function of employer looking to absorb a great contingent of consumers without technical qualification –

because they will vote in the elections.

In the low cost society, with great mobility, volatility and turbulence, employment – not job – passed to be the individual and social aim par excellence.

What was sacred for the old medium class, the love for a *profession*, word which etymological root is linked to meaning of *to profess*, was practically eliminated. Competitions among students in schools and universities, not rarely, passed to aim to a lastly and safe employment in economical terms, which could bring social status – but not obligatorily representing a *profession*.

Curiously, even using the most advanced technology they condemned, the most terrible groups of terrorists in the passage of the millennium preached exactly the opposite of what happened with the new low cost society: no longer the aspiration to a lastly and profitable employment, but the dedication to a cause.

Many times, the establishment of a strategy of absorption of great number of people by the State happened – direct or indirectly – with the resource to the increase of bureaucracy. With it all kinds of *facilitators* appeared, at low cost, *distributed* everywhere. In general, they represented large quantities of small *taxes*, many times considered *invisible*, and lots of information to be filled.

Such vigorous wave of bureaucracy passed affect in strong terms small business and medium class families.

Even many structural funds of the *European Union* passed to be directed by low power society's principles. With the argument that they could avoid steals, the funds were given only after the projects concluded or significantly advanced, benefiting States and big corporations and making impossible the active participation of common people, families or small businesses.

And however many forms of that new bureaucracy were digital, eliminating in great part the need of human intermediary, its crescent complexity started to request a great contingent of new bureaucrats, which were, direct or indirectly, linked to the State.

In architecture, for example, until the middle of the 20th century, in many countries, the approval by authorities of a project was practically automatic. People knew themselves and competence was assured. Only fifty years later, not only the architects were unknown, because of their great quantity, as the bureaucratic complexity became so big that a new kind of architect emerged – the bureaucratic specialist on the approval process by city’s authorities.

The same happened to almost all liberal activities.

In Law, many times, minimum processual errors passed to be more dangerous for a

condemnation than the fragility of the merit of the cause.

The bureaucratic universe passed to implicate a *tentacular* enlargement of the State – even in countries with opposed tradition to that tendency.

Such hyper bureaucratic universe generated an explosion of class associations and an increasing surveillance on all human movements. Each profession passed to be divided in dozens, if not in hundreds, of specialized sub groups – like what happened in medicine and engineering. Each specialization passed to count, many times, with a specific professional association.

The value of a professional passed to be established not by the accomplished work, but by the number of associations he was member, that is, the level of bureaucratic involvement he had.

In the same way that the logic of distribution

generated a society where power passed to be distributed in low intensity in large and continuous spectrum, each person passed to live inside a bureaucratic universe permanently present.

It is a universe contrary to the existence of the *family*. Documents, general taxes, fiscal compensation taxes, health controls, fees and obligations to associations, medical visits, dental corrections, consumption of new products, shampoos, creams, school controls, school equipment, behavior controls in a more violent society, controls on telephone calls, surveillance on computers, all kinds of financial implications – everything constituting a flux of attention in continuous dispersion.

Each one of those elements constituting a specific set of bureaucratic activity.

Gradually, the old figure of *family*, typical in societies generated by the medium class, disappeared under the weight of a generalized

bureaucracy.

Curiously, metaphorical designation for the structure of digital systems reveals something of its nature – practically everything in typical computer programs of the beginning of the third millennium was formed by *archives, folders, documents, files, windows, links, attached files, sectors, spies, CC* or *carbon copy* and so on, indicating an intensely bureaucratic scenario.

Again, here it is not about to establish judgments of value.

Everything passed to be a gigantic bureaucratic mental complex established since the first years of life in a process of expansion whose objective is strongly distributive.

The bureaucratic meaning is the *content* of a new medium.

The great expansion of bureaucracy – which

also became low cost with digital systems – as well as the emergence of a large contingent of low price products and services, with apparent good quality and huge quantity, everything articulated in a process of high dispersion, revealed a radical transformation of private life, changing not only the notions of Law, freedom, privacy and family but also the entire social behavior that assumed a great physical isolation but became profoundly gregarious in virtual terms, changing even the attitude face to death.

It is interesting to remind again what bureaucracy is: a tool for distribution of wealth among non-qualified labor force. When this concept is amplified to the world of ideas, everything is even more interesting.

Television: the emergence of a bureaucratic aristocracy – more control: State against Nation

*Who controls the past, controls the future. Who controls
the present, controls the past.*

George Orwell (1984)

This kind of mental low cost has one of its origins in television. With it, the system of cathode tubes sweeping substituted ocular saccadic movement, which is essential for the perception of form. Thus, television screen became a kind of sensorial prosthesis, passing to be responsible for a function that was before exerted by the eyes. We became free for other senses and, hypnotized, we

dived through television paths.

Information on the screen is *cool*, requiring a permanent action of our imagination to fill the *empty points*. Contrarily to what happens with literature, what we *fill* when we watch television screen is on its surface. They are not emptiness of ideas, but yes emptiness on a plane two-dimensional screen.

Because of that, television is a superficial medium par excellence. Comparatively to the book, for example, few is memorized with television. Thus, television produced a superficial generation oriented to continuous entertainment.

What we fill with our memories of the emptiness of television screen is pure surface.

With the book, imagination must fill the emptiness of ideas, of contents. On the television screen, emptiness is on the image's surface.

For David Lyon, surveillance and control systems are easily accepted by people because all kinds of voyeurism has become commonplace, encouraged by movie and television.

In fact, film and television played an important role in the emergence of a society of control – but not because people are going to the theater and watch the screen, or look at the television screen, as indicated by Lyon.

The impact on the structure of a new mentality is due primarily to the *process* of the media, like the telephone, radio or Internet, in terms of perception and cognition. In other words, how these media rearticulates complex neuronal and synaptic maps as sensory processes.

A survey made in Switzerland in 2005 showed that 80% of people considered television as the best entertainment, closed followed by radio with around 70% of the preferences. Only about 18% of people considered reading as the best way of entertainment.

In 2004, the average time spent every day by each person in front of a television was around three hours in Switzerland and around four and half hours in the United States! This means more than two months every year uninterruptedly watching television screens, twenty-four hours a day!

Another survey made in 2005 by the University of Indiana showed that, in the United States, a person passed an average of nine hours per day in front of the television, using Internet or speaking at the phone.

In China, an article published in August 2009 informed that a boy had been beaten to death in a camp for Internet addicts. It was known then that the Chinese government created “recovery clinics for addicts on the Internet”, where even electroshock therapy was used – only banned in July 2009.

The news, from the Associated Press, realized

that «the National People’s Congress of China estimates that 10% of Internet users under the age of eighteen are addicted. Chinese psychologists say that the symptoms of the disease include staying online for more than six hours a day and irritation, when they cannot connect to the network».

Curiously, the revolution of personal computers emerged with the figure of a virtual bureaucratic complex, revealing itself as a tool of distribution of information in a superficial world, disqualified, dedifferentiated, oriented to entertainment.

Bureaucracy inaugurated yet a new kind of political aristocracy – where its actors are legally protected, many times untouchable, free even to any possibility to be judged for acts of incompetence, malversation of public money or even for robbery.

In the majority of the countries at the beginning of the twenty-first, democratic systems

were formalized on the representative principle and not on direct democracy. Once elected, politicians became free to adopt a vast set of measures, even if contrary to their promises or people’s interests – after all, they had been elected.

In many cases, electors not even voted directly for their representatives, but yes for a political party – which, later, should designate those who effectively would assume public functions, according to bureaucratic and power rules. From groups of political identity, the large majority of the political parties was transformed into bureaucratic organizations with aristocratic character, and profoundly sectarian.

Then, surely, the only country in the world with a government closer to the ideals of the direct democracy was Switzerland. Authoritarian and dictatorial bureaucratic aristocracies dominated all other ones. The most curious is that, apparently, such fact was not well perceived by people, who calmly accepted all kinds of laws and regulations

seeming to believe that who controlled the country were best prepared for the task.

The new bureaucratic aristocracy – constituted by large quantity of small dictators, each one with low power – requested a permanent increase of costs from the State, which generally passed to be justified by the most diverse modalities of social benefits and security, many times with the argument to protect even the physical integrity of the common citizen.

In April 20, 2008, the *New York Times* revealed how, between 2002 and that year, the Pentagon infiltrated agents in the main television channels of the country, with the declared objective of influencing and driving information favorable to the administration of George W. Bush, constituting a kind of censorship.

Thus, as defined by Noreena Hertz, author of the bestseller *The Silent Takeover* «the political state has become the corporate state».

In another scale, that same principle passed to guide the attention of each one regarding to his own health, bringing people to the consumption of great quantity of medical exams, vitamins and all kinds of treatment, because *prevention* implicates *security* – and the body passed to be submitted to a condition of constant danger.

Then, hospitals became true shopping and leisure centers, like airports, railway stations, museums and so on.

Gradually, the State became a police entity, supervising everything and everyone, making even less chocking to the public opinion the approximation of Western politicians to old dictatorial systems like China, where until the beginning of the 21st century simply there is no freedom of thought or of expression.

Such huge grow of the State, its new strongly police character and the inequality in fiscal terms – practically freeing of taxes the largest companies

made by the Catholic University showed that around 70% of the young population had none or almost no interest in politics, a thing that was not very different in other countries.

In the general elections of 2001, in Great Britain, only 59% of the registered voters voted – the lower percentage since the First World War.

In the elections for the European Parliament in 1999, less than 50% of people exerted their right to vote – in a universe of almost three hundred million people.

In a survey of 1996, in the United States, about public trust on biotechnology information, only 7.8% of the people said to believe the government and only 1.6% on the information from the industrial sector.

According to Noreena Hertz, «Samuel Cohen, a University of Nebraska researcher on saccharin, whose findings were heavily relied on

by the US government in justifying its decisions to take saccharin off the list of cancer-causing chemicals, was revealed to have been funded in part by an industry group whose members included *Cumberland Packing*, the masters of *Sweet'n Low* saccharin products. *Exxon Mobil* has provided funding for maverick scientists who claim there is insufficient evidence of a human factor in climate change. (...) Particularly worrying given that George W. Bush seemed to use these views to justify his rejection to Kyoto, claiming that the scientific work of global warming was still 'unsettled'. And Bush's regulation czar, John Graham, solicited twenty five thousand dollars in funding from *Philip Morris* at the same time as he was overseeing a study that concluded that there were no health risks for secondhand cigarette smoke».

In Italy, the legitimacy of Silvio Berlusconi's rule as prime minister was strongly contested because he also was the owner of large corporations in the country.

In Brazil, Jose Alencar Gomes da Silva, vice president with Lula da Silva, also was the owner of one of the most important corporations in the country, controlling an empire in the textile field with *Coteminas* as his most important company.

In George W. Bush administration, Dick Cheney joined from the oil services megacompany *Halliburton*; Karl Rove, chief political strategist, had been chief political strategist for *Philip Morris* from 1991 to 1996; Mitchel Daniels, head of the White House Office of Management and Budget, was vice president of the chemical empire *Eli Lilly*; the Secretary of Treasury, Paul O'Neill, came from the giant aluminum *Alcoa*; and Condoleezza Rice, Secretary of State, came from *Chevron* – before *Standard Oil of California*, also known as *Esso Standard*.

In his book *Supercapitalism*, Robert Reich said that «nowadays, great part of citizens believe that politics only serves to the interests of few large groups that are interested only in themselves».

At least potentially, social inequalities were compensated in the old medium class framework by the aspiration on long-term employment, on the structuring of stable families and on the development of a single and well-succeeded profession in life.

In low power society, in many aspects designed by the virtual world and by low cost products and services, unpredictability increased exponentially, families tended to disappear, as well as safe long-term employment, and the State passed to assume, at least figuratively and in the political discourse, the responsibility in the fight against inequality.

But inequality was no longer the same as it was in a world of rich and poor. With low power society great part of salaries was no longer enough to support the acquisition of a home or, in many cases, even for the acquisition of a car. Then, financial systems passed to provide a quick and

inexpensive credit – assured by the State – turning the acquisition of a property into a kind of low cost act and making the buyer, many times, in debit for the rest of his life.

So, population plunged into a spectrum of continuous consumption and became, in general, eternally in debt with credit institutions, revealing a new and disguised kind of slavery.

It is estimated that in the year of 2003 there were about one and half million French families super indebted, representing around 10% of the population in the country. More than five hundred thousand families were subject to legal actions in courts for non-payment of their debits.

In the United States, between 1993 and 2004, the debit of consumers – including credit cards, loans in banks, mortgages and all kinds of financing – was multiplied by two thousand and five hundred, arriving to represent around 3% of the world economy!

In the ancient world, slavery represented, for the lords, a smart resource of energetic concentration, generating societies of luxury and pleasure.

In low power society, everyone became simultaneously slave and consumer of luxury and pleasure.

But, even worse, according to Loretta Napoleoni, «almost every product we consume has a hidden dark history, from slave labor to piracy, from counterfeit to fraud, from theft to money laundering». According to the United Nations it was estimated, in the first decade of the 21st century, that more than twenty seven million real slaves were present in the world – including Europe and the United States.

The ideals of freedom, which were defended by the old medium class, were substituted by the aspiration for continuous consumption, which

is narcissistic and numbing. Old ideas related to freedom were gradually disintegrated.

In the beginning of the 21st century, in low power societies, all people, with no exception, already born in debit with the most different natures of taxes, from the obligatory birth registration to direct consumption taxes. Debts initially responsibility of the parents, later automatically and compulsorily transferred to offspring. Thus, there was no possibility for a person to exist without taxes – a new phenomenon in function of its total involvement.

In this way, freedom in fiscal terms ended: obligatorily, everybody started his or her lives already in debit to the State.

But, individual freedom knew other transformations.

Based on the obsessive aspiration to *security* – collective, individual, about the own body, goods

or even knowledge – all kinds of prohibition passed to be imposed, not finding any relevant reaction from the people.

It became what the genial Georg Simmel said about the emergence of a “society of strangers”.

The term *security* appeared from the fusion of the Latin words *se* and *cura*, meaning *without care, without attention, abandoned*. It would be only in 1582, in English, after more than one century of intensification of the use of vision and literature that – in an apparent inversion – the word passed to indicate the idea of *something out of danger*. Thus, it passed to mean something that does not need attention or care, because it is already protected, safe, in *security*.

Gradually, with the approximation of the 20th century, *security* passed to mean *permanent control*. In this way, in the beginning of the 21st century, something *secure, safe*, indicated the idea of something permanently under surveillance,

constantly controlled and, therefore, always potentially in danger.

For safety to exist, danger became indispensable.

In name of *security*, people passed to be prohibited to start a business or to exert any commercial activity without a preventive and permanent control by the State through multiple declarations, documents, taxes or the unpleasant visits of fiscals.

It started to be prohibited the publishing of a newspaper or magazine free from the surveillance and responsibility of a journalist that, by its turn, was controlled by a class entity.

Prohibitions were extended in the most diverse directions, like the interdiction to exert advocacy without express permission of the State and class entities; interdiction to exert medicine without a preventive and permanent bureaucratic

control and so on.

The idea that each person should be free and responsible for his own fate passed to be looked as an aberration sometimes related to the old totalitarian ideologies!

Even health exams passed to be conditioned by the authorization of a doctor. People left to be free even to know their own bodies.

Self-medication – which was a common habit along thousands of years – passed to be strongly condemned. The acquisition of various medicines became forbidden without an express authorization and control of a doctor, recognizing with those measures total incompetence of users.

But, paradoxically, through Internet, great part of people passed to have access to scientific information which was restricted to the medical class just few years before, turning many in true paramedical specialists looking more for a health

orientation than for a dictatorial order from a doctor.

People passed to be prohibited to freely build their own housing. Even if they were disposed to sign a declaration of responsibility, governmental authorities simply did not recognized any possibility of capability and autonomy of the common citizen and imposed to everybody, indiscriminately, a great quantity of regulations and punishments.

Urban Master Plans passed not only to regulate indexes of occupation, but also setbacks, dimensions, openings, volumetric elements and even the colors that should be applied on the building, condemning *a priori* any construction to a strongly mediocre standard.

All human activities passed to be regulated and controlled by bureaucratic systems that eliminated the old differences, establishing an average criterion for everything.

Even artists passed to be prohibited to freely travel abroad bringing their own works out the area controlled by the State – because their works passed to represent a source of income through exportation taxes and internal revenue!

Industrial or handicraft products passed to be submitted to a huge set of rules and norms, whose very first objective was to exert control on everything.

So, a little everywhere, a great quantity of *companies of technical certification* passed to emerge, with the only function to fill hundreds of formularies as to receive the necessary governmental authorizations.

The old division of society in clear and visual *classes* was quickly substituted by a gigantic mass of consumers with no defined profile and without ideology.

Not only, in an extremely volatile society, the

aspiration to total control by the State appeared as a kind of reaction of equilibrium in a dissipative environment. Thus, many times counting with arguments based on the war against terror, the State passed to voraciously invade all spheres of privacy, freely intercepting phone calls, opening letters and deviating electronic messages among other resources, not counting with any strong opposition by the population, which seemed to be permanently allayed by consumption.

In 2008, conservative projections estimated more than forty thousand *cyberpolices* continually acting in China, permanently checking private communication in Internet.

That year, the Chinese government started requiring all computer manufacturers to preinstall a program of censorship, which automatically blocks access to determined sites. The application was named – in free translation – the *Green Barrier, Escort of Youth*. In August 2009, under some pressure from the United States and the

World Trade Organization, China withdrew this demand, but only for private use of computers and at a time when several manufacturers have already incorporated that program.

The complex Chinese system of censorship, known as the *Great Ciberwall* or the *Great Wall of Fire*, allowed to block access to various sites, identify mail, discussions, forums and blogs using words or phrases that could indicate topics banned by the authorities.

Several companies, like *Google*, *Yahoo* and *Microsoft* among others, have incorporated systems of censorship as a condition imposed by the Beijing government to operate in China.

Also in 2008, the sinologist Jean-Luc Domenach, in an interview with Nicolas Arpegian, alleged that Chinese government has teams dedicated to the wiretapping, particularly foreigners who live on the blocks of embassies that have certain phone numbers.

Many people forgot when, few years before, to open a third part's letter was established as crime by Law!

In November 2009, Chinese authorities censored the speech of President Barack Obama, in his first day visiting China, because he spoke about the importance of freedom! The Chinese government rigorously selected even those who attended to Obama's lecture.

Two days before Christmas, in 2009, the Brazilian government published the text of the *Third National Plan for Human Development*, which determined the social control on media, establishing official censorship. The reactions were great and President Lula da Silva was forced to revise the document. But then, the newspaper *O Estado de Sao Paulo*, one of the world's largest, was already under censure after several months.

In the last days of November 2009, the

European Parliament authorized the suspension of Internet access without requiring a court order.

Surely, the best example of this new condition of total surveillance and control is the *Echelon Project*.

Created by the *NSA National Security Agency* of the United States and operating in partnership with the *GCHQ Government Communications Head Quarters* of the United Kingdom, the *CSE Communications Security Establishment* of Canada, the *DSD Defense Security Directorate* of Australia and the *GCSB General Communications Security Bureau* of the New Zealand – articulated under a secret agreement established between the United States and the United Kingdom in 1948, whose terms remained secret until the beginning of the 21st century – *Echelon* is a powerful system of global espionage capable to capture and analyze in high velocity all telephonic connections, telefax and electronic messages in any part of the planet.

That system of espionage, forming a sweeping network of satellites, terrestrial posts and ships, intercepts practically all communications via satellite, through microwaves, cellular telephones or transmitted through optical cables. All this huge communication set is processed in the super computers center at the *National Security Agency*.

Information processing by *NSA* included even advanced voice recognition and optical characters recognition systems.

The Fourth Amendment to the Constitution of the United States, ratified in 1791, says that «the right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated...». The question is to know what is “reasonable” in a universe where reasons are multiple and, sometimes, contradictory.

One of the constant criticisms made against

the use of *Echelon* – beyond the flagrant offence to the old privacy rights – is that apparently it has been used not only for identification of terrorist groups but also as an instrument for industrial and commercial espionage – benefiting large conglomerates of companies in prejudice of small and new groups.

In 1985, under the propaganda of being a free borders principle, a system similar to *Echelon* was created by European countries: *Schengen*, which bears the name of the town in Luxembourg where the project was launched.

Initially, *Schengen* was announced as an agreement to release borders, with the aim of mutual recognition of visas and the strengthening of multilateral relations.

But in 1999 the *Schengen Treaty* became a system for recording and surveillance of large population stocks, incorporating Norway and Iceland, extending in this way, from the Arctic pole

to Mediterranean.

In principle, unlike the operational way that designs the Echelon, which continuously intercepts virtually every kind of electronic communication; *Schengen* archives, treats and classifies a large set of personal data.

In this way, the tendency of the enlargement of big groups of companies and a gigantic mass of low cost consumers – permanently under surveillance – was more and more reinforced.

In April 2009, *BBC* announced that «communications firms are being asked to record all internet contacts between people as part of a modernisation in UK police surveillance tactics. The new system would track all e-mails, phone calls and internet use, including visits to social network sites».

On the other hand, the obsession for control and surveillance reached the production and

dissemination of computer virus, generating even the expression *Government Trojan* to indicate spy virus created by governmental authorities as to control citizens' fiscal life.

China government was considered a world leader in the production of such kind of virus, according to reports of 2008. But, it was generally accepted that many other countries, also in Europe, did the same.

According to the security company *Sophos*, in studies of 2007, around 55% of the Chinese sites were true sources of digital viruses.

Nils Magnus, writing for the *Linux Magazine* in January 2008 described the terrible situation: «With the unkind thought that 'the ends justify the invasion', the governments of some countries have considered the idea to install spy software in citizens' personal computers with the objective to control data for the supposed benefit of national security».

In the early 2000s the American government created the spy virus *Carnivore* – which had the announced objective to protect citizens controlling them! The software was intensely criticized and officially discontinued.

But, in 2007, Germany announced its firm determination to legalize online investigation, infecting citizen’s personal computers with *Trojan Horses*. Beyond the evident aggression against civil liberties and rights, another important question emerges: how a determined government can know who is or is not its citizen in the cyberspace? The implementation of spy software implicates the disrespect for the old conventions related to Nations’ autonomy and self-determination.

To surpass such difficulty to control their citizens, some countries started even to consider the establishment of legal demand for the implementation of spy components in all personal computers.

In 2008, *Symantec*, company dedicated to the production of anti-virus software, announced in its *Internet Security Threat Report* related to the second semester of 2007, that there already were more than one million of different virus infecting computers all over the world.

Such huge quantity of different virus created a complex network of companies oriented to the production of anti-virus software. Then, not a single product was able to cover all types of virus.

The situation was so serious that the renowned scientific magazine *Science* has devoted part of his edition of 2009 to an analysis on the impact of viruses' contamination on mobile phones. If contamination occurred via *Bluetooth* it would have a configuration similar to what happens with the flu, but if it happened via *MMS*, *Multimedia Messaging Service*, it would be almost instantaneous.

Interestingly, the same issue of *Science* published an article on counterfeit products for scientific use made in China, another one about an epidemic of plagiarism of scientific articles on the Internet and, finally, an interesting article about the increasing difficulty in establishing demographic data on accuracy due to highly mobile population.

It was as if, in a context of structural change, a true civilizational mutation, a *cyberwar* without barracks, a kind of civil war, this time virtual, was happening.

Parallel to the quick emergence of a state of war without bodies – together with an increase in physical violence in planetary terms – a fast strengthening of mechanisms for control and surveillance happened, taking all people as potential criminals.

In the beginning of the twenty-first century, many countries – including Belgium, Brazil, Germany, Portugal, Spain and Luxembourg among

many others – it was forbidden to leave home and walk the streets without carrying an identity document. The most bizarre is that the vast majority of people considered this as something normal.

In July 2008, the Portuguese government approved – with the contrary votes of all opposition parties and in vacation period – a law obliging the use in all cars in the country of a GPS chip that permits real time control of movements of the citizens.

According to the Portuguese newspaper *Público*, «the chip or license plate electronic device aims to make easier the work of security forces, which will have access to information about periodic inspection and the obligatory insurance of the vehicle. The chip will also permit the identification of crashed or abandoned cars, but it can be used in integrated strategy for tolls and other taxes. Expenses of acquisition and installation will be driver's responsibility».

With that chip, enforced by law, displacements of Portuguese citizens will be controlled in real time! When the bizarre and authoritarian governmental decision was announced, there were no public protests in the streets. People were numbed.

And the same happened, again in Portugal, with the introduction of the called Citizen’s Card – in fact, an identity card that join in an incorporated chip a large quantity of information that can be controlled by authorities. Contrarily to what happened with the old identity cards, the owner compulsorily pays for the Citizen’s Card, it will be the only valid identity document and lasts only five years, revealing itself a new source of incomes for the State.

It was feared that in short time to that chip, renewed every five years, a GPS locator will be incorporated, turning possible the control and surveillance of every citizen in real time.

There were no protests to its implementation,

neither questionings about its constitutionality!

In Brazil, the identity cart was only regulated in 1969, under the military dictatorship. In 2009, forty years later, the country imposed the *RIC – Single Register of Civil Identification*, indeed a smart identity card with a chip, bringing together diverse information about its owner, for permanent control and surveillance, mandatory, without any right for the person to refuse it.

The same requirement, among many other countries in the early twenty-first century, was made by Sweden, where the entire system to identify and control was centralized at the *Skatteverket*, which is the tax department of the State. Everyone controlled by money.

The refusal to use these cards immediately place the person in a situation of illegality and therefore subject to prison!

In 1952, British government tried to turn

permanent the requirement of identity cards created as a tool against espionage in the Second World War. There was a strong popular reaction and the cards were destroyed in huge bonfires across the country. One of the judges who presented the most compelling evidence against its use has argued that identity cards automatically turned citizens into suspects and the absent-minded into law-breakers.

Only fifty years later, not counting with high resistance, governments around the world – including the British or American – sometimes under the guise of treating the issue of other documents like driving licenses, established a definite requirement for identity cards, turning everyone into suspect and potential criminal.

In the first decade of the twenty-first century, it was striking to note the absence of reaction of many people before coercive deployment of permanent control and surveillance systems, such as the identity cards. For most people, it was

about something normal, a sign of the times and a benefit against criminals and terrorists. They were unaware of the terrible danger they put themselves and all: that democracy and isonomy, the principle according to which all are equal before the law, the principle that everyone is innocent until proven guilty, are not eternal. When a totalitarian regime is installed, the institutionalized control and surveillance may mean the establishment of an impregnable fortress.

Marcus Tullius Cicero asked, in his Philippics – celebrated speeches where he questioned Marc Anthony – if «wouldn't be better to die one thousand times if one can not live in his city without the escort of armed men?».

In the beginning of the 21st century, as war justification, the United States, which until then was the world representative of the old ideals of democracy, of the isonomy and the medium class' values, created the *Patriotic Act*, eliminating from its legislation the *habeas corpus*, essential element

in defense of the principle according to which everybody is innocent until proof in contrary.

Then, under the determination of that Act, any person could be imprisoned in the United States, without right to contact any other person, without right to defense and even not knowing the reasons that led him to detention.

The *Patriotic Act* authorized the FBI to freely intercept any communication between citizens of any country without the need of a judicial authorization. The measure also authorized the United States to intercept communications even from other countries, even when through Internet and forbade Internet servers to reveal the extension of such measures of control and surveillance made by them for the authorities.

Even the requests of the American Congress for more information about these measures were simply denied by the government.

Not only, under the terms established by the Patriotic Act anyone in the world could be subject to persecution by the American authorities when computers inside or outside the United States are attacked.

This condition opens up a frightening precedent by challenging the *Treaty of Westphalia*, created in 1648, according to which the sovereignty of a State is determined by its territorial integrity, inviolability of its borders and the supremacy of the State.

Considering that even governments such as Germany or China, officiated use hackers to establish an active espionage in cyberspace, indeed the Patriot Act would inevitably lead to conflicts with those countries, among many others.

In 2002, through the United Nations, but of course with full agreement of all governments, the measures established by the Patriotic Act were immediately adopted in practically all over the

world.

Thierry Meysan, author of the disturbing book *11 septembre 2001, L'effroyable imposture*, published in the beginning of 2002, wrote: «In Great Britain, the antiterrorist law authorizes the prison of foreign suspects without any instruction, violating the European Convention of Human Rights. In Canada, the antiterrorist law obliged the journalists to denounce their sources of information, after a judicial request, under the risk of immediate prison. In Germany, to the Intelligence services were attributed powers of judicial police, transforming them in political police. In Italy, secret services are authorized to commit all kinds of crime inside the national territory, if in the interest of National Defense, without need to adjust counts with Justice...».

That same year, the American administration tried to open the so-called *Operation TIPS-Terrorism Information and Prevention System*, which aimed to transform thousands of civil servants and

millions of people in permanent informers of the State. Even the American government announced the controversial program saying that *TIPS* «will be a nationwide program giving millions of American truckers, letters carriers, train conductors, ship captains, utility employees, and others a formal way to report suspicious terrorist activity».

After a lot of complaints initiated by the *Washington Post*, comparing the methods of *TIPS* with East Germany's secret police *Stasi*, the American government was forced to cancel the program.

In 2003, it was announced that Russia was to recreate a network of spies among people nearby – resource widely used by the KGB during the Soviet period.

The new figure of a swollen State, super powerful and with small or no credibility at all, not only unveiled itself as a kind of barrier to old aspirations of the each day more reduced medium

class, but also made to emerge the bizarre condition of the *State against the Nation*.

The same was happening with companies. In Europe, it was established the electronic invoicing and the *EDI Electronic Data Interchange*, in the search for more revenue and total control of companies. Brazil has also quickly established the electronic invoice, allowing the government the opportunity to control in real-time the management of the companies!

In Brazil, in December 2009, the government announced that companies considered as systematic tax owed would pass to have the daily presence of a government auditor inside its building, as a *prevention* tool against tax evasion. A week earlier, the Brazilian tax authorities announced a series of “evil” acts, according to the official definition, against tax evaders.

The State against nation makes to emerge, of course, what we know as censorship.

It is a phenomenon that is not restricted to the active intervention of the Pentagon in American media between the years 2002 and 2008 by manipulating information.

In Portugal, during the first decade of the twenty-first century, were several signs of state intervention in the media. The same phenomenon was the subject of heated debate in Brazil. Hugo Chavez, in Venezuela, became famous for his interventions together the media – which came to represent the closure of all television and radio stations against the government – to the inexplicable and unacceptable complacency of most journalists the world!

Veiled threats, all over the world, often in the form of warnings by tax authorities, have become a part of a disguised censorship.

Countries such as China or Iran, however, did not need subterfuges to cover up acts of

censorship. On Tuesday, June 2, 2009, a day before the twentieth anniversary of the massacre perpetrated by the Chinese in Tiananmen, the Chinese government has blocked *Twitter*, *Flickr*, blogs providers and even the *Hotmail*. The censorship had begun weeks before, with the blockade of *Blogspot*, *Wordpress* and even of the *Youtube*. More than six thousand university sites were also blocked, preventing any discussion of what had happened twenty years before.

The end of 2005, given an order of censure by the Chinese government, *Microsoft* has deleted the blog of activist and journalist Zhao Jing, also known as Michael Anti. But, the blog of the young journalist, born in 1975, was not in China but on servers in the United States! Thus, *Microsoft* obeyed the orders of the Chinese government imposing a censorship on American soil!

In June 2009, Iran had established a strong censure across the country, to control the wave of protests against electoral fraud that supported

the then Prime Minister Mahmoud Ahmadinejad to power. With the media fully controlled by government forces, an anonymous virtual community was born, against which, paradoxically, only the paralysis of the State itself could represent a treat.

Two months earlier, Mohammad Hossein Safar, Minister of Culture of Iran, made an unprecedented statement: «This is what we ask publishers and writers, ‘You are aware of the vetting code, so censor pages which are likely to create a dispute’» - forcing a self-censorship.

In June 18 2009, most major newspapers in Britain reported its first pages with large black bars in protest against government pressure and are classified as genuine acts of censorship against freedom of information.

In July 31 2009, the Brazilian newspaper *O Estado de Sao Paulo* – one of the major newspapers around the world – was subject to censure for

denouncing thousands of acts of corruption possibly made by Senator and former President of Republic José Sarney. Nothing happened to the old politician who had the unconditional support of President Lula da Silva, and the newspaper continued under censure!

The reality of the Low Power Society in the beginning of the twenty-first century, submerged in a narcotic process of continuous consumption, emerged in sharp contrast with the ideas of the mechanical and literary society in the nineteenth century. John Stuart Mill, in defense of freedom, emphasized in his famous paper of 1859 that «the appropriate region of human liberty comprises, first, the inward domain of consciousness; demanding liberty of conscience, in the most comprehensive sense; liberty of thought and feeling; absolute freedom of opinion and sentiment on all subjects, practical or speculative, scientific, moral, or theological. (...) Secondly, the principle requires liberty of tastes and pursuits; of framing the plan of our life to suit our own character; of

doing as we like, subject to such consequences as may follow; without impediment from our fellow-creatures, so long as what we do does not harm them even though they should think our conduct foolish, perverse, or wrong. Thirdly, from this liberty of each individual, follows the liberty, within the same limits, of combination among individuals (...) No society in which these liberties are not, on the whole, respected, is free, whatever may be its form of government; and none is completely free in which they do not exist absolute and unqualified».

But how can we talk on *inward domain of consciousness* if it no longer has a literary nature, it is no longer associated to paper and was transformed into light, acquiring an ephemeral and volatile nature? How to talk about freedom of tastes and interests in a culture of mass production at low prices and apparently high quality?

Gradually, the picture of the State was becoming into an aristocratic and dictatorial entity

– without a specific dictator, a Prince, but with hundreds and even thousands of little princes and little dictators.

Of course, around this new bureaucratic elite joined what Karl Marx called the *lumpenproletariat*, first described in his *The German Ideology*, in 1845, and then in the brilliant *18th Brumaire of Louis Napoleon*.

In 1950 there were less than one hundred companies with main offices in Washington DC. In the 1990s, that number jumped to more than five hundred companies, with more than sixty-one thousand lobbyists. In 2005, there were more than ten thousand lobbyists working in Brussels.

In parallel with this dramatic increase of lobbyists around the world – that is, an increase of people able to penetrate and manipulate State secrets in order to take personal or corporate benefits from that information – everything passed to be secretive in its most varied ways.

Everything in the State becoming, in some way, secret meant that it became an authority strange to the individual, which lose his ancient condition of citizenship.

Always genial and often prophetic, H. G. Wells would be telling in his science fiction story, written in 1907 and published the following year, titled *The War in the Air*, about a world war and air strikes against New York City: «One of the most striking facts historically about this war, and one that makes complete the separation between the methods of warfare and democracy, was the effectual secrecy of Washington».

The secrecy of State, taking all individuals as potential enemies, is reinforced by the strategies of fiscal terrorism and default by the public administrations.

Several times, in many countries, perhaps in the majority of them, cases of breach of contract by

the State against the citizen increased dramatically. In case of judgments against itself, practically all States passed to determine the obligatory resource to last juridical instances, *a priori* condemning the poorest citizens and, principally, the medium class – more frequently subject to those legal actions – by their lack of capacity to resist to bureaucracy costs for long periods of time. In many occasions, in diverse countries, like Portugal, even the right of defense of the citizen face to the State passed to implicate the anticipate payment of a contested debit.

Yet in Portugal, as it also happened in other countries, the right to claim against the State became conditioned by a compulsory authorization giving to the authorities power to effective a total official inquiry on the citizen’s fiscal life – for what a reciprocate, of course, never could be possible – dramatically reducing, in practical terms, that right.

Not only, in several countries in Southern

Europe, the States took many months, in various cases years, to pay their debits, condemning thousands of companies to bankruptcy. In 2008, for example, governments of Portugal and Spain were accused to not pay in time their debits to companies of civil construction, generating a devastating degeneration in the sector.

In many countries, the only solution to receive a payment from the State passed to be corruption.

The ancient principle of reciprocity between State and Nation practically finished. If a common citizen did not pay the taxes imposed to him, he surely would be sent to prison. But, nothing would happen if the State did not pay its debits, as it started to be each day more frequent after the last years of the 20th century. Even if in some States courts assured the right of defense face to authorities, the citizen's losses in time, among other ones, would never be paid. Many times losses that hardly affected the results of an entire

life of work. At the same way, in general, nothing happened to corrupted politicians or important public servants involved in illicit acts.

According to the principles that characterized the middle class universe, money accumulated after the payment of taxes was a strict individual question, with a rigorously private nature. But, for a low power society no question can be *rigorously private* and accumulation was substituted by continuous consumption and credit. In this way, the States passed to disrespect bank secrecy, simply not recognizing its judicial validity, making free the access to bank information of any one, transforming the question into a mere bureaucratic act.

The United States and France are two exemplary countries in this phenomenon, fact that put them frontally against Switzerland, one of the only survivals all over the world in the respect to secrecy, privacy and individual rights. One can argue that secrecy benefits criminals – but one of

the pillars of the Western world is the principle according to which *everyone is innocent until proven guilty*, which was born from the Roman maxim *ei incumbit probatio qui dicit, non qui negat*, the burden of proof rests on who asserts, not on who denies.

Even in Switzerland, when the evidences of a crime appear, bank secrecy is immediately suspended by a judicial authorization.

With the end of bank secrecy without judicial authorization, following only to bureaucratic and political criteria, in various countries, the States gradually incited delation among citizens – like what was common in the Middle Ages – as a way of control amplification.

In the first years of the 21st century, Switzerland passed to suffer all kinds of attacks, many of them with the only objective to discredit that which surely was the only democracy in the world, in a ferocious campaign looking to end

its bank system and establish the international aristocratic bureaucracy standard.

But, such increasing conflict between States against Nations also presented flagrant contradictions. If, in fact, the police State for which fiscal terrorism became vulgar tool for new incomes – from car transit fines to persecution against the survivals from the medium class, generally classified as *rich* – it is also true the appearance of a powerful symbiotic involvement, sometimes promiscuous between big companies and the State, arriving to situations where it were flagrant the domination of the first and the submission of the latter.

As Galbraith affirmed, already in 1979, «the State is an important client. It is the State that buys for the airports, highroads, television channels, telephone networks, army, as well as with the financial help without which those objects could not be produced or sold. It from the State, yet, that emanates a more and more closed network

of regulations and restrictions that affect the selling and the use of products. Thus, the industry of transformation must have intimate relations of dependency, of symbiosis and sometimes of corruption with the modern State».

In the thirty next years many things happened, like the generalized privatization movement of highways, television channels, utilities of energy production and telephone networks. But, those changes seem to have been a superficial fact, giving to the States, each day bigger, the possibility of a quick and generous but extremely fragile and provisory income of capital.

If, by one side, big companies continued to have integrated as workers employees or ex-employees of their respective States, politicians of all kinds – evidencing a new type of promiscuity, even deeper and free from the old concerns – on the other hand, the continuous amplification of bureaucracy requested an accelerated increase of incomes through taxes.

But, the principle of *democracy* demands the centers of the economic power be independent from the political authority, as is defended by Robert Reich. For him, gradually, the world dived in an era of what he called *supercapitalism*, after the 1970s, with a dramatic degeneration of the old values of democracy.

Three essential elements designed the classical comprehension of the economic systems in the 19th century: consumer's spontaneous sovereignty, elector's supreme sovereignty, and the submission of the companies to the laws of market.

With low cost society, individual consumer simply has no longer importance. What started to be valid were great numbers, statistical data. On the other hand, a great diversity of products and services led the consumer to be quickly adapted to the fast changes of fashions, moving from sector to sector between different suppliers. Consumer's

sovereignty died with the end of the right to claim, and the end of the protest, which makes no longer any sense.

Even what Galbraith called the *inverted order* stopped to make any sense. Galbraith made reference to a curious phenomenon: if, in the industrial era, companies tried to attend to people's needs, and compete in such aim; in the called *affluent societies* the order was *inverted*, taking as its aim no more to attend social functions but yes to create new needs. However, in low power society it is no more about *needs* and yes about consumption while leisure and pleasure – condition that clearly illustrates the disintegration of the citizenship.

Thomas Humphrey Marshall, British sociologist who lived between 1893 and 1981, argued that the modern sense of citizenship was based on the development of civil, political and social rights, respectively in the eighteenth, nineteenth and twentieth centuries. Only with

those three rights attended we would have full citizenship.

However the prices of aerial tickets became very inexpensive in the beginning of the 21st century, Europe, the United States, Australia, Canada or Japan among other countries did not issue the necessary authorization even for a touristy visit to poor people. The right of free migration was virtually eliminated, and with it also one of the pillars of the civil rights: the right to freedom of movement.

In 1999, Dutch government adopted a bill called *Law on the Undocumented* or *Wet Ongedocumenteerden*, which allowed the immediate arrest and deportation of any person without passport seeking for political asylum. A person who is fleeing from his country rarely has access to the documentation supplied by that same country - what is, strictly speaking, to eliminate even the right of political asylum.

In fact, laws and endless bureaucratic procedures had already eliminated, in most countries in the beginning of the twenty-first century, the right of migration to hundreds of millions of people, contrary to the Article 13 of the Universal Declaration of Human Rights which says: «Everyone has the right to freely move and choose his residence within a State».

Other fundamental civil right, the right to privacy, practically ended.

If, by one side, the democratic systems – probably having Switzerland as the only exception – were dominated by a new aristocratic class, controlled by large companies and bureaucratic parties, formed a reality where the effectiveness of the vote was practically eliminated; on the other side, a strongly globalized planet also did not permit the effective right of vote. The United States exerted a tremendous influence in many other countries, but to foreign people it was not allowed the right to vote – the same can be said

about France, England, China, Brazil and so on – eliminating the political right.

Finally, with the transference of control of health care and schools from the State to private companies, the social rights to education and health pass to be exclusive to who can pay for it – disintegrating the social right.

With the end of those three rights – civil, political and social – we also have the end of modern sense of citizenship. People passed to be individuals without citizenship!

But they did not become, in reason of that, more free. Everyone passed to be subjected to permanent control and surveillance.

It is a world in which the figure of Ret Marut would be literally impossible. Marut – who has been compared to Henry David Thoreau – was born in the nineteenth century, but who he really was or even his real name were insoluble enigma. Among

his various identities are B. Traven, Hal Crover, Traven Torsvan, Artum, Fred Mareth, Albert Otto Max, Otto Feige and Anton Räderscheidt among many others. He was a writer, actor, photographer, literary agent, explorer and farmer among other professions. Speculations suggested that he was, in fact, Jack London, a millionaire American, a former black slave, a leper, Mexico's President Adolfo López Mateos, his sister, Mexico's President Elias Calles, the director of a book German publishing company and Arthur Breisky among others.

In one of his texts, Marut said: «Now I know that my country is classified in files, I saw it under a kind of employees skilled to erase in me the last traces of patriotism. Where, then, is my homeland? My home is always where I am, where nobody bothers me, where nobody asks me who I am, where I come from or what I do».

John Houston filmed one of his most famous books, *The Treasure of Sierra Madre*, in 1948.

do not work by “averages”. When an average reaches culture, we have *mediocrity* and art simply disappears.

Since the end of the 20th century, many people passed to identify the end of citizenship with the called *neoliberalism* – especially in Europe – as to refer to a new liberalism or, in other words, to the ideas presented by Adam Smith and David Ricardo now took as universal values.

But, in fact, what started happening in the beginning of the 21st century was something completely new: almost disintegrated States, completely controlled by big corporations; those large conglomerates spread out through the planet, now without clear reference to specific culture or country; the figure of the State against Nation; the end of citizenship; the end of the middle class; super control and super surveillance among a countless number of new elements that passed to constitute a new society.

Until then, everything what characterized the aspirations of practically all societies in the world, in all times, was forged by necessity, by the lack of resources. As Galbraith argued, it is the necessity what makes us to have clear ideas.

In the last years of the 20th century the expansion of the world wealthy was an overwhelming phenomenon. And, even if that formidable expansion had established small nucleus of extreme concentration, exponentially increasing social asymmetry, it happened a distribution of wealthy in low intensity and in a planetary scale through all kinds of artifacts – designing the low power society.

Hyperconsumption in a *hyperurban* planet eliminated the clearness of aspirations that before had designed the old medium class.

In political terms, the new society of pleasure and consumption, of the non-protest, of the non-claim, designed by the domination of States by

big companies, which also dominated the political class, the relevance of who was to be elected ended, save some notable exceptions.

The called representatives of people passed to be something like interfaces between market fluctuations and zones of big economic interests, practically meaning nothing to the common citizen, strange to people's reality.

Everything passed to be designed by masses of statistical data with low impact in personal lives.

Thus, the design of national politics passed to be dictated by market tendencies with the objective to keep unemployment and inflation at acceptable levels.

Groups of politicians passed to dispute televisions' backstage, newspapers and magazines plunging into a continuous debate without ideas, only as entertainment, alternating themselves in

the golden places of a new aristocracy.

Curiously, still bringing ahead the symbolic figure of the *worker*, much of the discourse of left-wing politicians passed to be characterized by the defense of the right to progress and individual sovereignty – which were the values of the old medium class, the called *bourgeoisie*, before classified as right-wing!

In last analysis, it is about a social metamorphosis – everything tending to great low cost expansions, in a low power society where direct democracy seems to have become more and more a distant utopia.

Populations in countries like China and India became avid consumers, but practically without any political function – what established a standard of identity with gigantic masses of consumers in other countries and passed to be illustrated by mass tourism.

It is estimated that in 2020 about 20% of the world population would be of tourists in some part of the year!

Only in the United States there will be around seven hundred and fifty million passengers in about seven million and five hundred thousand flights every year.

In France, in the year of 2005, more than two hundred and fifty amusement parks attracted around seventy million people per year, the equivalent to a country larger than France itself! In that same year, only *Euro Disney* passed to count with more than twelve million visitants per year, equivalent to a country like Greece!

Several groups of ecologists passed to defend the transformation of a *low power society* that, however in a distributive character, implicated an increasing energetic consumption, into a *low energy society*, even more controlled, more regulated, designed by instruments of punishment to oblige

people to decrease energetic consumption levels.

Of course, the great and increasing energetic consumption generated by low power society did not happen in absolute terms of concentration, that is, in terms of high voltages.

Alexander Volta invented the first modern batteries in 1800. Great part of the increasing of the energetic use in the beginning of the 21st century was in the use of low electric tension batteries. Such use appointed to an annual increase of more than 6% in 2006.

In that context of crescent raising of energetic consumption and simultaneously *miniaturization* of its distribution, several times it has been referred low cost companies that knew a great success after the year 2000, like *Skype, Ikea, Zara, Google, Ryanair, easyJet* or *Wal-Mart* among others, forgetting some pioneers like *Microsoft, Apple Macintosh* and *IBM*, which were responsible for the emergence of the personal computer; the

chain of restaurants *McDonald's* with their low cost food, responsible for the concept of *fast-food*; *Coca-Cola* with its fast-drink; or *BIC* with their popular low cost *sphere-graphic* pens that knew a planetary success after the 1960s.

In the same way that cars redesigned the *family*, turning possible its geographical expansion, human relations were not immune to the appearance of new information technologies.

New interactive low cost telecommunication media in real time, like *Skype*, *Messenger* or simply *MSN* among others, made many groups of teenagers started to pass various hours, every day, closed in their rooms but connected with other teenagers, as if they were in group, forming a strong gregarious behavior at distance, virtual.

Still, the huge avalanche of *compact discs*, quickly almost extinct by music compressed in *MP3*, recorded movies on *DVDs*, the fabulous Internet universe with *YouTube*, *Hi5*, *MySpace*,

counted with more than one hundred million users, adding more than one million new users every week!

In that year there already were personal blogs receiving more than five hundred thousand visitants per day, surpassing many old media with hundreds of workers, like important newspapers and magazines.

In 1991, Linus Torvalds, then a student at the University of Helsinki, in Finland, started working on a computer platform that should be free to everyone. Developed on a collaborative basis, his platform called *Linux* became worldwide famous and accused to be against the old principles of capitalism. Linus Torvalds replied saying that «we are not based on locked systems, not on financial capital, not on public subsidies, neither on distribution systems and other private companies' advantages. It is not about socialism, in contrary it is free market».

married mothers.

In the United Kingdom in 2005 there were more than two million single-parent families, with more than three million children, representing around 25% of the young English families.

In 2003, in Sweden, a research showed that people who had grown up in single-parent families had three times more tendencies to suicide than people born in families which had the presence of father and mother.

In the United States, in 2007, approximately 26% of people younger than twenty-one years old had grown up in single-parent families. Around 84% of the responsible for those families were women.

This phenomenon indicates a possible transition to a society with a more marked matriarchal character – women passed to be more time closer to the children and, consequently,

becoming more responsible for their education.

In general terms, man seems to essentially be more abstract and woman more intuitive, he formalizing a social logic of concentration and she more oriented to dispersion. However, even women who suffered the restrictions of a high concentration culture along centuries, see their lives radically changed in the sense of dispersion – free work, free thought, and free sex.

Biologically, it looks like the apparent contradictions of *zero* and *non-zero sum* games: men, designed by a logic of concentration in abstraction, must spread out his actions; women, designed by a logic of intuition and dispersion, have the powerful nature of gestation.

The entire conception of sexual behavior changes. As I referred in *The World of Perplexity*, of 2006, contrarily to the erotic, pornography and obscene begun with literature as a condition of fragmentation and specialization – the figure

detached from the ground. But, in the virtual universe this is no longer possible. The word *pornography* literally means *writing about prostitution* and appeared as cultured term only in the 18th century. The word *obscene*, by its turn, appeared around two centuries before, etymologically meaning *bad presage* and indicating, in its origin, an offence to the habits that only them became standard.

With the virtual world, in a society whose very first logic passed to be designed by distribution, pornography and obscene gradually left to have a place of importance and taboo they had before.

In Internet, between 2002 and 2007, the quantity of pornographic sites grew in an order of 1800% all over the world. In 2007, from the sixty-eight million requests made in search engines, all over the world, more than 25% looked for pornographic sites. It was then estimated that more than 10% of the Internet traffic were directly related to pornography.

What begun to exist were ordinary environments each time more erotic – from advertisements in the streets to movies or visual messages in mobile phones – gradually incorporating what before was obscene and pornographic.

Even pornographic movies that before were commercialized with great difficulty in exclusive black markets, forbidden and of high cost, passed to be easily sold with low prices, a little everywhere, definitively absorbed by free market.

Totally integrated in the low cost and low power spirit, sex passed to integrate common markets and stock markets all over the world, with thousands of products of all kinds directly or indirectly supported on images and ideas before forbidden.

On the other hand, a low power society – immersed in the huge quantity of low price products inside a context of continuous consumption

– integrates what the old medium class society considered as social minorities, so many times repudiated and repressed. Now, all them became consumers.

Rex Wockner, homosexual activist in San Francisco said, in an article published by *Wired* magazine in a 1998 edition that «in the old days, Activist A had to call Reporter B at Paper C and hope that the editor was interested. That strategy used to take two weeks to get anything out and only reached the readers of gay newspapers. The net changed all that. Now it takes 10 minutes to reach millions».

But, as if we are attending to a dissipation process, typical of fluids and viscosity, groups of religious fundamentalists and ghettos of all kinds seem to have become more and more intensified.

Ghettos passed to be present even in cities like Lausanne, in Switzerland, where such phenomenon was practically unknown. In Lisbon,

there are points in the city where “police does not enter” – what was very common to large metropolis like Sao Paulo, Rio de Janeiro, Johannesburg or Moscow, later amplified to almost everywhere.

Manuel Aalbers, urban planner and sociologist at Columbia University, starts his text *The neglected evidence of housing market discrimination in the Netherlands*, dated of 2002, saying that in the «last seven years the Netherlands has had a large number of reports on ethnic and housing segregation». Between 1971 and 1997, the number of immigrants in the Netherlands rose from 1.6% to 9.4% of the population, and «true concentrations of ethnic minorities have cleared increased». It is a concern also considered by other researchers.

In the first years of the 21st century, one of the problems that alerted responsible people for the educational system in the Netherlands, a traditionally multicultural country, was the appearance of a great quantity of schools exclusively

oriented to closed groups, with clear excluding philosophy – like educational establishments only for white, European or Muslims, for example.

It is a phenomenon not exclusive to the Netherlands. In countries so different like Mexico, Brazil, Argentina, France, the United States or Portugal – in a process that has been more and more intensified – there is a clear division between schools for rich and schools for poor.

Teleanthropos – education, viscosity, stress: the emergence of neognostic – copyrights and clones

Bad artists copy. Good artists steal.

Pablo Picasso

Yet, the context of continuous consumption does not implicate continuous education – in contrary, it is enough to exist a low power of purchase, but continuous and generalized, beyond a minimum and superficial education enough to turn possible the impetus to consumption.

Thus, schools and universities lose quality and reduced the time for basic formation – as it was established by the *Bologna Declaration* in Europe for example – in way to permit a quick increase of the quantity of people integrated in the labor market, more and more precarious, and to quick amplify the new mega class of continuous consumers.

The Treaty of Bologna not only integrated the European universities – which was very positive – but also reduced education at undergraduate level, which was to be five years, to three!

Educators in virtually all sides agree that the time of three years is totally inadequate for a physician, a lawyer, an engineer or an architect to perform their jobs with a reasonable degree of competence.

Thus, thousands of professionals without training are thrown into the job market – because qualification is no longer a prerequisite, but yes the

enlargement of the continuous consumer class.

In this way, all high repertoire art and culture projects become restrict to elite underground groups – a marginal elite, many times falsely disguised as poor people, trying to imitate the new gigantic class of eternal poor consumers, but more and more inexistent in statistical terms.

Similar process happens with the design of the cities that, a little everywhere in the world, intensifies the presence of closed communities installed in the middle of huge shapeless human agglomerates, like the megacities – a phenomenon that starts to know an accelerated expansion already in the 1980s.

They are the edge cities – concept coined by Joel Garreau in 1991 in his book *Edge City: Life on the New Frontier*. A new urban typology that inaugurated a new kind of *periphery*, no more located in the limits of the city, and generally rich and distributed in discontinuity.

However the *edge cities* had born in the frontiers of urban space, where before only existed villages and agricultural properties, they became autonomous and closed urban entities gradually projected inside large urban concentrations.

Edge cities implicate a boundary, a centrifugal force.

In a curious phenomenon, small replications of the old edge cities – what we could call *bubble cities* – started to appear in the interior of the megacities, creating closed sets of streets with luxurious and super protected houses, forbidding free flux of non-residents – a very common phenomenon in Americas but still rare in Europe.

Even if low power societies are established in an environment of continuous consumption of services and products with apparent quality and low price, each consumer is a person, relatively isolated from the others.

turbulences and ruptures, what leads us to the thought of the famous mathematician and thinker Lewis Fry Richardson with his poem that synthesizes the ideas present in 1920 in his text *The Supply of Energy from and to Atmospheric Eddies*:

*Big whorls have little whorls
That feed on their velocity,
And little whorls have lesser whorls
And so on to viscosity*

The poem illustrates the same logical design we find in real time interactive telecommunication networks of networks and that are the most fundamental base of the low cost products and services and of a low power society.

In such low power universe we have two axes crossing each other – the implication of a temporal revolution with real time, phenomenon that started in the 19th century with the telephone; and a geographical and spatial revolution, both indicating the emergence of the *teleanthropos*.

When *real time* appears, everything becomes *lack of time*. Everything is easily reachable, without space or time. We can attend to a real war, and we can do it driving a car, in the middle of an intense traffic, by chance.

The disintegration of time provoked by the emergence of real time generates what we call *stress*.

The word *stress* means *pressure* or *tension*. When we are in movement and suddenly something unexpected happens without time for any kind of mental preparation, there is the sensation of an immediate lock, sensation as if time had stopped, and everything seems to be *compressed*. It is what we feel when we are under *stress* – we are *compressed*, under pressure.

Real time makes that various unexpected events occur simultaneously.

corporal odors were pointed as responsible for a rise of stress in labor place.

According to the newspaper *Le Monde* in 2004, more than 11% of French people declared to be under intense stress and depression. The quantity of people under stress in France rose four times between 1970 and 1980, and more than seven times between 1970 and 1996!

Reports by the *American Psychological Association*, of 2004, revealed that 54% of the American population was very worried with the level of stress in their daily life, 62% considered that their job exerted a significant impact in the stress levels; and a crescent number of children and teenager said to live under stress. Those same reports indicated that 73% of people in the United States pointed money as the main factor for the rise of stress levels.

Money became, for the first time, an essential element of real time. Credit cards, ATM

In general, people believe that bad news provokes stress – it is an illusion generated by a typical literary approach, which deals with *contents*. In truth, the phenomenon of stress is directly related to *time*. When someone dies, the sudden disappearance *immediately* transforms the reality of everyone who is around and a situation of stress appears. It is not the *content* of something that produces stress, but the *structure of time*.

With *real time* everything changes *immediately* and, surely, it would be not difficult to trace a history of the stress beginning with the appearance of telegraph and telephone in the 19th century.

In 2004, Michael Marmot, Professor of Epidemiology and Public Health and head of the *International Center for Health and Society* at University College in London, published *Status Syndrome: How your social standing directly affects your health and life expectancy* where

Coined by René Berger in the 1990s, the term *teleanthropos* indicates the human being formed at distance, like a species of product by a collective and virtual *Frankenstein*.

In 1800 only 2% of the planetary population was urban. In 1950 the urban population all over the world was about 30%. In 2000 that population was around 50%. In 2005 the number of people living in cities was estimated in almost three billion and two hundred million people.

So, in 2008 there were more people living in the cities, all over the world, than in the countryside. Only in the second half of the 20th century, according to the United Nations, the world urban population was multiplied four times. It is estimated that in 2030, having stable the tendency of the beginning of the 21st century, the world urban population will surpass the 70%.

Still according to the United Nations reports, almost 90% of the urban growth between 2000

and 2030 will happen in poor countries.

More than 13% of the population in the United States in 2005 was born in a different country – in France and in Germany this number was approximately 11%. And around 22% of the planetary Gross National Product was dedicated to tourism travels all over the world!

In 2008, more than five hundred thousand Chinese lived permanently in Africa.

According to data of 2001, London's Heathrow Airport transported more than sixty three million passengers a year through one thousand and two hundred fifty flights per day.

In the beginning of the twentieth century, a typical American traveled, along his entire life, around 1.2 thousand miles. Only one hundred years later, he passed to travel more than twelve thousand miles every year and only with his car!

In markets of almost all cities it became common the commercialization of fruits native in different parts of the planet, trapping even the natural rhythm of climatic seasons.

Great part of the mineral water consumed in New York City in the beginning of the 21st century was bottled in France or Italy. Half of the vegetable and 95% of the fruits consumed in the United Kingdom were produced in other countries – phenomenon that had the opposition of environmentalists and that passed to be known as *food miles*, term coined in the 1990s by Tim Lang, professor of food police at City University in London.

In the first years of the 2000s, around 30% of the products transported in English roads was food.

In England between the years of 2005 and 2006 *food miles* knew an increase of about 31%.

Similar reality could be found in the case of human organs transplants. In 2005 around sixty-six thousand kidney transplants, twenty-one thousand of leaver and six thousand heart transplants were officially registered. The increasing quantity of transplantations, every year, not only started a new kind of international commerce but also a new activity: the *transplant tourism*.

The commerce of human organs knew such an increase in the first years of the third millennium that, in 2004, the *World Health Organization* adopted a resolution urging the State members to «take measures to protect the poorest and vulnerable groups from *transplant tourism* and the sale of tissues and organs».

Transplant tourism appeared as a kind of illegal low cost commerce of organs, avoiding the high bureaucratic costs imposed by different States.

In the beginning of the third millennium,

any place, independently from their origin.

In the cities, the great quantity of restaurants of all over the world, with typical cuisine from the most varied cultures, was a thing practically unknown until the end of the 20th century.

In the 1950s, if someone was not in one of the five or six most developed cities of the planet, it would be practically impossible to taste the cuisine from Japan, Malaysia, Thailand or China – and in the East, from Italy or France, for example.

In the first years of the 21st century, more than half of the thirty thousand restaurants in Paris were dedicated to the cuisine of other countries, many times from places literally located in the other side of Earth.

Practically every big city in the world passed to offer the service of restaurants with cuisines from various regions of the planet.

Even so, few were the establishments with a refined cuisine. Great part of the restaurants appeared in the last years of the 20th century followed to low cost principles: food with *apparent* good quality and low price, good appearance and accessible to practically everyone.

To have an idea about how fast such transformation happened, until the 1960s and 1970s *pizza* was practically unknown in Portugal, an European country distant only about one thousand and one hundred miles from Italy. Until the 1980s, the fruit *kiwi* was unknown in Brazil, and so on.

Responsible for a kind of explosive planetary distribution of a very specific kind of food – sometimes severely criticized by its low alimentary quality because of high weight in calories and saturated animal fat – the chain of restaurants *McDonald's* had, in the beginning of the 21st century, more than thirty thousand unities operating in more than one hundred countries.

2008 – *Wikipedia* quickly became the most used encyclopedia of the world, becoming ten times more important than the celebrated *Britannica Encyclopedia*, according to some analysts.

Wiki in Hawaiian language means *fast*.

In 2008, only the English version of *Wikipedia* had more than one million articles.

Quickly, television was incorporated to planetary telecommunication networks of networks. The same happened to radio and with all communication. Everything passed to be in network.

Just after its launching, *Google Earth* announced in its main page: «With *Google Earth* you will be able to fly to any place on Earth to see satellite images, maps, places, buildings in 3D and even to explore the sky. You will be able to explore a complex geographic content, to store visited places and share them with other users».

Cities, new spaces in any place of the planet that passed to be free and regularly visited by millions of people, not matter where they could be.

Other sensational tool was *Google Sky*, which permitted an experience similar to that of *Google Earth* but with images of the Universe. Thus, it became possible and accessible to practically anyone not only to virtually fly on planet Earth but also to dive inside the deepness of the sidereal space, an adventure before reserved to specialists on astronomy.

The success of *Google Earth* and *Google Sky* was such that in April 2008 it appeared the news that *Google Ocean* was being prepared – then still with provisory name. With it people could virtually dive in the seas and travel through three-dimensional images of oceanic topography, with details of the marine environment through the combination of satellite imagery, scientific reports

and photos.

In March 2008 there were already more than one billion and three hundred million users of Internet all over the world, representing around 20% of the planetary population. In that same moment, there were more than one hundred and three million domains, with one or more active sites.

In 1851, the American writer Nathaniel Hawthorne wrote in his book *The House of Seven Gables* something that at his time was considered insane scientific fiction, but that would be surprisingly prophetic one hundred years later: «It is a fact that by means of electricity the world of matter has become a great nerve, vibrating thousands of miles in a breathless point of time. Rather, the rough globe is a vast head, a brain, instinct with intelligence!».

Around one hundred years later it would be exactly this passage from Hawthorne’s book – an

to almost all kinds of music – but no longer to a *different* music. Everybody passed to have access to the most varied kind of information, always on statistical average.

Jacques Attali shows in his fascinating book *Bruits: Essai sur l’Economie Politique de la Musique*, of 1977, how what we call “music” is a kind of design of power in a logical order of sounds.

Thus, the establishment of a specialized order on the set of sounds established power and, with it, the principle of subversion. Because, by its very nature, music imposes itself on the order of everything.

We cannot avoid hearing. Music is a deeply invasive non-verbal language.

Avant-garde music is subversion, a deep questioning of power. And it has virtually ceased to exist. Being everything entertainment, music became repetition and reworking of old commercial

cars, anywhere we could be, waiting to be attended at phone, in a medical unity, inside a bookshop, in elevators or shopping in supermarkets – with music coming from the most distant places and in a hallucinating diversity!

Before, the quantity of artifacts produced was relatively small. Many times, only with the money received as salary – not being necessary to assume debits – a person was able to buy practically all artifacts at disposal in his period of life.

They were the medium class' feasible dreams.

The difference between a baker, an engineer or a physician was relatively small. However a physician could live with more comfort, he could not buy much more artifacts than a baker or even than a regular worker in an industry.

There was, then, a true *limit of consumption*. It was about a finite dominium.

With the emergence of the low power society, that limit simply disappeared.

People can no longer buy everything it is in the market. The old limits were disintegrated by a huge quantity and diversity of products, many times produced in the most diverse parts of the world.

Pressure for consumption passed to be so high that the first objective of people, in general, left to be to cultivate a profession and was transformed on the simple aspiration to make money, as quickly as possible.

This created a new aspiration for a hyper rotation in labor market, attending the hope for better incomes and, consequently, higher consumption.

On the other hand, strongly oriented to the present time, in a universe of continuous

consumption, the old sense of long term investment depending on a safe future return – typical of the medium class – practically disappeared in the low power society.

The hyper present made that not only contemporary products and services, but practically everything that was produced before in the entire planet became object of large scale commercialization – like what happened with the commerce of antiques, connecting ancient societies and realities geographically spread out on the planet and creating an informational network of space time in a logics of continuous dispersion.

Data became overwhelming. A process of integration between different cultures, connecting the most distant geographical spaces and temporal zones, practically started designing everything people produced – this is the very first design of the *teleanthropos*, a true civilization metamorphosis.

Thus, in various senses, the low cost

consumer was transformed into a nomadic being – from the easy change from commercial suppliers, located in different countries, always following the principle of lower price, to the easy transit between different times and cultures.

Don Tapscott and Anthony Williams, respectively professors at the Toronto University and the London Business Scholl, said in their book *Wikinomics*, of 2007: «The authentically global company don't have frontiers, neither regional structures. It builds transnational ecosystems to conceive, assemble and distribute products to all over the world».

Even in political terms, although some authors underline the fact that the borders of Europe, the United States of America or even of China have become even more stringent, the previous reality of national borders, separating hundreds of countries, led to emergence of a kind of continental walls.

Even if those walls are relatively impervious to the passage of people, they became non-existent for large international ecosystems, including drug trade.

This complex flow, as if it was about a fluid, designed a discontinuous reality, but non-linear and totally different from that produced by the literature.

In parallel to the phenomenon of a society of low, continuous, generalized and low power – for which superficiality is a very first sign – points of high concentration of knowledge appeared: true *singularities*.

Like a clear but apparently paradoxical chemical phenomenon, like attraction zones formed in turbulent fluids, also in this complex of viscosity *singularities* of the most diverse natures are formed.

Thus, in the same way Nature operates

by opposites, a hyper connected system is also designed by tendencies of fragmentation and projection of *singularities*: small relatively closed structures.

It is about a curious phenomenon that not only revealed fanatic nationalists and religious groups reacting – sometimes desperately – against the uncontrollable emergence of something higher and more overwhelming than a *global village*, but also small aggregated of multimillionaires for whom, since long time, money surpassed any relation to consumption.

World Bank's data from 2003 showed that 20% of the planetary population controlled more than 80% of the wealth and around 60% of the commercial energy in the world. However, if that research went deeper, it surely would show an asymptotic curve, with a gigantic concentration of wealth in a much more reduced number of people.

It was exactly that what Olivia Ward, foreign business journalist of the *Toronto Star*, revealed in the end of 2006, indicating that only one hundred twenty million people, in a planet inhabited by around six billion, controlled 50% of the world wealth; and only sixty million people controlled 40%!

In the last years of the 20th century, Bill Gates' net worth equaled the total net worth of the bottom half of the American families.

Small and closed low repertoire groups – like anomalous fragments of the continuous consumption mass – emerged with high power, in some sense like what happened with the new aristocracy of the political world and the new millionaires in permanent competition.

The projection of singularities, as discontinuities in the *hyperurban* fabric, generated yet another human type that appeared as a probable evidence of a new civilization wave:

Anti-authoritarian, plunged in that complex approach facing to the Humanity, they manifested – in general – against classifications and preconceptions.

This new human being, without precise nationality, without precise race or religion – who could be called *neognostics* – gradually became a little everywhere in the world. But, almost always, constituting exception, with no place in the super bureaucratic and massive low cost universe – like what happened, in certain sense, to Gnostics in the Middle Ages.

Singularities, instabilities, volatility, fluxes, turbulences that show us a planet working no longer as a strongly hierarchic structure, as it was typical in the image of the literary world, but while a *nano decisions* system distributed in discontinuity, as a kind of viscosity.

Cellular phones – each times smaller, with

In this way, even manufactured products, artifacts of all kinds, bundled in low cost universe, passed many times to be types of *services conductors*.

To buy a car, for example, passed to be equivalent to acquire a series of accessories to be permanently *updated*, even as kinds of *doors* for the most diverse services like travels, new software, movies and so on.

When a car is acquired, there are hundreds of small products and services attached – radios, CD players, DVD players, air conditioning, navigation systems, board computer, ABS, coolers, televisions and a countless number of electrical devices for example – and the car itself became only a good excuse for a myriad of consumption.

The universe of services exponentially amplifies and transforms the ancient concept knew as *Diderot Effect*.

Denis Diderot, who lived between 1713 and 1784, and who became famous as chief editor and creator of the celebrated *Encyclopaedia*, was responsible for a small and very interesting essay called *Regrets sur ma vieille robe de chambre ou avis à ceux qui ont plus de goût que de fortune*, or *Lamentations on my old robe or advise to who has more taste than money*, which was published in 1772.

In that small book, Diderot poetically describes the transformation provoked by the presence of a rope, which had gradually brought him to buy new furniture, totally changing his entire studio.

The simple presence of the robe led him to consider that it was not in harmony with another piece in the environment, provoking its change. Each new acquired object unchained a new impulse to change something more and, consequently, to acquire a new object. «There was an empty angle aside my window. That angle

asked for a table, which I acquired. Another empty space between the small table of the secretary and beautiful head of Rubens was substituted by two «La Grenée», when he arrives at the end, Diderot was in a totally transformed environment.

This impulse for consumption unchained by a determined object, which passed to be known as *Diderot Effect*, clearly illustrates how the urgency of needs does not diminish with the increase of supply. In other words, consumption always tends to increase in a feedback spiral – phenomenon that was strongly intensified in *low cost* systems.

In a low cost flight, for example, practically everything is permanent offering of services.

The word *service* has an old Indo European prehistoric root in the expression **swer*, which meant the idea to “pay attention”. Curiously, the particle **w* indicated the ideas of *separation*, *detachment* and *propagation*, in opposition to the element **s* that revealed the ideas of *proximity*,

connection and *similarity*. The fusion of those two Indo European elements illuminates the very first nature of what we call *service* and gives us an impressive clue to understand the virtual universe in which services became a fundamental functional trace.

By this way, *service* etymologically means *to propagate connections*.

The new world of low power society, which is strongly characterized by *services* and *low cost continuous consumption*, left to be a reality built by objects and passed to be designed by relations.

Design of the immense continuous consumption mass, a large esthetic movement with very first references on poverty appeared. But never about extreme poverty or misery, but yes *mediocrity*.

Once again, it is not about judgments of value.

When we associate sound and image, rhythm is the principal element, many times with a pulsation a little beyond the average regular heartbeat. Complex syncopated movements and a kind of counterpoint between image and sound realize a recipe for a profound individual involvement, truly hypnotic.

Great part of popular music happens under this sign, many times copied from old successes, like what happens with good part of architecture with the called *catalogues' architects* – who are proud to copy with ability the successes in construction, putting themselves as experts on that repertoire, placing themselves inside the fashion – phenomenon that publicity knows since long time.

In this universe, copyright seems to return, in some sense, even by fragmented way, to what was common to the Middle Age, when plagiarism was considered as a signal of *updated knowledge*, of the *well-informed* person.

The copyright question is one of the most complex in low power society's universe.

The etymological root of the word *author* is the Indo European **aweg*, which meant *to grow* and was related to the development of plants, like the moment before harvest.

The ancient Indo European passed to Latin *augere* that was transformed in the French *accroît* indicating, exactly, the idea of plant's growth.

From that we have the words *august* – it generated the name of the month of August after Julius Caesar's title, but we must not forget that the vintage, in Europe, happens in September and October, after plants' growth in August. That Latin word also generated *augmentation*, *augur*, *founder* and *author*.

Etymologically, *author* is who makes things

to grow. Such notion implicates the idea that the author never *ipsis literis* creates something from nothing, but transforms already existent things.

In fact, everything we know is not ours, as Marcel Proust showed in his celebrated and unforgettable *A la Recherche du Temps Perdu*, or as sagely affirmed Eugène Delacroix when he said the who learns with himself learns with someone very ignorant.

Along thousands of years, the idea of *property* vacillated between what already existed without natural indication of possession, therefore naturally pertaining to all; and the elaboration of something new from the transformation of things, produced by someone.

The word *property* appears from the Latin expression *proprius* that indicated *something of the person*, something different, different from the ensemble of other things – and from that, yet, the sense of *property* as quality of the thing.

The root of the idea of *property right* is subject to the concept of its object. If it is something material and non-universal, it can be property of someone. But, if it is a transformation, the indication of property will depend on the consideration of if its object is part of the whole or is not, what has a strong relation to the status gave to the individual, to the agent of the transformation – if he really is an individual or if he is part of a collectivity.

Abraham Moles' ideas, relating the object to its consumer, indicating that sometimes the destruction of the object implicated a feeling of death in its owner, finished to alert for an inverted phenomenon: the status of the individual gives to the object its very first quality, the notion of *particularity* in opposition to the *universal*.

Because of this, only if we consider the individual as a concrete unity, isolated from everything, we will be able to easily recognize the right to property. But, if we will have the person as

part of the whole, of a community, how could that right be recognized?

The concept of *individual* is directly related to a visual phenomenon: *systasis*. When we look at something we do not see one thing at time, but everything is a single shot – this is *systasis*.

More intensely visual societies easily isolate people more effectively identifying *individuals*. When that happens, *guilty* becomes responsibility of the person while autonomous entity – and the idea of *responsibility*, that etymologically means *response to something*, passes to emerge as a *personal* thing.

A *confessionary*, would be impossible for a predominantly oral culture. The invention of the confessionary, typical in the Catholic church, would only become popular after the 13th century, when the individual already was much more *visual* – and would lose impulse in the end of the 20th century, with the emergence of the real time interactive

hyper telecommunication systems.

Confession deals with *individual* and however it is *acoustic* in its *content*, the confessional is an *individualized closed package of personal sins*.

In acoustic societies, the idea of *guilty* transits between different people and everything is approached in relative terms.

Guilty and *propriety* are ideas intimately interrelated in logical terms. Because of this, so frequently, religions and ideologies associate them.

If in strongly visual societies the idea of *property* is something very natural, to acoustic cultures the concept of *participation in community* is the most important.

When Thomas More wrote the *Utopia* in 1516, he reacted against post Gutenberg visual intensification, which led to the physical

Greek miracle – from its origins until the climax in the Hellenistic period.

Even if we can identify – with higher or lower precision – figures like Thales, Anaxagoras, Anaximandrus, Anaximenes, Heraclitus, Parmenides, Zeno, Socrates, Plato, Xenophon, Aristotle or Thucydides among so many others, it would be only in full Roman Empire with Cicero that we would have the first determinations related to the called *rights of the author*.

That is, thousands of years of gradual visual intensification – passing from the Sumerian world, through the Acadian culture, through the Egyptian universe till the *Greek miracle* – were necessary for the visual wave produced during the Roman Empire be able to generate the principle of the idea about *author's rights*.

But, there is an important detail: the difference between the concepts of *property* and *possession*. A person can be *proprietary* of

possession and not of *property* of knowledge what Cicero defended – who specifically used the Latin word *possessio*.

If such idea already existed in relation to material goods, it would be Cicero the responsible for the start of that concept applied to immaterial terms, as the defense of authorship of an idea.

Around one hundred years later, the great Iberian poet Martial passed to apply the term *plagiarius* – until then only used to designate someone who had stolen a slave – to *literary theft*, the steal of the *form of an idea*, refining the concept of Law, now applied to the immaterial world of ideas, making in this way to emerge the concept of *plagiarism*.

It was necessary a strong intensification of the specialized use of vision through phonetic alphabet and papyrus to make possible the *visualization* of immaterial elements.

It was a phenomenon that permitted the emergence of the right of possession on something that does not exist, in material terms.

In logical terms, Cicero's strong *visuality* is patent in his texts. In *De Inventione*, Cicero argued that «every subject which contains in itself a controversy to be resolved by speech and debate involves a question about the fact, or about a definition, or about the nature of an act, or about legal processes. This question, then, from which the whole case arises, is called *constitutio* or the *issue*. (...) There is a controversy about the nature or character of an act when there is both agreement about what has been done and certainty about how the act should be defined, nevertheless a question remains about how important or of what kind it is, or in general about its quality, e.g. was it just, unjust, profitable or unprofitable?».

Those questions related to possession or to property, to what is or is not profitable, to the just or unjust face to a stable legal corpus, would

be strongly eclipsed when Rome lose control on Alexandria and consequently also on the production of papyrus, plunging in the period *low defined* as Middle Age – *low definition* because what we call *definition* also is a strongly visual question.

Etymologically, the word *definition* means *to determine an end, a profile, to designate the limits of a form.*

And *definitions*, in general terms, would be recalled with more rigor only in the end of the medieval period, specially after the moment when Europe started producing paper, substituting parchment and making a gradual transition to Renaissance.

In the 13th century, after more than one hundred years of intensification of the use of vision through the increasing articulation of paper and phonetic alphabet, the medieval principle according to which all knowledge had a Platonic nature – a divine gift *without transformation*,

without true *authorship* – forbidding, therefore, the commercialization of ideas, started to be strongly questioned and various teachers in the universities – of Paris, for example – started to protest for the payment of their intellectual work.

The attitude of the teachers generated many and alive discussions. Later, the genial Francesco Petrarca strongly reacted against the change that emerged uncontrollable and, like Thomas More but in different circumstances, he denounced his profound revolt in the book *De Remediis Utriusque Fortunae*, wrote between 1360 and 1366, against the fact that books had become vulgar commercial merchandise.

In 1421, the first known *patent* was given to the Florentine architect Filippo Brunelleschi – considered the father of the *flat perspective* – for a project of a ship.

But, it would be necessary some centuries more for the appearance in April 10, 1710, of the

celebrated *Copyright Act* – first regulatory act of the authorial rights, also known as the *Statute of Anne* – which said: «Whereas printers, booksellers, and other persons, have of late frequently taken the liberty of printing, reprinting, and publishing, or causing to be printed, reprinted, and published books, and other writings, without the consent of the authors or proprietors of such books and writings, to their very great detriment, and too often to the ruin of them and their families: for preventing therefore such practices for the future, and for the encouragement of learned men to compose and write useful books; may it please your Majesty, that it may be enacted, and be it enacted by the Queens most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons in this present Parliament Assembled, and by the Authority of the same, that from and after the tenth day of *April*, one thousand seven hundred and ten, the author of any book or books already printed, who hath not transferred to any other the copy or copies of such book or books, share or shares thereof, or the bookseller or

booksellers, printer or printers, or other person or persons, who hath or have purchased or acquired the copy or copies of any book or books, in order to print or reprint the same, shall have the sole right and liberty of printing such book and books for the term of one and twenty years, to commence from the said tenth day of *April*, and no longer; and that the author of any book or books already composed and not printed and published, or that shall hereafter be composed, and his assignee, or assigns, shall have the sole liberty of printing and reprinting such book and books for the term of fourteen years, to commence from the day of the first publishing the same, and no longer (...)».

Again, it was necessary a great visual intensification, this time generated by the use of paper and phoneticalphabet dramatically amplified by mobile types press, for the appearance of the *Copyright Act*, recognizing the right of *possession* to the person who had transformed something that before was common to all, elaborating a new element, of unique nature – almost three hundred

years after Gutenberg’s invention!

Curiously, copyright emerged as recognition of the protection of the form and never of the idea in itself.

In principle, the free use of an idea does not affect copyrights, which are especially sensitive to form, to the structure and articulation of ideas. This is, also, an essential characteristic of vision – the *perception of form* – and, more specifically, it is a fundamental characteristic of central vision.

The *element unique*, while *form*, disposed in a hierarchical chain, where the author is the *vanishing point* inside a logical structure – typical in *flat perspective* – essentially is a characteristically visual idea found in the Renaissance, which would also be the stage for the appearance of the concept of *genius*. An epoch that launched itself in a tiger’s leap – to remind Walter Benjamin – to ancient Rome when other kinds of perspective were known and that, comparatively, knew a less

intense use of vision, through phonetic alphabet and papyrus.

Copyright Act is based on the idea of *reproduction*, of *copy*. It would be the fundament of disturbing questions on author rights appeared in the passage to the third millennium, in the center of a true *explosion* of electronic media and of low cost reality for intellectual goods.

The word *copy* appeared from the Indo European **op*, particle that, connected to the ancient origins of the word *power*, indicated the idea of *work*, of *productive activity*, and that generated the words *opus*, *office*, *official*, *optimum*, *opera* and many Romantic words – like *ouvre* in French, or *obra* in Portuguese and Spanish – indicating the *piece produced by work*.

It passed to the Latin *copis* that meant “abundance”, “rich”; and *copia* that initially also had the sense of “abundance”, “duplicity”. The Italian word *coppia* means *couple*, *pair*.

Just after the beginning of the paper production in Europe, in the 12th century, the term *copy* emerged with a new meaning, indicating the idea of “resources”. Only around one hundred years later the meaning of “copy of a manuscript” would appear; and in the 16th century it would be fully used as to mean any kind of copy, as we do nowadays.

The idea of *abundance* related to that of *duplication* of something indicates *amplification* – in material or immaterial terms. This was the ancient meaning of the Roman *copyists* who amplified the Greek heritage, so many times through replications in stone of originals in metal.

When we transit to a real time virtual universe, *copy* gives place to *clone*.

In 1903, the American Botanist Herbert John Webber coined the word *clone*, indicating the principle of asexual reproduction, as *reproduction*

without participation.

The term *clone* launches itself to the Greek *klon* that means *sprout*, indicating the idea of a vegetable growth – a curious and mysterious approximation to the etymological root of the word *author*.

We return to the initial question about *rights of the author* – those rights, being of *possession* or *property*, will depend on a question that is fundamentally esthetical: if the logical organization does not implicate the *detachment* of each person as a strongly autonomous entity, how that right could be recognized?

In the virtual universe, with low power society designed by the aspiration to a low cost continuous consumption, some essential elements for reflection appear.

One of them, the planetary integration – which would finish to be popularly known as

globalization – would evidence the aspiration to a *global ethics*.

The word *ethics* appeared from the Indo European root **swe* – practically identical to the word *service*.

Again, we find the Indo European particle **s*, indicating the idea of *link* – like what happens with the words *service* and *possession* – meaning here the *link of a person to a specific social group*.

Revealing the original sense of *link*, the Indo European **swe* was amplified to the Greek *ethos*, which means “habits” and also *ethnos* which means “race”.

So, the idea of *ethics* would appear as the set of principles that designate human relations in a determined context.

On the other side, from that old particle **s* another Indo European word appeared: **segh* that

indicated the idea of a *quality inherent to the thing* – something that characterizes the object, which belongs to it as an essential element and that, therefore, *designates* it. It passed to the Greek word *hektos* meaning “what one can have”, and to *epokhê* that means “stopping”, as a *discontinuity of quality* – and that made our word *epoch* appear.

When we deal with a determined *epoch*, we make, therefore, a kind of *cut* in time.

What we defined as *ethics* passed to be a comprehension of uses and costumes of a determined people, in a determined *epoch*. A typically visual approach, delimitating and classifying time and space.

In the 1960s, the legendary art critic and philosopher Herbert Read, and the no less genial physician and scientist Lewis Thomas, his contemporary, used to say that the history of words enlightens, in some way, the history of the ideas.

It is very interesting to notice the ancient link between the words *service*, *possession* and *ethics*. No less interesting is to observe that the word *ethics* appears only in the 13th century, after the beginning of the process of intense visualization in Western world, just about one century before Gutenberg.

When we penetrate the 21st century, through real time planetary telecommunication systems of networks – like Internet – we pass to deal with all epochs and all places as a single continuum of knowledge.

It is a complex fabric of knowledge in permanent turbulence, in an individual process of continuous discovery, where *clones* substitute *copies*.

Any *copy* implicates a certain degree of degeneration in relation to the original. A *copy* is never perfect and never better than the original.

existence of an *author* is typically literary. Both concepts appear with the modern *book*.

And it no longer is about *clones* of texts, music or movie – but simply of anything. A report by the *Federal Trade Commission* of the United States indicated that the volume of fraud denounces in auctions made in Internet duplicated between 2002 and 2004.

The volume of counterfeit inside and outside Internet simply exploded.

The phenomenon started in the 1980s, initially through letters – and generally from Nigeria – promising millions of dollars to whom replied them, quickly passed to Internet and spread out by the world. There are letters or messages by criminal groups, international gangs, who try to convince naïf and greed people that they have a great sum of money in a bank account and that they need someone as correspondent, who will receive a generous commission, payment free from any

work. In fact, as soon as the victim replies a bridge with the criminals is established, and a process of extortion and serious threats begins, even arriving to kidnapping.

To Moisés Naím, editor of the *Foreign Policy* magazine, «in defiance of regulations and taxes, treaties and laws, virtually anything of value is offered for sale in today's global marketplace – including illegal drugs, endangered species, human chattel for sex slavery and sweatshops, human cadavers and live organs for transplant, machine guns and rocket launchers, and centrifuges and precursor chemicals used in nuclear weapons development».

In an apparently uncontrollable wave, various groups using the most advanced cloning technology passed to produce great quantities of fake money in Europe and all over the world. More than copies, cloning of money was, many times, practically identical to the original.

sold all over the world are counterfeits.

The universe of illicit commerce was amplified in such way to lead Moisés Naím to affirm that people comfortably living in wealthy countries «are far more connected to trafficking – and to its global effects – than most of us care to imagine».

Even the concept of *industry* – like the modern concept of *democracy* – is a literary production.

With literature, the sense of *identity* is established with the reader in silence, transformed in sovereign *vanishing point* in the whole process and, therefore, isolated from all other worlds not belonging to him. But, with virtual systems everything passed to happen in a different way.

With new digital media all worlds passed to belong to the person and he – while entity separated from everything, while *individual*, like

what happened to the society of literature – started to be disintegrated.

That disintegration, profound change of mentalities, is not something of *pathological* character, as we generally consider *necrosis*, but a metamorphosis that sometimes seems us very subtle, as if everything would happen by *apoptosis* – and we watch the world as if it would have been always like that.

Apoptosis is a term used by biologists to indicate the fall of the leaves of a plant as a kind of programmed death that is renewal of life.

Low power society's universe, with a continuous low cost consumption, is similar to a process of *apoptosis*. Products alternate in high velocity, keeping references with the previous ones, in a metamorphosis of continuous spectrum. Strictly talking, *copies* left to exist and are substituted by *clones* in multiple variations, without degeneration.

eliminating their authors' rights.

With the objective to use an image for commercial purposes, any person could put it to circulate without identification in Internet and this would automatically legalize the theft.

All copyright legislations permit the use of works – visual or not – for didactic use. The main purpose of the *Orphans Act 2008* seems to be the enlargement of the right of free commerce to everyone, practically eliminating the old author's right concept.

If approved, the *orphan works* reform would approximate, in practice, the United States to countries like China, where the value of author's right is extremely relative, if not practically inexistent.

All discussion about *orphan works* turns around a fact: the transformation of *copy* into *clone*. Images in Internet, or even in magazines,

of delinquency – «It was the instituting of this new local, capillary form of power which impelled society to eliminate certain elements such as the courts and the king».

It was an epoch that generated the figure of the delinquent as essential part of the production systems of that new society. Until then, the figure of the criminal was tolerated by society, like what happened with the *bravi* in Italy and, among them, the genial Caravaggio.

The word delinquent has its ancient etymological root in the Indo European **leik* that meant “to leave” and that passed to the Greek *leipein* also indication the idea of “to leave” and projecting, still in Greek, the word *ekleipein*, which means “to leave behind”, to abandon.

Curiously, by its turn, the root of that ancient Indo European term **l* would be the generator of our words *link* and *liberty*, making us to reflect on their deepest relations.

In this way, while the word *reliquary* etymologically means the recall of something that was *left*, that *passed*; the word *delinquent* indicates the reinforcement of something left, or the insistence on a condition that is left out from the social rules.

But, even so, the word *delinquent* reveals – as if we could here recall Lacan and his genial reflections – a nature while link, or the recidivism on the break of a link. And that is only possible when the ideas of *copy* and *repetition* are present.

The word *delinquent* would appear only in the 14th century, coinciding with Gutenberg's press.

Copy brings in itself, obligatorily, the *error*. *Clone* is the automatic extension of an *environment*.

F for Fake: fate and free-will – responsibility and competence

*I did promise that for one hour, I'd tell you only the truth.
That hour, ladies and gentlemen, is over. For the past
seventeen minutes, I've been lying my head off.*

Orson Welles

In the acoustic world, *destiny* is sovereign.
In the visual world, its place is taken by *free will*.

Only with *free will* the figure of *sin* can
exist.

In the oral universe, when someone kills
another person, or when someone suffers an

attack, even if there will be place for punishment, it was Nature – or God – what produced the event, above all and any possible judgment, being a thing totally out of personal control. But, when someone pertaining to the literary world kills another person, he is the isolated and absolute responsible, without attenuants.

This approach of flagrant conflict between *destiny*, or the sense of *pure causality*, and *free will* has been the motor of warm debates since the oldest times.

When *free will* exists there is also – in logical, or esthetical terms – a kind of *structure in perspective*, with the agent revealed as *vanishing point* of a strongly hierarchical system. This is the fundamental nature of the *systasis*, of vision.

Such *structure in perspective* is the responsible for our senses of merit and professionalism.

When we move the intensification of use to

responsibility would be one of the most vibrating flags of French Revolution and of the beginning of the United States.

Already in the end of the 20th century, the judgment of various crimes, even the most brutal of them, passed to be taken according to the environment the criminal was born and lived, his life path, not rarely transferring the guilty, until then individual, to society.

It is when the personage that before was considered delinquent passes to be quickly integrated in the collective imaginary, as victim or hero, many times through the popular music, movies and television.

Then it is reinforced the idea – born in the end of the 18th century – that the correction of the phenomenon crime must be object of an *education*, in a posture of collective and no longer individual responsibility.

The person to be educated is someone that must be corrected accordingly to norms established by a large average.

Only two centuries before, individual responsibility and independence of thought were two of the central elements in Thomas Jefferson’s ideas, a declared sympathizing of French Revolution.

That approach according to which reality is structured with the sovereignty of the individual would lead Jefferson to affirm that «the legitimate powers of government extend to such acts as are only injurious to others. But it does me no injury for my neighbor to say there are twenty gods, or no God. It neither picks my pocket nor breaks my leg» – an argument that would have been chocking a few centuries before and, probably, a few centuries later.

Emanuel Kant, Jefferson’s contemporary, did not hesitate to affirm in his famous essay

Fundamental Principles of the Metaphysics of Morals that «duty is the necessity of acting from respect for the law» – a single and stable law, facing to which all citizens are *equal particles*.

These principles of individual's sovereignty were the pillars of what it would be called the *medium class*.

Medium class' universe, which is literary par excellence, was the world of competences. Everything turned around the aspiration to a competence, to a *profession*.

Like what happens in the social structure of non-visual cultures, where the value is established after the relationships and not as result of an action, the low power reality is, par excellence, that of the privileges and “churches”, closed groups of interests and relations of obligation, in most cases informal in their nature. Because of this, it became increasingly difficult to find non-fiction books written by people who are not tied to any academic

organization. It has become increasingly difficult the existence of the independent individual.

Competence implicates independence within a framework of interdependence. Who knew a communist regime knows that one of the most obvious of its traces is the lack of personal responsibility – everything working in a chain of relationships.

The reality of low power society, profoundly plunged into low cost consumption and entertainment, is that of *incompetence*.

For Jean-Marc Vittori, «what ends with the middle classes is a new industrial revolution. Machine has dramatically increased the efficiency of those who knew nothing. It gave advantage to the arms. Instead, information technology gives advantage to the brain. The computer and the Internet do not bring anything to those who cannot read».

There is a new revolution, but no more with an industrial nature. In fact, computers and the Internet bring nothing to those who cannot read in absolute terms. But there are several levels of mastery of language. It is not necessary to have much competence on verbal language to operate a computer or surf on the Internet. Platforms and programs are friendly and facilitate the entire process.

And in last instance, everything is to “use the brain”. The most interesting is to know what kind of use we are dealing with.

The word *competence* has its ancient etymological root in the Indo European **pet*, which indicated the idea of *creative impulse*, of *energy to do things*, and from that we have our word *impetus*.

Any impulse to do things implicates change.

But in similar way to what happened in

In any one of them, such condition implicated a specialized knowledge that was inaccessible to the majority of people.

It could exist a cultural, a political or an industrial elite. But, with planetary hyper communication systems the whole knowledge passed to be accessible to everyone. On the other hand, the fast rotation of jobs practically eliminated the old figure of the *connoisseur*.

The word *elite* appears from the Indo European **leg*, which indicated the idea of *choosing* and also of *similarity*. It is about what is separated as a similar thing, as a characteristic example of an ensemble of things – from that, yet, our word *selection*.

From that same root we also have the word *election*.

In ancient Rome, the classical Latin formula *eligere* became the popular *exlegere*, which

indicated the idea of *elite* – people naturally choose for “out”. That is, people who were naturally detached as those who joined more qualities of their group.

Curiously, the old Indo European expression **leg* also produced the French word *lire*, the Italian *legere*, and both in Portuguese and Spanish *ler*, all meaning *to read*. And *to read* – to detach things from an environment – is directly related to the emergence of the sense of *elite*.

In low power society, the universe of literature gives place to electronic media linear flux, quickly condemning any kind of *elite*.

The senses of *elite*, of *competence* as well as of *responsibility* are subjacent to Jefferson’s and Kant’s ideas.

The word *responsibility* starts in the Indo European **spend* that indicated the *act to make a libation*, to produce a ritual with religious and

sacred character. From that meaning we have the word *response*, which passed from the ancient Indo European to the Latin expressions *sponsus* and *spondere*, indicating a kind of *return* or *justification* facing to a sacred act.

The expression *responsibility* would appear only in the 12th century, almost one century after the beginning of the production of paper in Europe, meaning, in its beginning, a compromise with a religious act – as if it would be revealing the previous medium as content.

It would be only in the 18th century, climax of *Enlightenment*, immersed in a profound expansion of the literary and visual culture, that the word *irresponsibility* would appear to designate the individual who does not accomplish with his duties.

But, what is the sense of obligation, of *responsibility*, in a universe where good part of people systematically changes their jobs and

functions with the only objective to enlarge their spectrum of consumption and entertainment? Or still, inside a universe where uncertainty is proportional to credit, obliging to an elasticity of functions to survive and to keep the debit under reasonable levels?

On the other side, the sacred – being contrary to the stereotype – implicates discovery, the main sense of *Enlightenment*.

A world of continuous entertainment is formed by great averages, stereotypes in an abyssal quantity, pulverizing the entire system in clouds of tendencies where the sacred is permanently disintegrated through multiple and parallel circuits of sales and consumption.

Thus, we dive inside a universe of *irresponsible* and *incompetents*, spread out a little everywhere, from governments to business people, from those who have as general function the public relation to people directly engaged on education – inside a

complex universe where success is a statistical data, a data of general tendency, like consumption.

In September 2002, Maher Arar, a Canadian born in Syria, engineer of digital programming, was arrested by the American authorities at the JFK international airport in New York due to false information provided by the Royal Canadian Mounted Police. After two weeks stuck in solitary confinement in the United States, without right to counsel, he was not deported to his country of citizenship and residence, Canada, but to Syria, where he was born! Arar was imprisoned under torture in Syria for almost one year.

Canadian authorities conducted a survey showing that Arar was innocent, that the information given to the United States was unfounded and that he had been severely tortured in Syria, they acknowledged the terrible mistake and paid him compensation.

Moreover, the United States never

acknowledged any responsibility for the case and until February 2009, Arar was still included in the American lists of suspected terrorists, not recognizing any value to the Canadian investigation.

The universe of incompetent and irresponsible, typical of a low power society, permeates all social strata and is also revealed in the decisions of the States.

Until the beginning of the 21st century, small daily errors inside big companies were so many that, sometimes, it was questioned how they could survive; but the general ensemble worked.

Curiously, this universal principle according to which small errors are not so important, but yes the integrity of the ensemble, was generated by the American industry through a statistical approach of random sampling in quality control still in the first half of the 20th century.

Later, already in the 1960s and 1970s, with *kaizen* and *kanban* in Japan, the path was inverted, aiming to eliminate small errors and improving quality.

But such tendency to high quality, very specific in Japan, would not characterize the base of the future low power society.

Again, it is important to reinforce that it is not about to make judgments of value, classifying such situation as good or bad, right or wrong, as well as it is not about to establish an absolute picture, but yes general tendencies.

In this wave of transformations, the relationship of the human being with the death also seems to have radically changed.

In the medieval period it was common for all to participate in the death of a person, like a kind of spectacle watched even by children. Only in the 18th century the first pictorial representations of

But it would be only after the 15th century, after Gutenberg and a high intensification of the specialized use of vision, that people would pass to believe that each one see again his entire life, like a *movie*, in fast and absorbing sequence of *images*, in the moment of death.

And it would be only in the end of the 19th century, with the appearance of photography, telephone, telegraph and radio, that death would pass to be assumed as maximum horror by the Western world – and, quickly, pictorial representations of death practically disappeared, becoming taboo and signal of disrespect to take pictures of a dead person, if he was not an important public figure or the picture have journalistic character.

In the first half of the 20th century, Philippe Ariès and Geoffrey Gorer alerted to the fact that the theme of death, as a horror scene, had substituted sex in the quotidian talks in post war Europe.

But, in the passage to the third millennium, death and sex became not only recurrent themes in daily life talks as well as movies, television programs, journalistic reports and so on.

On the other hand, an increasing number of people passed to wish no more witness death. In hospitals, special sections passed to reserve to the moribund an antiseptic place far from any human presence. A protection against the sights of who are no doctors or nurses.

More and more, in diverse parts of the world, principally among youngest, people passed to prefer not see the dead in the funerals.

In the United States, a true industry of cosmetics to give dead the appearance of alive emerged, disguising the event of death that already was a strong taboo.

Researches showed that great part of

first time in its history a Law of Author's Rights in September 7, 1990, in the ambit of the *15th Meeting of the Communist Party Committee at the Seventh National Congress of the People*. But, twelve years later, in April 25, 2002, the American television network *CNN* announced that the director of the *U.S. Patent and Trademark Office* had firmly criticized the Chinese government for its complete inaction in relation to the continuous and systematic theft of intellectual property in the country: «Yet despite *WTO – World Trade Organization* commitments, there is little evidence of any prosecutions of Chinese citizens for criminal copyright theft. Even Deng Xiaoping's daughter had her biography of her father pirated by the Chinese press». In that year, China was responsible for 49% of the pirate products apprehended by American authorities.

According to Robert Reich, China was responsible for a production of more than seventy five million fake audio compact discs every year, in 1994.

Even food passed to be faked. «Counterfeit brand foods are a major problem for consumers, but also for the food industry in general», alerted Ezzeddine Boutrif, Chief of the *Food Quality and Standards Service* at the *FAO Food and Agriculture Organization* of the United Nations.

In April 2007, in a case that quickly took paragons in newspapers all over the world, a Chinese court condemned *Yahoo*, in a process of copyrights moved by companies associated to the *International Federation of the Phonographic Industry*.

In that same month the United States formally accused India, China and Russia, beyond other countries, to not be able to combat the counterfeit of American products in the areas of pharmaceutical industry, movies, software and other materials protected by copyright.

But this is not an exclusive problem of China,

India or African countries – it is about an essentially esthetical question, of mind structuring, of logics.

It is a phenomenon present everywhere in a reality forged by free real times telecommunication networks of networks.

The value of authorship represented, along centuries, an essential thing to the called *Western culture* – but, surely, it did not happen in the same way in the Arab, African and Asiatic countries that, beyond to represent a larger part of the world, passed to integrate the planetary fabric of low power society.

Thus, the *Digital Music Report* of the *International Federation of the Phonographic Industry* announced in 2008 an increase of digital music sales – made in Internet – of around 40% between 2006 and 2007, passing to represent 15% of the world market.

In that year, John Kennedy, chairman

and CEO of that powerful Federation, accused: «Copyright theft has been allowed to run rampant on [ISP] networks under the guise of technological advancement. Some estimates say no less than 80% of all Internet traffic comprises copyright-infringing files on peer-to-peer networks».

The *International Federation of the Phonographic Industry* alerted yet for the fact that musical industry sales had decreased more than 22% all over the world between 1998 and 2003.

It was estimated that in the first five years of the 20th century the number of pirate music in free transit in Internet increased from one million to more than one billion – number that never stopped to increase.

It was estimated, in 2005, that more than one million movies were illegally available in Internet, with more than five hundred thousand downloads per day.

In that same year, Russia already exported pirate audio compact discs to more than twenty-six countries.

In China, also in 2005, 90% of the music recordings sold were pirated. In some African and Latin American countries that number reaches 100%!

In a report on digital music, dated of 2008, that same Federation declared that «widespread copyright theft continues to be the most significant barrier to the development of a legitimate digital music business. The mass availability of unauthorized, unpaid-for music has also caused major damage to CD sales», and announced profound transformations in the sector: «A revolution is happening in the way consumers obtain and pay for music and the music business is transforming itself for a new environment. Record labels are proactively reinventing themselves, moving away from a “record-centric” model and diversifying their revenue streams across a much

broader range of products and platforms. A release from an artist today may appear in dozens, sometimes hundreds, of different products. Consumers have more choice than ever as to how they want to connect to and experience the music from their favorite artist – they can buy a download, a CD, wallpaper for their mobile phone, a mastertone, an e-ticket, a music video, become their friend on a social network or sign up to a subscription service. In many cases consumers will choose various products and acquire these on many different platforms».

Curiously, that report from the *International Federation of the Phonographic Industry* about digital music, with twenty-eight pages, has only one reference to the called *classical music* and no one to *experimental contemporary music*, revealing how the world of low power society became completely absorbed by continuous entertainment of low repertoire.

Until 2006, only four big groups controlled

85% of the distribution of popular music all over the world. The fifteen largest audiovisual groups controlled more than 60% of the sector. And the seven biggest cinematographic companies dominated more than 80% of the world market.

In Japan, in 2008, the consumption of musical pieces listened in mobile phones already represented more than 40% of the total market of digital music.

But, despite the efforts, pirate actions did not stop to develop. In 2008 it was estimated that only in Mexico and Brazil the number of downloads of illegal files of music was almost five billion. In Japan, the quantity of downloads of illegal files of music turned around four hundred million.

Surveys indicated that 80% of the people who download illegal files did not have any feeling of guilty.

In 2007, the newspaper *The New York Times*

in Spain, the genial pop musician Manu Chao announced: «I will use my site in Internet as a radio station», and shot: «Today pirate actions are easy, a mass process and inevitable. We are attending to a true revolution. The big discography industries are in big difficulties, it is a little the end of the dinosaurs. Large companies are victims of their own law of market: everyone looks for what is less expensive, if not free. Some lose others win. And us, singers, must to find our place to be able to continue».

In June 2007 Peter Gabriel – for many the soul of the mythic rock music ensemble *Genesis* formed almost forty years before – launched the site *We7* with free music: «Here, music is paid by advertisement. *We7* will result because we will always have demand. *Internauts* want to listen to music, they only don't want to spend money».

Everything passed to be maximum consumption without expenses, only maximum absorption.

To attend to such metamorphosis, the *Creative Commons* appeared in Massachusetts in 2001, having its first project in December 2002. Formed by lawyers, artists and researchers, many of them from Harvard, its home page in 2008 announced: «*Creative Commons* provides free tools that let authors, scientists, artists, and educators easily mark their creative work with the freedoms they want it to carry. You can use CC to change your copyright terms from ‘All Rights Reserved’ to ‘Some Rights Reserved’. We’re a nonprofit organization. Everything we do – including the software we create – is free».

Its board included the cyberlaw and intellectual property experts James Boyle, Michael Carroll, Molly Shaffer Van Houweling and Lawrence Lessig; the *MIT* computer science professor Hal Abelson; the lawyer-turned-documentary filmmaker-turned-cyberlaw expert Eric Saltzman; the renowned documentary filmmaker Davis Guggenheim, movie director of Al Gore’s *An*

Inconvenient Truth; the Japanese entrepreneur Joi Ito; and the public domain web publisher Eric Eldred.

Not controlled by States, therefore out from the copyright governmental agencies, *Creative Commons* appeared as a new tool for the defense of copyrights, and quickly spread out all over the world.

On the other hand, Bill Gates would accuse *Creative Commons* to be a potential threat to the profits of sectors based on software research.

In 1996, John Perry Barlow – who four years before had co-created the *Electronic Frontier Foundation* – launched in Davos, Switzerland, his *Declaration of the Independence of Cyberspace*, where he stated: «Your (government) legal concepts of property, expression, identity, movement, and context do not apply to us (cyberspace users). They are based on matter, there is no matter here. Our identities have no bodies, so, unlike you, we

cannot obtain order by physical coercion».

In 1992, few days before die, John Cage told me: «The basic idea of capital changed. Now, money passed to mean *use* and no longer *property*».

Cyberpanspermia

*It is better to make a piece of music than to perform one,
better to perform one than to listen to one, better to
listen to one than to misuse it as a means of distraction,
entertainment, or acquisition of "culture".*

John Cage

In 2006, in his book about the future *Une Brève Histoire de l'Avenir*, Jacques Attali described, in fact, what already was a present reality: «In a general way, we will pass from purchase to access. The dematerialization of information, in particular, will make easier to pass from the property of data to its use, permitting the access to culture, education and information. The control

on intellectual property will be more difficult to be guaranteed».

To Niklas Zennstrom, co founder and CEO of *Skype*, «the idea to make payable telephonic communications is something from the last century». *Skype* has its main offices in Luxembourg and it made possible free audiovisual communication through Internet. In only two years, *Skype* jumped from one hundred thousand to one hundred million users!

When, in 2005, Michael Powell, then president of the *Federal Communications Commission* of the United States, used *Skype*, he said: «The dice are thrown. Change is inevitable».

Continuous hyper consumption transforms old literary value of the single work in permanent presence. The author stops to bring in himself the old content of artisan, his previous medium, and starts to be actor without drama, mirror without soul, always looking for an identity, because the

world is transformed into an ephemeral and unstable metabolism.

On the other hand – as Alfred Marshall and John Kenneth Galbraith showed – continuous hyper consumption eliminates any judgment of value, any evaluation on what is necessary or unnecessary, important or unimportant. A premonitory comprehension found in John Cage’s works.

A reality that, in the middle of permanent change, unveils the astonishing modernity of words attributed to Buddha, Siddarta Gautama, who was born in 563 BC: «Whatever is material shape, past, future, present, subjective or objective, gross or subtle, mean or excellent, whether it is far or near all material shape should be seen by perfect intuitive wisdom as it really is: “This is not mine, this I am not, this is not my self.” Whatever is feeling, whatever is perception, whatever are habitual tendencies, whatever is consciousness, past, future, present, subjective or objective, gross

Always we have power in mind, we also think on money. But, in a low power society *real* money practically disappeared.

In 2005, Li Pan, researcher at *Xi'an Jiaotong University*, in China, argued that «e-money is fast becoming the currency of a new era, since the use of electronic money has slowly grown over the last decade. E-money is regarded as the second radical transformation of monetary form. E-money not only impact essentially on the electronic commerce, they also influence present monetary system and the implementation of monetary policy directly and indirectly. E-money challenges the traditional monetary policy of the central bank. The central bank should make careful research on e-money».

Then, it was speculated that only about 15% of the money, all over the world, would have reference in concrete values. All the rest would be numbers, pure abstraction, without any material support, and so, being free to be *redesigned*, free for all kinds of manipulation.

In that reality of *invisible* money, the prices of practically all products dramatically fell like an asymptotic curve. The price of a television set in 1967 was only 50% of the original price in the beginning of the 1950s, and only around 6.5% of that price in 2000. Then, it became accessible to 90% of the families bellow poverty line. The same happened to microwave ovens. In 1967, the price of a microwave set was around 38% of the original price when the equipment was launched in 1955. In 2002, it was only 15% of that price, being accessible to 73% of very poor families. The price of a radio in 2000 was only 6.5% of its price in 1962, and the price of personal computers in 2008 were less than one third of what was common only ten years before.

One of the most evident and interesting traces of low power society and low cost consumption is revealed together the children.

Children's world – that already incorporated

real time global interactive telecommunication networks – is a world of exchanges and acquisition of images, music and games, without money, but in an astronomical quantity.

The acquisition of games, music, movies, photos, software of illustration and practically everything more we could imagine, stopped to implicate any effort.

The old notion of value was directly related to rarity and to the idea of limitation of the physical quantity – what no longer exists in the immaterial world of cyberspace.

For the reality of the old medium class, the price of a toy or of any other object obligatorily represented a parcel of an already made work – and the *effort of purchase* was part of a process of education: to know *how to give value to the things*, which was a classical expression of the old industrial society.

In low power society, even among children, the question gradually stopped to be about *who made what*, and passed to be focused on *how to freely circulate*, affecting everything what had been the foundations of the emergency of copyrights in the past.

Among others, two important factors were responsible for the dramatic change of that reality.

On one hand, *purchase power* became volatile and credit was immensely amplified, eliminating the old relation between work and money.

On the other hand, products and services became less expensive, practically accessible to anyone.

But it is not only about new products. The market of auctions and sale of used objects reached an unexpected dimension after the year

found with extremely low prices – products to clean glasses or soaps to wash-dishes machines with surprisingly high prices.

Prices of mineral waters surpassed, many times, those of gasoline – even with the raise of petroleum prices in the first years of the 21st century.

Such irrationality of prices turned everything into the bazaar’s reality where there is no *market price*. The bargain, so common in the countries where the bazaar is the reality of commercial world, was transformed in the random search in large-surfaces.

Sometimes, prices in the low cost world became so low that double collecting – without the client be aware about them – started to happen.

As claims practically left to exist – because the cost of the claim normally surpassed that of the product or service – millions of illicit operations

passed to happen in an almost imperceptible way.

If the old world of the medium class was characterized by fixed price, standard and independent from the consumer – which determined a strong distinction in comparison to the oral universe of bargains – low power society’s reality launched floating strategies that obey to market variations, depending on many factors.

Thus, in the beginning of the 21st century, the price of an aerial ticket passed to depend on the epoch of the year, the distance from the date of buying and the date of use of the transportation, the quantity of people who had already acquired tickets for that flight, the place, the type of client and so on – an unthinkable thing few years before.

The same started to happen to hotel and many other services. A reservation of a room in a hotel, to rent a car, for a travel in a ship, a tourism excursion or vacations in a resort, for example,

became very similar to true auctions.

In television the concept of *noble time* – which oriented, as a kind of *vanishing point*, the entire daily programming – disappeared. All moments passed to identify some kind of audience, spreading out a fragmentation of *noble times* in continuous flux.

But, low power society's brave new world also counted with an increasing presence of aged people that are quickly integrated into the universe of *continuous consumption*. «The aging process meant less velocity and inactivity, fidelity to trademarks and sub-consumption: now, it became a period of life characterized by hedonism and consumption over-activity», as Lipovetsky underlined in 2006.

In 1900, about 4.1% of the population in the United States was composed by aged people, older than sixty-five; in 1950 this number was of about 8% of the population. In the first years of the 21st

century they would be around 15% and studies pointed to about 30% of old people in 2030.

In France, according to statistical data from 2008, life expectancy grew one semester per year!

The old culture of the medium class – which was *medium* also in its average age – clearly valorized the individual effort and even old secret organizations like Freemasonry gave a special attention, at least in its origins, to individual effort and personal achievement.

All this left to make any sense in the reality without effort of the new low power society.

For the old social strategy of the medium class everything should be verified by the client – each individual, before buy anything verified the price and the quality of the product. He looked to never buy moved by impulse. But with the generalized low cost, verification and no-impulse

habits practically finished.

Consumer passed to move like if he was designing great statistical averages, always knowing, approximately, the general costs of his consumption, but not individualizing prices.

In 2006, it was estimated that, in average, up to 60% of the consumption made in French supermarkets resulted from *non-reflected* impulses.

What before designed the sense of *differentiated quality* practically disappeared, passing to be confined to small and strongly specialized niches of market.

Thus, for low power society everything that in some way makes reference to the difference, to something beyond mediocrity, gradually begins to be considered negative and despised.

Such condition of great average without

Computer is a formidable accumulator and articulator of memory, that is: *energy*.

Real time hyper connectivity projects strong informational and energetic dispersion.

Consider nanocomputers present everywhere means to consider a *horizontal* distribution of information.

The transformation of all kinds of materials into complex systems of computers indicates the amplification of the concept of memory and an unprecedented expansion of *material culture* dematerialization.

Everything becomes matter and memory in *holographic* terms: everything permanently related to everything.

With nanotechnology, the fabric we use for our clothes can be quickly transformed into an information system able to registry all organic

and environmental fluctuations; or the walls of buildings identifying the presence of everything – inside or outside the building.

Intelligence is economy, and economy nothing more is than implicitness of terms. But, because everything in this new reality reserves us a full spectrum of paradoxes, the principle of total economy finishes to establish the aspiration for total control and regulation.

The reality of literary universe, simplifying all relations through a phonetic alphabet formed by about twenty-five basic signals, established a non-contradiction, coherent and stable scenario, for which the maximum aspiration was no-control and no-regulation – like what characterized the ideals of the French Revolution and of the formation of the American State.

On the other hand, the metamorphosis of digital universe and of low power society turned possible complex relations through a

fabulous system of amplification and prosthesis of intelligence, establishing a framework of profound contradictions, incoherent and unstable, for which *security* passed to be its maximum aspiration.

Jacques Attali pointed to the year 2050 a reality that already was strongly present in 2008: «All companies and all nations will be organized around two demands: to protect and to distract» – that is, security and entertainment.

In this sense, personal computers like what we knew in the beginning of the 21st century – compact concentrators of information like points established in a network, manipulated with a keyboard, mouse and screen – will tend to finish, simply disappear: they will become content of new media.

If we take a small personal computer of the beginning of the 21st century and compare it to what was known as *computer* only forty years before, we will see that they have little in common.

The small personal computer could be taken as a huge ensemble of old computers, which scale totally changed its functional design.

A small personal computer in the beginning of the 21st century was more powerful than all computers in NASA forty years before, when human being reached Moon for the first time.

Between 1950 and 1995, digital processors knew an increase of their memory and capacity of information processing of around ten billion times. Between the first digital experiments from the 1920s and the end of the 20th century, that increase was of around one trillion times.

In 1965, Gordon Moore, cofounder of *Intel*, made a prediction that would be confirmed along the next decades: the capacity of information processing of a chip would duplicate each eighteen months.

It is estimated that, because of the quantum

computers to the physical world the more the issue of interaction becomes important».

The dematerialization of material culture, the ephemeral, the distant closer – even in the context of a hyper superficiality everything is *personal* in a low power society.

Low power society is articulated as an amorphous mass of countless classes without clear distinction, where the person is the only value – not as individuality, but yes as statistical data. For the previous literary society, characteristic of the old medium class, the value was in the relation between individual and society. It was about a subtle difference.

For low power society, the value is in the quantity of aspirations oriented to a tendency. The value is no longer in the *relation* between people and society, but in the intensity of the aspiration to consumption.

With low power society, reality left to be the *city* or the *global village*, to become the planet transformed into a *hypercity*.

The *hyperurban* transcends geographic and temporal limitations. Everything passed to be linked in parallel dimensions.

Together the explosive low cost universe, a great quantity of excluded survives.

In 2001, in Europe – continent considered paradise of welfare – around 15% of the population, around one hundred and ten million people, was poor according to *Eurostat's* data.

In 2008, in Portugal, miserable already represented more than 20% of the citizens. In 2006, official data about poverty in the United States indicated a number closer to that of the European Union, with more than six million miserable people – and that more than forty-five million did not have access to any health care.

But, even those excluded participated, in some way, in the low power wave. By the prices practiced in 2008 by low cost aerial companies, even a miserable homeless could travel from London to Paris, with the result of his mendicancy in one or two days in the streets.

Yonghee Jung, anthropologist of design, from South Korea, makes researches for *Nokia* in Brazilian *favelas* and poor settlements in other countries, looking to find information for the development of new mobile phones that could be consumed faster in those poor environments!

On the other side, a report by the *World Energy Council*, of 1993, already alerted to the fact that if excluded people in the world became consumers without a dramatic change of the energetic sources, this would mean a quick planetary bankruptcy in energetic terms.

In 1985, the average of American citizens

consumed forty times more energy than the average of citizens in India.

In 2007, the *Cercle des Economistes* in France demonstrated that if only China reached the European *per capita* level of gasoline consumption, which was around four times inferior to that of the United States, five planets Earth would be necessary to attend the demand!

It is estimated that until 2015 around 80% of the *continuous consumers* will be, for the first time, located out from the called *industrialized countries*.

The brilliant Canadian historian Harold Innis, who so deep inspired Marshall McLuhan, argued that «concentration on a medium of communication implies a bias in the cultural development of the civilization concerned either towards an emphasis on space and political organization or towards an emphasis on time and religious organization». And, in fact, it happened like that along the last

thousands of years.

But, with the appearance of digital systems' networks of networks, it simply finished to be about concentration in one or in other communication medium, in one or other sensorial system – what passed to happen was a revolution in all senses, in the nature of memory, and its exponential amplification through intelligent prosthesis.

The logic of sensorial *extension*, of the *copy*, and all values that alternated around the principle of *concentration* along thousands of years, simply finished.

The passage from a logic – with thousands of years – coined by *concentration*, to another one designed by *distribution* finds some curious references in the political world of the beginning of the third millennium.

The *United Nations' Millennium Project*, of 2005, firmly proposed, in its final recommendations,

the reinforcement of help to *local* organizations.

In that same year, the *Earth Institute* at the *Columbia University* launched the *Millennium Villages Project*, a «bottom-up approach to enabling villages in developing countries to lift themselves out of the poverty trap».

What in fact begun to exist was a new logic, a new human being.

Even so, 95% of the whole energy consumed in the planet in 2008 still was of fossil origin, with a high concentration design in its molecular structure.

Unexpectedly, this new world launched us, through mysterious paths, to some part of the ancient Greek world.

Around two thousand and five hundred years ago, the philosopher Anaxagoras imagined that life was constituted by very small particles

distributed in the Universe.

According to his texts, which survived indirectly through Simplicius' hands, his about the beginning of the Universe, as we know it, were similar to modern *Big Bang* theories: «All things were together, they were infinite both in quantity as in their small scale; because even the infinite was small», then, an explosive expansion happened, distributing seeds of life everywhere – phenomenon from which the word *panspermia* appeared, apparently coined by Anaxagoras himself.

The concept of *panspermia* would be forgotten until the year of 1743 when Benoît de Maillet – diplomat, anthropologist and responsible for the first evolutionist hypothesis to explain the appearance of the human being – recalled it, suggesting that germs of life would had arrived on Earth, from the sidereal space, producing the first fishes, which had gradually evolved to amphibious, reptiles and mammals.

So, even if low power society manifests a general mediocrity, particles of knowledge would be free, each time in larger quantities and, now, articulated according to the *distribution* principle, preparing a new and formidable human mutation.

Between 1995 and 2005, only in the United States, the conventional book publishing knew an increase of 50%. From 1880 and 1980, one million and three hundred thousand books were published in the United States – only between 1980 and 2000 more than two million books were printed.

In twenty years, after 1980, France increased book publishing in about three times.

A new world with a new logic, a new esthetic, *operating by coordination* – an idea I have defended since 1982 with my text *A Brief History of Time Design*.

A reality of the planet transformed into

a *hypercity*, where the old notion of territory is disintegrated in the middle of an accelerated process of dematerialization of the material culture.

A sensorial universe for which «the essential is no more to dominate a territory, but yes to have access to a network», as Jean-Marie Ghéhenno defends.

Trajectory to a logic of hydrogen and photon, from the city to the *hypercity*, in a metamorphosis to a *Type I* civilization.

A new civilization that seems to have definitively subverted Nietzsche's affirmation when he said, in his *The Desire of Power*, that «the objective is not happiness, but the sensation of power».

For the low power society, happiness is power.

*Planetary revolution is here:
But there are options –
A hot-headedly conducted,
Bloody revolution –
Everyone loses;
A cool-headedly conducted,
Design science computer-accommodated
Wealth-accounting revolution –
All humanity wins.*

Richard Buckminster Fuller



Data about Low Power Society concept

2006, May 18 to 20

Presentation of the lecture *Amores-Eros & Low Power Society* by *Giorgio Alberti* at the Spirit of Discovery International Art and Science Meeting, by the Arts, Sciences and Technology Foundation – Observatory, in Trancoso, Portugal. Meeting directed by *Emanuel Pimenta*.

2006

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2007, April 17

The End of a Belief, Towards an Era of Underdevelopment International Meeting, at Monte Verita Foundation, Ascona, Switzerland, directed by *Giorgio Alberti*.

2007, April-June

ALBERTI, Giorgio – Introduction to *The End of a Belief, Towards an Era of Underdevelopment*, in *Cenobio Rivista Trimestrale di Cultura*, Locarno, Switzerland.

2007, June 21 to 23

Low Power Society at the Spirit of Discovery International Art and Science Meeting, by the Arts, Sciences and Technology Foundation – Observatory, in Trancoso, Portugal, directed by *Emanuel Pimenta*.

2007, June

PIMENTA, Emanuel Dimas de Melo – *Low Power Society*, lecture at *Low Power Society at the Spirit of Discovery* International Art and Science Meeting, by the Arts, Sciences and Technology Foundation – Observatory, in Trancoso, Portugal. ASA Art and Technology, UK, London.

2007, June

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2008, March 8

Low Power Society, Not Low Price Society International Meeting at Monte Verita Foundation, Ascona, Switzerland, directed by Giorgio Alberti.

2008, October

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Low Power Society site at www.asa-art.com/low-power.html by Emanuel Pimenta.

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Carnivore

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DNA – Dioxide Ribonucleic Acid

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DVD – Digital Video Disc

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eBay

ECCO

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Neoliberalism

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EDI Electronic Data Interchange

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EFF – Electronic Frontier

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Teleology
Teleonomy
Telephone

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Television

Cable television

CNN Television

Fox Television

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 University College (London)
 University (Columbia)
 University (Harvard)
 MIT (see MIT Digital Labs)
 University of Helsinki
 University (London) Business
 School
 University of Miami
 University of Nebraska
 University (North Caroline at
 Chapel Hill)
 University of Sherbrooke
 University of Toronto
 University of Xi'an Jiaotong
 Ur
 Uranium
 Uranus
 Urban
 Hyperurban
 US Steel
 Utopia
 V2 Organization
 Value

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Orders of value
Venus
Video
Violence
Viscosity
Vision

Central Vision

Peripheral Vision
Virus (see computer virus)

Wal-Mart
War

Cyberwar

First Iraq War

First World War

Second Iraq War

Second World War
War of the Worlds, The
Warriors
Washington DC
Water
We7
Wikinomics
Wikipedia
Wired
Wood

World Bank
World Economic Forum
World Energy Council
World Health Organization
World Social Forum
World Trade Center
World Trade Organization
Writing

Xerox's Computer Science
Laboratory PARC

Yahoo
YouTube

Zapping
Zara
Zen
Zhoukoudien

Emanuel Dimas de Melo Pimenta has been considered an important musician, architect, writer, photographer and intermedia artist in the beginning of the third millennium - according to statements written by personalities like **John Cage, Ornette Coleman, Merce Cunningham, René Berger, Daniel Charles, Dove Bradshaw, Phill Niblock** or **William Anastasi** among others. With several international prizes, more than thirty published books, many electronic books and twenty audio compact discs, his works are included in some of the most important art collections and world-wide recognized institutions like the **Whitney Museum of New York, the ARS Aevi Contemporary Art Museum, the Biennale of Venice, Biennale of São Paulo, the Computer Art Museum of Seattle, the Kunsthaus of Zurich, the Durini Contemporary Art Collection, the Bibliothèque Nationale of Paris** and the **MART - Modern Art Museum of Rovereto and Trento** among others. His works are also included in the **Universalis Encyclopedia (Britannica)** since 1991, in the **Sloninsky Baker's Music Dictionary (Berkeley), the Charles Hall's Chronology of the Western Classical Music**, as well as in the **All Music Guide - The Expert's Guide to the Best Cds**. Legendary musicians like **David Tudor, Takehisa Kosugi, John Tilbury, Christian Wolff, Maurizio**

Barbetti, Audrey Riley and the **Manhattan Quartet** among others have performed his compositions. He collaborated with **John Cage**, as commissioned composer for **Merce Cunningham**, from 1985 until his disappearance in 1992. He remained composer for **Merce Cunningham** along more than twenty years, until his disappearance in 2009. Articles on his works have regularly appeared in different newspapers and magazines, like the **New York Times**, **Le Monde**, **Le Parisien**, **O Estado de Sao Paulo**, **O Expresso**, **O Globo**, **Il Sole 24 Ore**, **la Repubblica**, and **The Wire** among others. He is member of the **SACD - Societ  des Auteurs et Compositeurs Dramatiques** in Paris since 1991. He also is an active member of the **European Environmental Tribunal**, where he has been member of the board since 1995 (www.eeft.org). He is an active member of the **New York Academy of Sciences**, of the **American Association for the Advancement of Science** in Washington DC and of the **ASMP - American Society of Media Photographers**. He is member and advisor of the **AIVAC - Association Internationale pour la Video dans les Arts et la Culture**, in Locarno, Switzerland. He was a founding member of the **International Society for the Interdisciplinary Study of Symmetry - ISIS Symmetry**, and of the **ISA International Symmetry Association**, in Budapest. He is member of the jury of the **BES Fellowship (Experimental Intermedia Foundation)** of New York, the **Luso American Foundation** and the **Calouste Gulbenkian Foundation**) since 1995.

He was Editorial Director of the art and culture magazine **RISK Arte Oggi**, in Milan, from 1995 to 2005, and editorial member of the science magazine **Forma**, in Tokyo, in Japan. He is permanent member of the Editorial Advisory Board of the art and philosophy magazine **Technoetic Arts**, in Bristol, England, as well as of the online editorial center on architecture **Vitruvius**. He studied with **Hans Joachim Koellreutter** (Paul Hindemith, Hermann Scherchen, Marcel Moyse), **Eduardo Kneese de Mello** (Alvar Aalto, Walter Gropius), **Decio Pignatari**, **Holger Czukai** (Karlheinz Stockhausen) and **Conrado Silva** (Olivier Messiaen) among others. He took part in various workshops and master classes with **Kenzo Tange**, **Oscar Niemeyer**, **Yona Friedman**, **Peter Cook** (Archigram) and **Charles Moore** among others. Mr. Pimenta has been regularly invited, as professor and lecturer, by several institutions, like the universities of New York, Lisbon, Florence, Georgetown, Lausanne, Tsukuba, Sao Paulo, Palermo, the Calouste Gulbenkian Foundation, the Monte Verita Foundation in Switzerland and the Technion Institute in Haifa, Israel, among others. He is also founder and director of the **Arts, Sciences and Technology Foundation - Observatory**, in Trancoso, Portugal (www.asa-art.com/facto.html). He is co-founder and director of the **HOLOTOPIA Academy**, in the Amalfi Coast, Italy (www.asa-art.com/holotopiaacademy.html). Emanuel Pimenta lives in Locarno, Switzerland - but he is also based in New York and Lisbon. His site is www.emanuelpimenta.net