Hidden Beings
Emanuel Dimas de Melo Pimenta
The End of a Belief. Towards the Era of After-Development
Alchimiarte – Locarno, Switzerland

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Monte Verita

We must believe in free will. We have no choice.
Isaac Bashevis Singer

In a dark night, we look at the sky and thousands of stars appear.

Each one of them tells us a history frozen in time. The image we see has thousands years of age. We are so wondered as if we were dealing with the present time.

As if the sky that amazes us would be our contemporary. And it is…

As if we share same reality.

Everything we see is illusion. Images coming from thousands of years ago.

Beyond the illusion, beyond to be participants of a single time, of a single space, there is the idea of permanence.

Like what happens beyond faith and wish.

1

If the stars disappeared a long time ago, it is also true that their image, the image of the movements that are their design, continues in an inexhaustible trip through the Universe, until all energy be definitively dissipated.

There is no time without memory.

Far from being a metaphor, it is what we live when approaching to any object.

All matter is source of memory – and the type of memory modifies the structure of thought.

All language – verbal or non-verbal – implicates memory.

Memory is, in last analysis, thought structure.

We generally think about memory as to be something pertaining to the past, but in fact it is present, fundamental design of what we know.

When mixing chemical elements, under specific conditions, they automatically assume a determined configuration. When adding two parts of hydrogen and one of oxygen, we automatically have water. Molecular structuring is a memory system that projects not only all matter we know but also the basic design of our sensorial perceptions and of our neuronal systems.

Automatically.

Thus, we have diverse levels of memory – everything depending on the scale.

Our bodies are memory, as well as minerals or any another thing.

When we deal with sensorial extensions or prosthesis, we are dealing with memory. While sensorial extensions are projections of memory, prostheses establish different levels of active interference on memory configuration.

2

Creativity is the combination of memories of different natures, producing a new system.

When we mix two or more things that were not associated before, generating something new, what we do is just to establish mnemonic designs.

Memory is here and now.

Going deeper in this approach we will quickly conclude that even what we vulgarly call perception nothing more is than a scale of memory.

By this way, what we know as information storage is designed by environmental conditions.

Therefore, we immediately distinguish central and peripheral vision – the first especially oriented to form, texture and colour; and the second, to light and movement.

Vision is strongly characterized by sistasis – everything taken in a single shot. When we look at a painting, a photo or a landscape, we don't see one thing at each time.

The word systasis was created by Jean Gebser – philosopher born in Poznan, now is Poland, in 1905 and died in 1973. Gebser lived in Switzerland and became close friend of Carl Gustav Jung, with whom he collaborated in his Institute along various years.

Gebser dedicated his whole life to study consciousness. Systasis, according to his own words, is «the conjoining or fitting of parts into integrality... a process whereby partials merge or are merged with the whole».

Another fundamental concept in Gebser's thought is synairesis, word also coined by him, originated from the Greek term synaireo, meaning "to synthesize", "to collect", "to join".

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While systasis deals with the phenomenon itself, synairesis deals with the most iconic aspects of cognition, in the sense of «everything being seized or grasped on all sides, particularly by the mind or spirit».

Systasis implies the number one – there is not a possible opposition for a complex whole. This is its logical nature par excellence. From there the principle of icon, the Platonic concept of eidos, and the relation of quality with the object emerge – even before a synairesis, which implies a more pure or distant state of abstraction.

Systasis happens because in the eye everything is strongly interdependent, everything implicated – from the distribution of photoreceptor cells, to the ocular pressure or even to the design of the ocular globe.

That visual principle of totality happens, again, in neuronal terms: we only perceive what is in movement; and when we blink, a neuronal deletion happens, preventing the generation of emptiness in visual information.

Hearing operates in diachronic way, producing the sensation of the establishment of compartments, while vision operates in synchronic way, generating the sensation of linearity.

Our auditory systems establish the privilege of the number two – there is no sound without diachrony; in the sonorous world everything is a thing after the other. Past projecting the present.

Not only, hearing is responsible for an important aspect of orientation – sensorial guiding.   The differences between signals received by our ears orient, in a complex acoustic field around us, the movement of our eyes. They establish a guiding target.

The fusion of these two phenomena – vision's systasis and something we could call hearing's directional guiding – generates what we call predication, verb and the idea of volition.

4

The elaboration of the phonetic alphabet on papyrus or paper was nothing more than the accomplishment of such principle.

Tact is interface.

Like vision, everything is simultaneity in tact – nothing happening in diachronic way.

But this simultaneity happens in specific corporal regions, never in the whole body.

Skin and retina have a notable philogenetic similarity.

Retina is born from skin.

And skin is an extension of the cellular membrane.

While skin is the interface for material events, retina is the interface for light.

Eyes are about three times slower than skin in terms of perception.

Ear and skin have the same perceptive speed.

George Bracque was used to affirm that tact had the property to separate the observer from objects, while vision separated objects from other ones.

Tact identifies a specific corpus, and vision projects the identity of things – a phenomenon stranger to hearing.

Dividing and identifying things, vision strengthens the tactile principle, making people in more visualized societies to prevent corporal contact, constructing all types of behavioural barriers.

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While for both vision and tact there is an immediate construction of an ample set of similarity relations, or paramorphisms; for hearing similarity relations depend on a continuous exercise of repetition and references to data accumulated in time.

In December of 2003, in an article published in the New Yorker magazine, journalist Isabel Hilton told that an important member of a Pashtun tribe, in Pakistan, revealed the structure of a local principle considered fundamental in social terms: if a conflict appeared between the Pashtun leader and his brother, it would remain between them. If the cousins intervened, he and his brother would fight against the cousins. If the inhabitants of his village decided to intervene, the conflict would become between him, his brother and his cousins against the inhabitants of the village. And if foreign people decided to intervene, him, his brother, his cousins and the tribe would fight against the foreign – illustrating, in a very appropriate way, how the acoustic logic works.

What seem strange at a first sight, becomes clear when we have in mind the reasons that motivated Eric Satie, Henry Cowell and John Cage to create the roots of the minimal music, with high levels of repetition, going against the culture of their times, announcing a cognitive revolution which would happen with the electronic universe.

The necessity of repetition and the resource to data accumulated in time also happens both for vision and tact, in the formation of schematas. But, the difference is that as much for the nature of tact as for the vision, the existence of a similarity relations framework is an a priori condition.

The essential logical element of tact is the principle of unity.

The word unity launches its etymological origin in the Indo European *oinos, that meant something that could be isolated, separated, identified as a single and specific thing.

The notion of body is the maximum sublimation of that principle.

6

Like hearing, olfaction also is, essentially, a faculty operating in diachronic way.

But, contrarily to vision and tact, that divide and identify, and to hearing that implies a continuous exercise of repetition, our neuronal systems assure a deep capacity of smell memorization turning it into a deeply integral sense.

A fragrance is part of a whole mnemonic theatre that is deeply integrated.

Taste is the sensation produced by chemical substances dissolved in saliva.

Taste is decomposition.

Decomposition means separation in differentiated elements, that is, establishing an order.

Order means differentiation.

When eating, we carry through a continuous exercise of ordering.

However, such exercise through chemical decomposition has a logical nature different of other sensorial faculties. All gustative perception implies a kind of punctuated equilibria that project the construction of the flavour, in permanent transformation and discovery.

These punctuated equilibria, true field folds, are reasonably stable between different individuals, projecting – like what happens with olfaction – strong strategies for social interaction.

But, the capacity of long-term memory sedimentation is lower with taste, implicating an intensification of repetition. Because of this we don't become satisfied to eat just a small sample of good food.

Vision operates in systasis and produces an apparent continuum; hearing is structured in diachrony and generates the sensation of fragmentation; taste discloses us the sense of ordering, of social order; olfaction rescues an integral condition of memory, and tact unveils, in the concept of unity, much of the base of all systems of language.

It is not about intermediates between an external reality and thought, but parts of thought itself spread out through time and space.

Each set of memory has a specific nature of order, a specialized form of differentiation, of organization.

The transformation of the sensorial palette implies a structural change of different types of informational organization.

Thus, when we intensify, during a long process of neuronal formation, a determined sensorial structure, we are designing a specialized set of differentiation principles – what makes what we know be what it is.

8

There is, yet, another element of fundamental importance: the question of scale. Everything changes with scale.

The emergency of pictographic writing represented an intensification of use of the central vision, which took hearing – its previous medium – as content and projected the phonetic writing.

The invention of writing coincides with the appearance of wheel – the visual exercise generated by the speed of the horse and the wheel, linear and fast, is the same that characterizes the phonetic text reading exercise.

Metamorphosis of architectural spaces, from Mesopotamia to the Roman world, indicates a sensorial transformation: mutation of differentiation principles.

Through thousands of years, we have elaborated a complex organism we vulgarly call culture.

An alive organism working in symbiotic relation with the human being.

Culture nothing more is than the set of everything what establishes principles of order, beyond the natural order.

When we born, we inherit a determined basic genetic configuration – but it is during life, with experience, that we establish the diverse patterns of synaptic relations, making us to perceive.

What we perceive is what it is.

We are coined by what exists, that designs action.

The word progress appears from the Latin gradus, that means degree, step. To progress literally means "to step ahead". With the specific sense of development, the word progress appeared only in the 16th century, coincident with the expansion of Gutenberg's press, with the Portuguese maritime discoveries and with the splendour of Italian Renaissance.

The idea of a world that works in degrees, departments that must be surpassed, is an essentially visual concept.

An idea that designed the world of the Enlightenment.

The existence of departments implies a distancing – condemned by the first emergency of the real time with the invention of telephone and radio.

When taking the history of technology – that is the metalanguage of technique – we have a history of senses, while elements of memory.

9

Here, it is not about the use of memory while function of data accumulation, but memory while design of that accumulation.

The logic of verbal cultures is the tribe, the clans, the formation of groups of privileges, ones inside the others, repetition, tradition, nationalism, and strong interpersonal relations.

The logic of a society designed by the phonetic alphabet with a fast medium like paper, is that of departmentalisation, the principle of the excluded third, the social stratification, the conventional systems of accounting, the assembly line, racism, perspective, paradigmatic changes, the idea of revolution, the future, rupture, and the emergency of the individual.

Where the societies are more tactile, there are more social unity – and if this sense of unity will be submitted to a verbal, acoustic universe, the necessity of repetition for the configuration of a stable system will produce a structure similar to the layers of an onion, generating conflicts depending on time space scale.

10

Perfume is always an element of strong integration. When it is intensively used – like what happens with certain Oriental religious groups, for which fragrances are true doors for self-knowledge – a strong stability emerges.

The elaboration of complex systems of flavours implies a strong notion of social order – what can lead to conflicts between groups strongly identified.

In first place, an isolated medium doesn't exist – that is, it is not about to close social groups in well-defined sensorial compartments. Visual or acoustic societies don't exist in an exclusive way. Sensorial faculties are dynamically contaminated among themselves.

It is not about, yet, to establish a classical picture of sensationalism – people exclusively designed by senses. Beyond senses, like proprioception, we have our bodies, the molecular structuring of matter and neuronal complexes.

Central and peripheral vision, saccadic movements, systemic luminosity and fluctuations of light concentration among others characterize ocular system. On the other hand, skin has about two hundred thousand different receptors cells for temperature, about five hundred thousand for touch and pressure and something around three million pain detectors.

Beyond their multiple nature, a type of complex holostructure of departments at a neuronal level, operating simultaneously in departments and in its whole, characterizes each of our senses.

The Aristotelian division of five strongly established sensorial faculties, as well as the principle of the third excluded, loose their privileged place.

We have dozens of independent and interdependent neuronal sectors, simultaneously, for each sensorial complex and for all together.

The perception of letters on paper depend on the position, inclination, shape, colour, light and dimension – even beyond the context – everything articulating what we assume to be a total and real meaning.

Sound perception depends on intensity, volume of harmonics, rhythm and a great quantity of other factors that are treated, simultaneously, in an interdependent and independent way in our brains.

Taste not only depends on the olfaction, but also on hearing, tact and vision – the same happening with any another sensorial element.

And we are always dealing with economy, and thought structure.

Economy doesn't mean reduction of ways, but implicitness, interaction.

Thus, all political, social and economic structures nothing more are than aesthetical conditions.

Modifying our sensorial complex, including neuronal aspects, we will be changing our social relations.

11

What we believe as free will or pure destiny depends on these relations.

In a more strongly acoustic society, destiny has priority. In a visual society, free will and independence of the individual are more vigorously believed.

Both free will and destiny are present in the structure of matter, revealing a new state of order: to be, not to be, to be and not to be.

If the deterministic factors of molecular aggregation, supported by the principle known as no hidden variable, in Quantum Physics, designs what we could call destiny; the proof of the Free Will Theorem made in 2004, and published in 2005, by John Horton Conway and Simon Kochen, both mathematicians from Princeton, demonstrating that there is a principle of free choice among elementary particles, establishes what we call free will.

Wouldn't be, however, a simple discussion about chance and determinism? Even so, chance as the base for free will leads us to an interesting reflection on acoustic societies, strongly deterministic, and on visual ones, more oriented to the believe in free will.

12

Acoustic universe generates, by its own nature, a huge volume of repetition, establishing a framework of intense redundancy and, because of this, very deterministic – because everything pertains to a determined environment where the elements of order are permanently reinforced. While in visual world, tools for the extension of long-term memory, like paper and press, free short-term memory mechanisms, reducing redundancy and determinism, opening the possibility for a quick transition between diverse informational environments.

In this complex universe of relations there are other, and many, essential factors, like disembodiment and the principle of imitation.

The text written on paper disembodies sound and vision – sounds free from voice and eyes free from body. We read a book and make a trip into fantastic scenes, without any direct contact with them.

All language implies a certain degree of disembodiment, of release from the body.

Cells known as mirror neurons – leading us to involuntarily replicate sensorial complexes – also put in question principles of elaboration and free will. When we are closer to someone suffering, we feel that pain, even not knowing its reason.

Strategies of molecular aggregation, free will at an elementary particles level, sensorial palettes, neuronal complexes simultaneously working in departments and in a holostructure, culture as an alive organism: everything directly related to what we call power, submission, exploitation, identity, violence or even the will people have to live accordingly to models they consider better.

And all these factors change depending on the scale.

To consider the question of scale, we cannot have in mind separated or isolated individuals.

Individual isolation is only an illusion of language.

13 A group of twenty people has only one hundred and ninety interactive relations between two people – what can be summarized in the mathematical formula of twenty people multiplied by nineteen, divided by two. But, in the population of a megacity like São Paulo, for example, with about twenty five million inhabitants, the potential grows to more than three hundred billion interactive dual relations.

With the planetary systems of interactive telecommunication in real time, the number of potential dual relations grows to huge values.

Thus, when we deal with the beginning of the 21st century universe, it is not only to take an overpopulated planet, but also about a metamorphosis without precedents in terms of human relations.

And human relations are what we synthesize as culture.

This symbiotic organism reaches an exponentially unique dimension – and quantity changes quality.

The behaviour of groups of interest, like industries of weapons, energy, or even groups that bring the nostalgic aspiration to ethnic independence, revolution or an imaginary social sanity, start to obey to principles strange to the legal determination established by the old literary culture.

Everything becomes volatile.

What before it was determined, since the Middle Ages, as a defence of social values made by the fables, assumed as content of the literary world – all romances are, in last analysis, fables – is transferred to computer games, many times virtual, present even in cellular telephones and connecting people in different countries, in different societies.

Ancient medieval fables turned into action, lived in real time by the players, like a kind of training that will prepare them for life.

Everything starts to tend to zero sum games, with losers and winners – contrarily to the ancient civilizational aspiration to non-zero sum games, to collaboration – and coming closer to Nature in its modus operandi.

But, we do not deal with a logic of the exclusiveness – the exercise in zero sum games leads to an intuitive discovery of the principle known as Nash-equilibrium, established by the mathematician John Nash, and before him by Antoine Augustin Cournot.

The Nash-equilibrium principle indicates that, in a game, no player has any benefit changing unilaterally his strategy.

Thus, zero sum games tend, in a first instance, to generate non zero sum games in a second instance.

14

Something resembling, in some way, the formation of complex and differentiated sets through dissipative processes, like what was demonstrated by Ilya Prigogine.

According to Michael Lesk – Professor at Rutgers University in New Jersey, specialised on Information Science – each American is exposed, every day, during about nine hours, to some type of communication medium.

Reality shows, that started in the American television, in 1973, with the series An American Family, started to characterize much of contemporary world – simulacrum of life in real time, from wars to the political world.

It is calculated that about five hundred billion electronic chips are currently working in the whole world, what represents almost one hundred chips per person – but practically a half part of the planet still lives in extreme poverty. So, the concentration of chips per capita is still stronger in a large sector of the world population, constituting a true cyber civilization.

The expansion is such that annually, in the whole world, more than one hundred billion chips are produced, many having up to one hundred million transistors each – what represents more than two billion and five hundred million transistors per each inhabitant on Earth, every year.

A single personal computer in the beginning of the 21st century has more capacity than the set of computers in NASA when the first trip to the Moon happened, about thirty years before.

All these phenomena indicate a deep social transformation – from groups and families to the individual dived inside a fabulous universe of countless virtual relations.

Gutenberg press generated a strong movement of social synchronization and of stereotypes – which became a world integrated by virtual tele-interaction systems in real time.

Rigid schedules in industries, schools, restaurants, and even at homes, tend to disappear. Everything passes to be commanded by orders through computers, many times unexpected, or through telephones, that also are operated through digital systems.

For the visual world, the future is in the prediction of decisions, while for the acoustic, prediction happens as a projection of a whole coined by the past.

Thus, visual prediction is of a different nature in comparison to the acoustic one – while the later is supported on destiny, the first establishes on free will its criterion par excellence.

Such different doesn't annul one or other, because both synchrony and diachrony have much to unveil.

To a planet operating in real time interactive telecommunication networks of networks, the idea of forecast – called pre-vision in Romance languages – starts to obey a new logic, where there is no longer place for the future, where everything becoming prediction of the present moment.

16

What it was before constituted, since the Neolithic, by social groups, collective movements and organisations in defence of the family, is transformed in the individual responsible for nanodecisions facing to a gigantic scale of knowledge. This turns obsolete the old models of education and social participation.

The obsolete models of visual education follow formats created for a universe of social groups and not for each pupil individually. Tribal groups privilege individual education. But, the students of the beginning of the 21st century have their personal computer and belong to a network of more than a billion people, independently where they are.

They implicate, simultaneously an approach to groups and individuals.

Alienated to the sense established by the virtual world, political institutions, in their more diverse instances, still are turned to a bureaucratic character and privileges, like what generally happens in museums, cultural centres, minis-

tries, departments of State... like archaic aristocratic structures.

The universe of personal computers amplifies each human being, connecting him to a vast network of hyperlinks. This turns each one into a kind of super individual, aspiring to an omniscience and an omnipresence through prosthesis of intelligence that virtually places him present in practically any place, diving inside a gigantic ocean of knowledge. On the other hand, even if this system – strongly personal – intensifies inter persona relations, it makes collective aspects become less relevant in some aspects.

Virtual universe turns clear that the collective emerges from the individual, and not the opposed.

But, archaic political structures still are turned back toward the collective, in detriment of the individual. They manifest a discourse of social solidarity that never pays attention to individual aspirations. They exert a political posture judging individualistic positions as antisocial – but, nor they are it, nor it would have place for a judgement of value, because it is about a dynamic social process.

Old political structures – sometimes disguised in a superficial messianic discourse – that, in fact, are nostalgic aspirations to the past.

In this way, the political discourse that defends local ideas in collective terms almost doesn't touch people that have, more and more, global ideas. On the other hand, global, superficial populist discourses, under the mantle of general ideas, but remaining personal and partial, tend to magnetize the public opinion.

What works, in general, are short, superficial, synthetic and absurdly phrases of general effect.

For good part of people, the world works like their personal computers – in a condition of permanent instability. This is the standard of normality. Things work precariously, but the whole continues emitting news.

17

On the other hand, a world structured by billions of potential interactions can no longer be constituted by a stable and dominant ethos.

Facing to the old principles of hierarchy and anarchy, a new post-urban political figure emerges: pararchy: order by coordination. A principle according to which differences are not eliminated, neither standardised in a regular and stable structure of values, but everything starts to work through the permanent and dynamic contact between individuals.

To the emergency of virtual corporations of the most different types, an obsolete and archaic political world is revealed, with laws that are changed in an accelerated rhythm, in the desperate search to establish an impossible aspiration – hegemony and continuity, essential aspirations of the old international order.

Institutions start to search, as to reach that aspiration, the control of everything and everyone.

With the volatility of the contemporary world, the more and more accelerated change of laws – generated by the profound human diversity and by the virtual telecommunication systems – every day a huge quantity of laws and legal regulations is established justified by the defence of security and assurance of prosperity but with a real objective that is to control each citizen, avoiding at any cost changes which, in fact, already happened.

To control private life in all its aspects.

Monitoring of electronic communications, telephonic conversations and transferences of values violently emerges: phenomenon that has as essential example the system of espionage known as Echelon.

Echelon is, even today, a secret project of SIGINT – acronym of signals intelligence – for the National Security Agency of the United States, indicating the processing of telecommunication signals all over the world. With the argument to exclusively look for messages that can represent threats to worldwide security, Echelon processes, as it is calculated, millions of telephonic, fax or e-mail communications.

Many believe that the Echelon System has being permanently used for industrial espionage.

The European Parliament, in Plenary Session of September 2001, six days before the terrorist attacks in the United States, declared that "there are no doubts about the existence of a global system of interception of communication which operates thanks to the cooperation between the United States, Canada, Australia and New Zealand… it seems probable that its name is Echelon… there are no doubts that the system aims, at least, to intercept private and commercial communication… and any interception represents a serious attack to the exercise of the right to private life… and violates the principle of proportionality…".

Echelon operates through satellites. Since the years 1960 until the beginning of the 21st century, almost five hundred astronauts had already been in space – in the great majority of times with the objective to work in satellites.

In the end of January of 2006 the Electronic Frontier Foundation, entity that defends the freedom of communication through electronic systems, initiated a judicial action against AT&T, because of a supposed collaboration with Echelon.

Control systems quickly spread out through the entire planet.

In August 2005, a referendum in Canada indicated that 72% of the population wished all public places equipped with monitoring video cameras.

Equilibrium and instability generate the sensation of insecurity. In 2005, a report by the National Intelligence Council of the United States predicted that in 2020 the world would be dived in a deep feeling of insecurity, even stronger than in 2005. If this happens, it will mean that the world will even more in equilibrium.

In situations where change is more present, people feel less its effects. Insecurity and equilibrium are generated by the huge expansion of culture – it is enough to have in mind the production of music, literature or arts, that are in a

large extent new edition of things already made, or even the almost absence of revolutions or strong challenging social movements.

Thus, the cycle of fear will tend to intensify at each terrorist attack – even if the attack will not mean a tragic threat in absolute terms, it will be in relative terms.

In March 2006, the European Union formally adopted the Directive 2006/24/EC, on "the retention of data generated or processed in connection with the provision of electronic communication services available to the public or of networks of public communication...", demanding the retention, for a period of six months to two years, of data related to the identity of the communication source, identity of the addressee of the communication, dates, schedule and duration of the communication, type of communication, used equipment and its localization.

The word control appears of the Latin rota, that means route, way, street. Only in the 13th century, with the beginning of the paper production in Europe and the intensification of vision, the word controller appeared, to assign the person who monitored a road, with the sense to go against the movement, to block the flux. About one hundred years later the term control would appear, with the general meaning of restriction.

To control means to establish a higher level of noise – what blocks the flux of information, of any nature.

Wealth nothing more is than accumulation of implicitness, relations, interactions. In all interaction there are exchange and discovery.

All noise, beyond that generated by the system itself, affects the flux of interactions and blocks the wealth production.

Wealth and equilibrium don't mean, however, the end of social asymmetries. If literary societies aspired to hegemonies, even of the wealth, the new virtual societies don't question the difference, but yes the degree of disequilibrium.

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In a literary society, interactive relations in the generation of wealth were established in departments inside a strongly hierarchical order, taking as content, even partially, the structure of the agrarian world.

Thus, the differential between what it was produced and what was received, plus value, was accumulated in the top of the hierarchical structure – like a kind of new reading of the first agrarian structures.

But, in the virtual world, where millions of people participating as shareholders of thousands of companies spread out through the planet, and where millions of people started to work at home, part of the accumulation of capital started to be speculation.

And the word speculation accurately indicates the nature of the process: of speculum, which means mirror, indicating who is not physically in the place.

The speculator is the absent present.

Everything is changed into some type of speculation – not meaning something negative or positive.

21

There are many forms of speculation – remote monitoring is one of them.

Entertainment is a form of speculation – because superficiality implies less distinguishing factors, less elements of conscience, everything changing all the time, turning the people more flâneurs and badauds.

Curiously, computer and television screen resembles the surface of a mirror – but a special mirror, like those imagined by Lewis Carrol or the ancient and mythical magical mirrors, so important for the mystic Indian universe.

The surface of computer and television screen reflects the world in another space-time dimension. It is vulgar to have television program presenters announcing us that "they will enter our homes".

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The frequency of sweepings in the screens substitutes the saccadic ocular movement, which is responsible for the perception of form. This produces a deep hypnotic effect, origin of the phenomenon known as immersion.

But, it is not about immersion inside an exactly similar mirror parallel universe – it is, in fact, a powerful amplification of the world. Through the commands, of the most diverse sites and the most diverse programs, we travel in a continuous zapping, amplifying the reality in time and space.

We can be at the Ancient Egypt or in a fictional world of a distant future; to dive in the deepest regions of the oceans, or to visit the boundaries of the most distant known Universe; to walk on the Moon or to be in the middle of a war.

However, everything happening in a superficial way – disembodiment and superficiality of knowledge produced by the nature of memory established by the screens, where we must continuously fill cognitive emptiness, emptiness of image, emptiness of lights and colours.

An exercise that concentrates in central vision elements of the peripheral one like what happens when we use earphones transferring stereophony to the centre of the head.

Such an unstable, dynamic mirror universe, with a fabulous scale, is our new reality. Not a new reality in the sense to be in its beginning. It is an always-new reality.

A reality in equilibrium – because only the equilibrium can be unstable.

The hyper intensification of certain aspects of vision and hearing also led to an intensification of olfaction, tact and taste. Now, a huge quantity of incense is produced in the planet, like never before, and the chemical industry for new fragrances destined to commercial products never was so active. We never had so many restaurants, with so many different cuisines, like now. The same can be

said about the industry of clothes – an industry strongly related to tact. In cities, a little all over the world, bookstores or shops of other objects are quickly substituted by the commerce of clothes and footwear, which design our tact when walking. The same happens with old street fairs all over Europe.

And, in everything, there always is a gigantic volume of references, of symbols – from the image of actors or famous singers, to athletes, movies and popular music. Because the symbol is always a degenerated, or a second instance, relation with its object.

Even if a person can consider his religious symbol as something real and concrete, it only is it in a second instance – only happening when we deal with reason.

It is notable how a world made by superficiality, by permanent entertainment, but also by a deep and direct involvement of sensorial prosthesis, is characterized by the intensive use of symbols of the most different natures.

Democracy implicates a strong sense of identity, promoted by the intensive use of vision, allied to paper and phonetic alphabet. Without identity there is no difference – and without difference there is no conscience.

But, how can we establish a strong sense of identity inside a reality in continuous transformation?

Old social functions that designed strong identities quickly disappear. Great part of the population starts to float between diverse functions, a great variety of jobs, looking to a continuous adaptation as a way to survive.

Great part of the young people looks the identity not in a function, but in the symbolic image of some personage, of some theatrical rule, like images in movies, of some myth of marketing – that are pure fictional personages built in a continuous reality show.

According to the United Nations Population Fund, about a half part of the worldwide population, something around three billion people, is composed by less than twenty-five years old people. One third lives in almost extreme poverty, without education or job. About 85% lives in poor countries.

Another element that designed strong patterns of identity was the nationalism, typical of acoustic societies and, later, of the literary societies stimulated by radio.

The old idea of nation, territorial borders and independent State quickly disappears. Journalistic news spread out with increasing sense of urgency, facts happened in distant countries. Most different products, of the most varied natures, travel permanently in the planet. Even foods modify the planetary geography – tropical fruits sold everywhere, fruits and vegetables cultivated in diverse places opposing the rhythm of climatic seasons.

Violence is only the search for identity.

Violence can be related with poverty – but only when poverty implicates loss of identity, like what happens with migratory flows or the unstable social functional disintegration of urban world.

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A reality of superficiality also is of instability – the superficial is always volatile.

FBI reports that violent attacks in the United States increased 200%, between the years of 1960 and 2005, proportionally to the population growth.

Countries like Brazil and Russia, among many others, had known an overwhelming growth in their levels of internal violence – what led the writer Amin Maalouf, who lived the terrors of the civil war in Lebanon during good part of his life, to consider that we would be walking to a disguised condition of civil conflict in a planetary scale.

The etymological sense of the word corruption is "to break into pieces", "to destroy", "to fake".

All corruption is an act of violence.

Where there is corruption it is no identity – because violence doesn't know stability, and without stability there is no difference.

A curious paradox – in the aim to establish identity, violence generates the destruction of fundamental conditions for the existence of a systemic stability framework.

Only through culture is that a strong condition of identity can exist.

And everything in the universe of entertainment starts to be culture – even if on surface.

The amount of books, magazines, periodicals, museums, art galleries, television channels, movies, industrial design and cars among many other artefacts never was so gigantic.

We are totally surrounded by a formidable quantity of gadgets – everything designed by the superficiality of entertainment.

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What we could call an aesthetic of violence, of aggressiveness, of dirty, of disrespect – or no-attention, all mixed with sex, present a little everywhere like a picture of exclusion, attributing to itself anti-bourgeois values and pretentiously announcing itself as redeemer of ancient values, even paradoxically, nothing more is than a reaction to the world made of gadgets, to the world transformed into hyper culture.

And it is very interesting to observe how this is so characteristic of much of the so-called inteligentsia of the beginning of the 21st century.

Curiously, being about a nostalgic aesthetic of superficiality, that inteligentsia also represents entertainment, producing new gadgets, so bourgeois as what it criticizes through contents and symbols, literarily.

The reality of hyper culture, formed by a countless volume of artefacts, of all natures, all coined by real time interactive planetary telecommunication systems, is enough unstable to produce a fast degeneration of the levels of identity.

In the called open societies, not commanded by a religious system, of ideological or theological character, the survival of culture as an alive and symbiotic organism depends on social tools to criticize it – critic here took in the sense of deconstruction.

There is, par excellence, two instruments for criticism of culture: art and crime.

Art – in the sense of a criticism of culture, not by content but by strategy – emerges during the Italian Renaissance, coinciding with the beginning of the production of paper in Europe and, little later, with the invention of the mobile metallic types press by Gutenberg.

Permanently deconstructing culture, art keeps it alive, in dynamic transformation, generating function and identity.

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The true criticism established by art happens in relation to sensorial logical structures and patterns of neuronal association, of neuronal sets and synaptic systems. When art emerges from the content, from the symbol, it generally is just a refined form of entertainment – like what happens in the vast majority of cases.

This doesn't mean to say that the conceptual art is entertainment, for example. Conceptual art articulates a complex network of relations between sets of symbols, transcending the symbols themselves and provoking a metamorphosis of the understanding of the world.

The other toll for critic of culture is crime. But, while art is a generative process, crime is degenerative.

Crime implies a deep simplification of the system – all references simply disappear, all starts to turn around the criminal action.

When, in an open society, culture is enlarged without criticism, crime also increases as well as the violence, in the search for identity.

New complexes of information generate an expansion without precedents of culture, everything by the ways of entertainment, of superficiality.

While crime and violence are directly associated to zero sum games – with losers and winners – art is always non-zero sum game.

If we have in mind the principles established by the classical mechanics, by the Aristotelian logic – fundamental for the literary concept of development and progress – this scenario of full entertainment, of crime and violence, superficiality and volatility, would mean the condemnation of the planet to decadence and entropy.

But, each day, there are more complex structures – and, more important, such complexity is supported by a dynamic system of information.

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The old literary world separated with rigour what is alive from what it is not – but, when any element is closer to instability, it unveils dynamic reactions that are characteristic of what is alive.

Life is in permanent transformation.

From there, we have again the brilliant comment by Prigogine accordingly to which dissipative structures, through a process of entropy, end to generate complex systems, opposing the second law of thermodynamics and generating the first one, in a dynamic metabolism.

That is, dissipative structures that receive energy from an exterior source finish to generate moments of instability and auto organization, projecting more complex models.

Everything in the world of the reality of virtual systems implies the existence of a continuous flow of information, where everything is simultaneously external and internal – like a kind of continuous self-injection of energy between different fields.

Zero sum games generating non-zero sum games.

The idea of game is intimately linked to the idea of life.

All relations, including the symbiotic ones, imply in some way principles of game.

Several Romance words for game, like the French jeux, the Portuguese jogo, and the Italian gioco, come from the Latin jocus, which was born in the 12th century, coincidently with the beginning of paper manufacture in Europe, originally meaning "theatre piece".

An older Latin word for game is ludus, which meant, more specifically, religious or official games performed in honour to the death. From there we have the words illusion, as a kind of counter-game, allusion, or even prelude.

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It is told that Xerxes, the celebrated Persian king who lived between 519 and 465 BC, submitted the inhabitants of Lydia, Minor Asia, not by the force of weapons, but by the construction of gambling houses that would have weakened the power of resistance of local population. Later, from the word Lydia it would have appeared the Latin term ludus.

The English word for game appears from gamao – an old game that is assumed to have a Sumerian origin.

Jocus, ludus or gamao implies the most elementary principles of life, mixing zero and non-zero sum principles.

Hermann Hesse, in his work Das Glasperlenspiel, The Glass Bead Game – Magister Ludi, described the game as being "all the insights, noble thoughts and works of art that the human race has produced in its creative eras, all that subsequent periods of scholarly study have reduced to concepts and converted into intellectual property – on all this immense body of intellectual values the Glass Bead Game player plays like an organist on an organ. And this organ has attained almost unimaginable perfection; its manuals and pedals range over the entire intellectual cosmos; its stops are almost beyond number. Theoretically this instrument is capable of reproducing in the Game the entire intellectual content of the universe".

Anaxagoras of Clazomenae, who lived between circa 500 BC and 428 BC, defended that the seeds of life would potentially be present in the whole Universe and that, once on Earth, they would had expanded themselves. This was the idea known as panspermy. In 1879, the brilliant Hermann Von Helmholtz rescued that old idea by Anaxagoras.

In the beginning of the 21st century, René Berger questioned himself about a possible cyberpanspermy: in a reality characterized by information intensively and dynamically distributed, seeds of new knowledge spread out through the virtual world would be ready for a fast expansion.

The concept of cyberpanspermy, coined by René Berger, rescues for the world of knowledge, for the symbiotic organism of culture, the dissipative structuring principles of complex systems.

But there is an old Jewish legend that illuminates this whole process. It is about the Thirty Six Tzadikim. The word tzadik means, in Hebrew, just, correct, illuminated – and tzadikim is its plural.

The world would be safe by the existence of thirty-six just, correct people. From the 18th century, the existence of tzadikim starts to be occult – they can be in each one of us, not obligatorily at all moment. Most interesting in this tradition, is the fact that it is possible for a tzadik not know that it is it.

Gershom Scholem, always brilliantly, reminded that «a family of the Right ones doesn't exist. The Just occult, when it happens, is in fact my and your neighbour, whose true nature will remain eternally inexplicable and regarding to which this mysterious idea teaches us to not make judgements of value. In a certain sense, this is an anarchical teaching, and exactly because of this it is so surprising. Your next can be the Just Occult» – anticipating a new sensorial logic.