AND PHENOMENOLOGY OF THE END.

Cognition and sensibility
in the transition from
conjunctive to connective mode
of social communication

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[W]hat a vapid idea, the book as the image of the world. In truth, it is not enough to say, "Long live the multiple," difficult as it is to raise that cry. No typographical, lexical, or even syntactical cleverness is enough to make it heard. The multiple must be made, not by always adding a higher dimension, but rather in the simplest of ways, by dint of sobriety, with the number of dimensions one already has available – always n-1 (the only way the one belongs to the multiple: always subtracted). Subtract the unique from the multiplicity to be constituted; write at n-1.

– Gilles Deleuze and Félix Guattari

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INTRODUCTION

CONCATENATION CONJUNCTION CONNECTION

> *A rhizome has neither beginning nor end, but always a middle (milieu), between things, inter-being, intermezzo. The tree is filiation, but the rhizome is alliance, uniquely alliance. The tree imposes the verb "to be", but the fabric of the rhizome is the conjunction, "and… and… and…" This conjunction carries enough force to shake and uproot the verb "to be" […] to establish a logic of the AND, overthrow ontology, do away with foundations, nullify endings and beginnings.*
>
> —Gilles Deleuze and Felix Guattari

The metaphor rhizome

In a rhizome there is no beginning and no end, according to Deleuze and Guattari, who propose to view reality as an infinite rhizome, an open concatenation of and and and.

This is why I'm writing this phenomenology of the end.

There is no end. One may take this assertion as a source of endless despair, one may take this assertion as a source of endless hope.

Both would be on a wrong path.

Do not get me wrong, I don't pretend to know what is good and what is bad. I am not hopeful. I'm not hopeless because phenomenology is an infinite task, so the phenomenology of the end is an interminable task.

I decide to stop here because my life is not endless, and I'm approaching the end, but I know that I'm not stopping concatenating: and and and.

Deleuze and Guattari wrote *Rhizome,* a short text later published as Introduction to *Thousand Plateaux* in 1977, the year of the premonition.

In the year 1977 social movements, punk culture and the dystopian imagination of art and literature did foreshadow in many ways the mutation that we are now witnessing and living: a mutation that is investing the technological environment, social relations and culture.

Rhizome is simultaneously the announcement of a transformation of reality and the premise to a new methodology of thought. A description of the chaotic deterritorialization following Modern Rationalism, and a methodology for the critique of deterritorialized capitalism.

Actually the small text about rhizome foretold the dissolution of the political order inherited from Modernity, and the vanishing of the rational foundations of Western philosophy. At the same time, however, this text opened the way to a new methodology adopting concatenation rather than dialectical opposition as a model for the conceptualization of the cultural process and social becoming.

Some decades after the publishing of *Rhizome* we understand now that the rhizomatic metaphor can be seen as a way of mapping the Neoliberal process of globalization, and the implied precarization of labor. Furthermore, the rhizomatic metaphore refers to the interminability of the philosophical task. Does the philosopher have a task? And what, in that case, is the philosopher's task? Mapping the territory of the mutation, forging conceptual tools for orientation in the everchanging deterritorialising territory of the ongoing mutation, these are tasks for the philosopher in our times.

Diacronic and Synchronic Phenomenology

The rhizomatic methodology is shaping my approach to the subject of this research: the phenomenology of sensibility in the present age of cultural mutation and technological transformation.

The transition from the alphabetical to the digital environment of the Infosphere marks a shift from the cognitive model of conjunctive concatenation to the model of connective concatenation.

The text that I am here introducing is dedicated to the effects of this shift in the field of aesthetic sensibility and in the field of emotional sensitivity.

This shift is diachronic as it happens as a transition and extends over the span of various human generations, transforming throughout time cognitive patterns, social behavior and psychological expectations. But I want to investigate as well the synchronic frame in which the shift happens: I want to describe composition, conflict and coevolution of different psycho-cultural regimes that simultaneously approach, collide, interweave in the process of globalization.

The first axis (diacronic, temporal) of the Phenomenology of Sensibility that I'm introducing here is the transition from the mechanic to the digital order, and the effects of this transition in the psychosphere.

The second axis (synchronic, spatial) of this Phenomenology of Sensibility is the coevolution of different cultural regimes of subjectivation in the contemporary sphere of globalization.

During the last thirty years the shift from the mechanical to the digital technosphere has provoked a mutation in the texture of human experience, and in the fabric of the world itself. The conjunctive mode of social interaction, which was prevailing from the Neolithic Revolution, has been swiftly replaced by the connective mode that starts to prevail when the automating interfaces of the information machine pervade and innervate the linguistic sphere.

I'll try to describe the transition from the age of Industrial capitalism to the age of Semiocapitalism from the point of view of a shift from conjunction to connection as the dominant mode of social interaction.

Sensibility and sensitivity are affected by the shift from the conjunctive mode to the connective mode, but the mutation takes different forms and intensities in the different geo-cultural areas of the world. So we have to retrace the general lines of an aesthetic genealogy of the present mutation.

Sensibility will be the main field of my research: I'll try to draw a phenomenological map of the global mutation investigating the aesthetic and the emotional side of sensibility.

For this purpose I'll try to retrace the effects that the shift from conjunctive to connective mode has produced in different geo-cultures.[1]

Finally I want to disclose that my research has no pretention of exhaustivity, as we know that "phenomenology is an infinite task." (Edmund Husserl)

Sensibility and creation

Emotion is concatenation of unconnected things, events, and perceptions. How does a concatenation become possible between things that have no connection? Are there filters and grids that make the human organism sensitive to the colour of autumn leaves, the tenderness of a gesture, the sound of a

1 The word geo-culture has been proposed by Irit Rogoff in an article titled *Geo-cultures, circuits of art and globalization*. In Open 2009, *The Art Biennial as a Global Phenomenon*.

song? Are the parts that enter into a concatenation fragments of a mosaic whose unity has been lost? Should we perhaps reconstruct the design to which the fragments once belonged? Or should we rather avoid presupposing a pre-existing design wherein segments are integrated and meaningful?

When I speak of conjunctive concatenation I mean that no original design is to be restored: conjunction is a creative act because the conjoining act is able to create an infinite number of constellations without following the lines of a pre-conceived pattern, or an embedded program.

At the beginning of the act of conjunction there is no design to fulfill, there is not a model at the origin of the process of emergence of the form, and beauty does not correspond to any hidden harmony embedded in the universal spirit or in the mind of god. Nor is there any code to comply with.

Conjunctive concatenation is source of singularity: it is event, not structure, and it is unrepeatable because it happens in a unique point in the net of space and time.

"The more we study the nature of time, the more we shall comprehend that duration means invention, the creation of forms, the continual elaboration of the absolutely new." (Bergson 1911, 7)

According to Bergson "we perceive duration as a stream against which we cannot go", a stream that we cannot go back up, and in this stream, in every instant new configurations of being come out of nothing.

Sensibility is the faculty which makes possible to find the path which does not exist, the link between things that have no intrinsic or logical implication. Sensibility is sense-driven creation of conjunctions and the ability to perceive the meaningfulness of the shape that is emerging from chaos, not by way of recognizion, not because it is compatible with some form that we have seen before—but simply because we perceive its aesthetic correspondence, its accordance (conformity) with the expectations of the conscious and sensible sensitive organism.

Expectations are crucial in the act of aesthetic conjunction, in perception and projection of form, and culture is the sphere of formation of the expectations. Culture has a temporal history and a geographic location: geo-cultures in the flowing of time. There is no implicit logic in the approach of one sign to another, and composition is not aimed to get some isomorphism with the world. The part is not fulfilled in a conjunction with another part, nor do parts put side by side give life to a totality.

The only criterion of truth is the pleasure of the conjunction: me and you. This and that. The wasp and the orchid.

Conjunction is the pleasure of becoming other, and the adventure of knowledge is born out of this pleasure.

The problem is: how does it happen that under some circumstances conjoined signs give birth to meaning? How does it happen that under some circumstances conjoined events become history? And conjoined percepts become reality? Gombrowicz suggests that reality is the effect of obsession.[2]

Gregory Bateson suggests that the skin is the line of conjunction and the sensible interface *par excellence*.[3] Forms are evoked and conjured within the aesthetic sphere. But what does "aesthetics" mean? By the word "aesthetic" Bateson refers to everything that belongs to the sphere of sensibility. Sensibility is not the space where conjunction is recorded. Rather, it is the factory of conjunctions. Conjunctions do not happen somewhere in the world, but they happen in a sensible mind.

For Bateson the question of truth has to shift from the realm of metaphysics and history to the realm of biology and sensibility: mind is able to think life because the mind belongs to the living world. It's a matter of co-extensivity, not of representation. There is no ontological correspondence between the mind and the world, as the metaphysicians think. There is no historical totalization in which mind and world coincide. There is no correspondence or adjustment or Aufhebung-realization: there are only conjunctions.

(And connections, as we'll see. But this is another story).

Reality could be described as the point of conjunction of innumerable

2 "I could never know the extent to which I was the cause of the combinations around my combinations, oh you can tell a thief from the hat! Just look at the infinite number of sounds and forms that come to us at each moment of existence… a hive, a buzz, a river, nothing easier than making combinations! To combine. The word surprised me for a second, like a ferocious beast in the forest, but it immediately disappeared in the great bedlam. In the infinity of phenomena that occur around me, I isolate one. I see, for instance, an ashtray on the table (the rest is shadowed). If this perception is justified (for instance, I noticed the ashtray because I want to ash on it), everything is fine. If I looked at the ashtray by chance and don't go back to it, it's still fine. But if after noticing the phenomenon with no precise reason you go back on it, then there is a problem. Why did you return to the object if it is meaningless? Ah, ah! So it meant something to you, since you insist on it. This is how, for the simple fact that you concentrated for an extra second on the phenomenon, with no apparent motive, that the thing starts to acquire a meaning… This is how a phenomenon becomes an obsession. Is reality essentially obsessive? Given that we construct our worlds through the association of phenomena, it would not surprise me if since the beginning of time there had been a gratuitous and repetitive association that imposed a direction and an order on chaos. Consciousness comprises of something that transforms it in its own cage." (Gombrowicz, W. 2005. *Cosmos.* Translated by Danuta Borchardt. New Haven: Yale University Press)

3 See: Bateson, G. 1979. *Mind and Nature*. New York: E.P. Dutton.

psycho-cognitive projections. If the mind can process the world as an infinite set of co-evolving realities that act on one another, this is only because mind is in the world. Language, the realm where man contrives being, is the conjunction of artificial fragments (signs) that produce a meaningful whole. But meaning does not take place in nature or in reality out there, it only occurs in the concatenation of minds.

Mirror neurons, language and connective abstraction

When it comes to connection the conceptual frame changes completely. When I use the word "connection" I mean the logical and necessary implication between two segments, the inter-functionality between segments. But connection does not belong to the kingdom of Nature, it is only a product of the logical mind, and of the logical technology of mind.

I'll come back again to the distinction between conjunction and connection because this text is essentially a consideration about the anthropological and aesthetic effects of the shift from the sphere of conjunction to the sphere of connection.

In his book *La negazione* (2013) Paolo Virno argues that language, far from easing the contact between human beings, is the basic source of conflict, misunderstanding, and finally of violence.

Only language establishes the possibility of negating what our senses are experiencing. Negation is like a switch that breaks the natural link between sensorial experience and conscious elaboration. Immediate experience knows a state of being, but only language can deny the state of being that experience acknowledges. In this sense we can say that negation is the beginning of any mediation.

In the first pages of the book Virno refers to biologist Vittorio Gallese's research on mirror neurons. According to Gallese and his colleagues, mirror neurons enable human beings to understand each other.

According to him mirror neurons establish a net of inter-individual threads that originate comprehension well before than the individual becomes self-conscious. Comprehension in fact is a physical and affective phenomenon, before being an intellectual act.

According to Gallese we comprehend the emotions and the actions of

another person because looking at that person we activate the same neurons that we would activate if we were feeling those emotions, and performing those actions.

We may call this mirror-like understanding empathy.

The development of linguistic competence, far from strengthening or confirming empathy, can be viewed as the beginning of the process of mediation that is gradually eroding empathy, and turning comprehension into a purely intellectual act of syntactic adaptation, rather than a process of semantico-pragmatic osmosis.

According to Virno language creates the un-natural possibility of switching down the light of immediate truth that surrounds the perceptual experience. The order of language is syntactical: conventional rules open and close the access to signification. In the course of human evolution the syntactical order of language has invaded and re-framed the immediacy of empathy, and in many points it has totally perverted or destroyed the very possibility of empathy.

William Burroughs (in *Ah Pook is here*) says that language is a virus that spreads as a mutation in the human environment.[4] Virno adds that the content of this virus is "negation", a laceration in the canvas of the shared perception and projection that we call reality.

Empathy is the source of conjunction. During the history of civilization and of techno-evolution the syntactization of the world (the reduction of the common world to the syntaxis of linguistic exchange) slowly erodes the traces of empathic understanding, and slowly enhances the space of syntactic conventions. Linguistic mediation develops technologies that are shaping the *Umwelt*, the surrounding environment.

The digital connection is the point of arrival of this process of growing abstraction, and of increasing dissociation of understanding from empathy.

In the book *Zero Degree of Empathy: A new Theory of Human Cruelty*, the British psychologist Simon Baron-Cohen speaks of "empathy erosion" in order to explain cruelty and violence in the relation between human beings. Baron-Cohen says that empathy is made of two consequential steps: the first step is the interpretation of the signs that proceed from the other, and the extrapolation of the other's feelings, desires, and emotions. The second step is the ability to respond accordingly.

4 First published as a comic strip in the English magazine Cyclops, this collaboration between William Burroughs and Malcolm McNeill, *Ah Pook is Here* was republished as a literary text in 1979 by John Calder and Viking.

I call conjunction this form of empathic comprehension, while I call connection that kind of understanding that is not based on the empathic interpretation of meanings and intentions of the other, but is based on the compliance and adaptation to a syntactic structure. The best explanation of the difference between conjunction and connection has been proposed by Tolstoj, when Prince Andrej Bolkonski compares, in the third book of *War and Peace*[5] the chess game and the game of war. The opposition between conjunction and connection is not to be seen as a dialectical opposition. The body and the mind are not reducible in an oppositional way to conjunction or connection. There is always some connective sensibility in a conjunctive body, and there is always some conjunctive sensibility in a human body formatted in connective conditions. It's a problem, of gradients, shades, undertones, not a problem of antithetical opposition between poles.

Recomposition and a-signifying Recombination

In the midst of infinite births and deaths, in the midst of rottenness, and leaves falling from a tree and sea waves—the infinite chaotic events randomly occurring in the universe, the only stunning and unexpected thing is the inexhaustible craving for sense, harmony and order.

Metaphysical and Dialectic philosophy focused on the idea of Totality, and the concept of Totality was based on the assumption of a pre-existing order, or on the assumption of some final order to restore and to bring into being. According to the principles of totalitarian philosophy each fragment finds its pre-established place and all the parts are arranged to compose an original or a final Totality, Code or Destiny.

The phenomenological approach takes leave from the assumption that knowledge can lead to the perfect totality, and abandons the project of a totalitarian identification of thought and world. So it opens the way to the

5 "They say that war is like a game of chess." Pierre remarked. "Yes replied Prince Andrew, but with this little difference, that in chess you may think over each move as long as you please and are not limited for time, and with this difference too, that a knight is always stronger than a pawn, and two pawns are always stronger than one, while in a war battalion is sometimes stronger than a division and sometimes weaker than a company. The relative strength of bodies of troops can never be known to anyone. Success never depends, and never will depend on position or equipment, or even on numbers, and least of all on position. / But on what then? / On the feeling that is in me and in him, he pointed to Timokhin, and in each soldier" (Tolstoj, L. *War and Peace*, Book Three, Second Part, Chapter XXV)

possibility of different theoretical constructions, based on different *Erlebnis* (forms of life). The rhizomatic methodology is just one of the possible phenomenological approaches.

According to the rhizomatic methodology meaning emerges from a vibration, which is singular in its genealogy and can proliferate and be shared. Meaning is therefore an event, not a necessity—and we can share it with other singularities which enter into vibrational syntony (or sympathy) with our intention of meaning.

The rhizomatic methodology does not presuppose or imply any totality to establish or restore. It is based on the principle of non-necessary conjunction and continuous molecular recomposition of cells whose destination is not implied in their program or genetic code.

The recomposition is a process of uncertain and autonomous subjectivation: flows of enunciation interweave and create a common space of subjectivity.

The collective subjectivity can be the result of an imagined form of belonging (the tribe, the nation, the common faith). In this kind of collective existence, enunciation pretends to bring about truth, and divergence is betrayal.

But collective subjectivity can be expression of an attraction: desire as singular creation of the other as singularity. In this case we can speak of a collective singularity, a singularity which is the living experience of a pathway from nowhere to nowhere. As Antonio Machado writes (and the Zapatistas repeat):

"Caminante no hay camino, el camino se hace al andar."

Desire, as attraction for the singularity is the generator of the pathway and the reason of existence (*reason d'etre*) of the collective.

Not the homeland, the family or the ideological dogma: the collective subjectivity that I am trying to trace out is based on nomadic desire, not on belonging or code.

I speak of recomposition in order to describe the process of social conjunction, the opening and conjoining of individuals in a collective singularity, which is expressing affective and political solidarity without identification, without conventional codes or marks of belonging.

Recomposition is the meeting, converging and conjoining of singular bodies in a provisionally common pathway. The common pathway is not inscribed in the genetic code, or in the cultural belonging—it is the discovery of a common possibility which is the meeting point of singular drifts of desire. The community that results from the process of recomposition is

a community of desire, not of necessity. In the process of recombination, on the other hand, a-signifying segments are connected in accordance with coded rules of generation.

Conjunction/Connection: the ongoing mutation

I call conjunction a concatenation of bodies and machines that can generate meaning without following a pre-ordained design, nor obeying any inner law or finality.

Connection, on the other hand, is a concatenation of bodies and machines that can generate meaning only following a human-made intrinsic design, only obeying precise rules of behaviour and functioning.

Connection is not singular, not intentional, not vibrational. It is rather an operative concatenation between previously formatted agents of meaning (bodies, or machines) which have been codified, or formatted according to a code.

Connection generates messages whose meaning can be deciphered only by an agent (body, machine) which shares the syntactic code that has generated the message.

In the sphere of conjunction the agent of meaning is a vibrating organism: I call vibration the uncertain and unresolved oscillation around an asyntotic point of isomorphism.

The production of meaning is the effect of singularization of a series of signs (traces, memories, images, words…).

Conjunction is the provisional and precarious syntony of vibratory organisms which exchange meaning.

The exchange of meaning is based on sympathy, the sharing of a *pathos*.

Conjunction, therefore, can be viewed as a way of becoming other. Singularities change when they conjoin, they become something other than what they were before their conjunction. Love changes the lover and the conjunctive composition of a-signifying signs gives rise to the emergence of a previously inexistent meaning.

In contrast, in the connective mode of concatenation each element remains distinct and interacts only functionally. Rather than a fusion of segments, connection entails a simple effect of machine functionality.

In order for the connection to be possible, segments must be linguistically compatible. Connection presupposes a process whereby the elements that need to connect are made compatible. Indeed the digital web extends through the progressive reduction of an increasing number of elements to a format, a standard and a code that makes compatible different elements.

The few considerations above are an introduction to the understanding of the anthropological mutation that is underway in our times, which in my view is essentially a transition from the predominance of the conjunctive mode to the predominance of the connective mode in the sphere of human communication.

From the anthropological point of view, techno-cultural change is centred on the shift from conjunction to connection as paradigm of exchange between conscious organisms.

The leading factor of this change is the insertion of electronic segments in the organic continuum, the proliferation of digital devices in the organic universe of communication and in the body itself.

The effect of this change is a transformation of the relation between consciousness and sensibility, and the increasing desensitisation in the exchange of signs.

Conjunction is the meeting and fusion of round and irregular bodies that are continuously weaselling their way about with no precision, repetition or perfection. Connection is the punctual and repeatable interaction of algorithmic functions, straight lines and points that overlap perfectly, and plug in or out according to discrete modes of interaction that render the different parts compatible to a pre-established standard.

The shift from conjunction to connection as the predominant mode of conscious interaction between organisms is a consequence of the digitalisation of signs and the increasing mediatisation of relations.

The digitalisation of communicative processes induces a sort of desensitisation to the curve, the continuous process of slow becoming; and a sort of sensitisation to the code, to the sudden changes of state.

Conjunction entails a semantic criterion of interpretation: in order to enter into conjunction with another organism, the organism sends signs whose meaning can be interpreted only in the pragmatic context, by tracing the intention, the shade of the unsaid, the conscious and unconscious implications and so on.

Connection instead requires a criterion of interpretation that is purely syntactic. The interpreter must recognise a sequence and be able to carry out the operation foreseen by the "general syntax" (or operating system); there can be no margins for ambiguity in the exchange of messages, nor can the intention be manifest though nuances.

The gradual translation of semantic interpretations into syntactic differences is the process that runs from the modern scientific rationalism to cybernetics and Artificial Intelligence programs.

Connective logic

The debate on artificial intelligence began in the 1960s.
In order to outline the problem that lies at the core of Artificial Intelligence, Hubert Dreyfus distinguishes between "areas in which relevance has been decided beforehand, and areas in which determining what is relevant is precisely the problem." (Dreyfus 1979, 33)

When we exchange messages in the conjunctive sphere we are trying to find out what is relevant for the participants in the communication. We don't know what our common object of interest and attention is: communication is about enlightening this point. In the connective sphere, on the contrary, we start from a common ground of conventional knowledge, translated into technological standards and formats that make connection possible.

Discussing the genesis of connective methodology in the history of Modern philosophy Hubert Dreyfus writes:

> "Galileo discovered that one could find a pure formalism for describing physical motion by ignoring secondary qualities and teleological considerations, so, one might suppose, a Galileo of human behaviour might succeed in reducing all semantic considerations (appeal to meanings) to the techniques of syntactic (formal) manipulation. The belief that such a total formalization of knowledge must be possible soon came to dominate Western thought… Hobbes was the first to make explicit the syntactic conception of thought as calculation. Leibniz though he had found a universal and exact system of notation, an algebra, a symbolic language, a universal characteristic by means of which we can assign to every object its determined characteristic number." (Ibid., 68-9)

Retracing the steps of formation of the contemporary digital mind-set, Dreyfus writes:

> "An important feature of Babbage's machine was that it was digital. There are two fundamental types of computing machines: analogue and digital. Analogue computers do not compute in the strict sense of the word. They operate by measuring the magnitude of physical quantities. Using physical quantities such as voltage duration, angle of rotation of a disk and so forth, proportional to the quantity to be manipulated, they combine these quantities in a physical way and measure the results. A digital computer represents all quantities by discrete states, for example, relays which are open or closed, a dial which can assume any one of ten positions and so on, and them literally counts in order to get results… Since a digital computer operates with abstract symbols which can stand for anything, and logical operations which can relate anything to anything, any digital computer is a universal machine." (Ibid., 71)

The universal digital machine is the logical and technological condition of the anthropological mutation that is underway in our times of transition.

Conjunction is the opening of bodies to the understanding of signs and events, and their ability to form organic rhizomes: the concrete, carnal concatenation of each pulsating vibratory bodily fragment with each other pulsating vibratory bodily fragment.

On the contrary, in a digital environment only what fulfils the standard of compatibility can connect: not every thing can connect with every other thing, and in order to enable the connection of distant communicative agents we must provide them with tools enabling them to access the flow of digital information.

When connection replaces conjunction in the process of communication between living and conscious organisms a mutation happens in the field of sensibility, emotion and affect.

My research is about this mutation.

This mutation—which happens in time, in the Diachronic dimension of the transition from the Modern mechanic environment of Indust-Reality to the post-Modern environment of Semio-economy—is not homogeneous as it depends on the particular features of the cultural context—geo-cultural, and synchronic—in which the mutation takes place.

Therefore my research is dedicated to investigate the different forms of diachronic connective mutation inside certain selected cultural contexts, in the framework of the synchronic plurality of cultures with a special attention for the relation between aesthetic sensibility and forms of emotional life.

Evolution and sensibility

By the expression "cognitive wiring" I refer to the capture and submission of life and of mental activity in the sphere of calculation. This capture is occurring at two different levels: at the epistemic level it implies the formatting of mental activity, at the biological level it implies the technical transformation of the processes of life generation.

In the Modern age the modelling of the body—a subject that Michel Foucault has widely elaborated in his works about the genealogy of Modernity —was essentially macro-social and anatomical: the subjection of the social body to the industrial discipline was linked to the macro-social action of repressive machines acting on the individual body.

Nowadays digital technology is based on the insertion of neuro-linguistic memes and automatic devices in the sphere of cognition, social psyche and life-forms. Metaphorically, and not only metaphorically, we can say that the social brain is undergoing a process of wiring, mediated by immaterial linguistic protocols and also by electronic devices.

As generative algorithms become crucial in the formation of the social body, the construction of social power shifts from the political level of consciousness and will, to the technical level of automatisms located in the process of generation of the linguistic exchange and in the process of formation of the psychic and organic body as well.

My attention here is focused on the processes of bio-social modelling of sensibility, on the embedding of cognitive automatisms at the deep level of perception, imagination and desire. This implies that social becoming is no more understandable in the framework of history, but only in the framework of evolution.

History is the conceptual sphere where conscious voluntary actors transform the surrounding conditions and social structures. In the sphere of evolution, on the other hand, human being cannot be considered an actor,

because the concept of evolution refers to the natural becoming of organisms in their interaction with the environment.

The concept of history and the concept of evolution can be distinguished and also opposed by the point of view of intentionality. The concept of History has been emphasized by the Romantic and particularly by the Hegelian Dialectical tradition, including Marx and the Marxist movement. The concept of Evolution, on the contrary, has been elaborated in a cultural space more akin to the positivist school of thought.

When political intentionality is effective in modelling the environment we speak of historical action. When the exchange between humans and nature, and the reciprocal transformation of these terms cannot be controlled by the intentional political action, we speak of evolution.

In the present conditions of hyper-complexity and acceleration of the technical environment, the social sphere can no more be properly understood in terms of political transformation, and is better explained in terms of evolution, particularly of neural evolution. The evolution of the brain resulting from the action of the environment on cognition and society, and the subjective adaptations of the human mind is the main factor of social transformation, and it is hardly subjectable to the political will.

In the context of History political action was driven by will, rational understanding and prediction—while in the context of evolution the organism has to become tuned with the environment, and sensibility is the faculty that makes this syntonization possible. Therefore the relevance and effectiveness of human action is no more placed at the level of rational knowledge, political decision and will, but at the level of intuition, imagination and sensibility.

The conceptual and practical sphere of modern politics has lost its ground.

In the age that began with Machiavelli and culminated with Lenin, human will (the prince, the State, the Party) was able to reign on the infinite chaotic variation of events and projects, and submit individual interests and passions to the common goal of social order, economic growth and civil progress.

The technical transformation of the last decades of the twentieth century, the infinite proliferation of information sources and flows, unleashed by the accelerating network technology, has made impossible the conscious elaboration of information by the individual mind, and the conscious coordination of individual agents of will.

The loss of effectiveness of political action is essentially an effect of change in temporality: because of the acceleration and complexification of the Infosphere, reason and will, the essential tools for political action, are unable to process in time and to decide in time. The technical transformation has changed the conditions of mental activity and the forms of interaction between the individual and the collective sphere.

In the age of Modernity these two spheres—individual and collective—could be seen as distinct, externally linked, and interacting on the basis of an effective intentionality.

Now the distinction between individual and collective has been blurred. Crowds and multitudes are involved in automatic chains of behaviour, and driven by techno-linguistic dispositives. The automation of the behaviour of many individuals traversed and concatenated by techno-linguistic interfaces results in the effect of Swarm. Man is the animal who shapes the environment that shapes his/her own brain, the swarm effect therefore is the outcome of human transformation of the technical environment leading to automation of mental behaviour.

PART I

SENSIBILITY

CHAPTER 1

SENSITIVE INFO-SPHERE

La peau humaine des choses la dermo de la realité
—Antonin Artaud

The sensible organism

What do we mean by sensibility? In his book on Francis Bacon, Deleuze writes that "Sensibility is a vibration. As we know, the egg represents a stage of the body before organic representation—axes and vectors, gradients, zones, cinematic movements and dynamic tendencies—in relation to which forms are contingent and accessory." (Deleuze 1995, 103)

Sensation is the opening to the world that enables the tantric egg of the body without organs, to vibrate.

> "A Body without organs is made in such a way that it can be occupied, populated only by intensities. Only intensities pass and circulate. Still, the Body without organs is not a scene, a place, or even a support upon which something comes to pass. It has nothing to do with phantasy, there is nothing to interpret. The BwO causes intensities to pass; it produces and distributes them in a spatium that is itself intensive, lacking extension. It is not space, nor is it in space; it is matter that occupies space to a given degree—to the degree corresponding to the intensities produced. It is non-stratified, unformed, intense matter, the matrix of intensity, intensity = 0; but there is nothing negative about that zero, there are no negative or opposite intensities. Matter equals energy. Production of the real as an intensive magnitude starting at zero. That is why we treat the BwO as the full egg before the extension of the organism and the organization of the organs, before the formation of the strata; as the intense egg defined by axes and vectors, gradients and thresholds, by dynamic tendencies involving energy transformation and kinematic movements involving group displacement, by migrations: all independent of accessory forms because the organs appear and function here

> only as pure intensities. The organ changes when it crosses a threshold, when it changes gradient. "No organ is constant as regards either function or position… sex organs sprout anywhere… rectums open, defecate and close… the entire organism changes color and consistency in split-second adjustments. Tantric egg." (Deleuze Guattari 1987, 153)

The organism is the specific sedimentation of the vibrations through which the potentiality of the egg is actualized, and it naturally retains the ability to return to the state of a body without organs whenever it finds the potential to change again. When an organism stiffens its refrains, its obsessions and its codes of interpretation, it is doomed to lose sensibility and to lose its ability to vibrate.

Sensibility can be defined as the faculty which enables the organism to process signs and semiotic stimulations that cannot be verbalized or verbally coded. Someone who is unable to comprehend moods, emotions, allusions and the non-said—a large part of what constitutes communication and daily affective and social life—is commonly defined as insensitive.

Like a thin film recording and deciphering non verbal impressions, sensibility makes possible for human beings to conjoin and enter empathic relations, or in other words, to 'regress' to a non-specified and non-codified state of a body without organs that pulsate in unison. Empathic relations enable the comprehension of signs that are irreducible to information and yet constitute the foundation of inter-human understanding. Sensibility is the faculty of decoding intensity, which is by definition escaping the extensive dimension of verbal language.

Therefore sensibility is the ability of understanding the unspeakable.

Beauty

According to Paul Klee, the task of creative activity is not to reproduce the visible, but to make visible. Sensibility is the faculty of making visible a configuration of the world.

The function of creative activity such as poetry, music, painting, cinema, literature, is not to represent existing reality, but to make the world sensibly perceivable, to translate world into sensitive configurations. Although art and sensibility are not limited to the realm of beauty, we name beauty the

emergence of forms in the realm of sensibility. Beauty can be found in symmetry or in a harmony intrinsic to an object, but a violation of the symmetric order can cause no less aesthetic pleasure.

In beauty, we find a regression to a state of a body without organs, where it is possible to create new constellations of meaning and new functionalities for the objects we experience.

Victor Sklovski defines poetry as the restitution of *pathos* to words which have been overly used and consumed: he calls *ostranenie*, (estrangement) the procedure that gives back meaning and energy to this kind of signs. We do not need to look at symmetry and a-symmetry for an explanation of aesthetic emotion and the pleasure of forms, we should rather look at estrangement, an unpredicted deviation in the relationship between sign and meaning.

This is the point: the derailing of the customary predictable relation between sign and meaning and the discovery of unforeseen and multiple perspectives is the condition of beauty. Beauty has to do with surprise. Symmetry and dissymmetry are modalities of the configurations of signs and their aesthetic value is dependent on improbability, unpredictability and strangeness: a distance from the predictable order.

Perhaps beauty is the ironic tolerance of the real life's imperfection, allowing for a relaxation of the tension between an organism and its environment, mind and body, existence and being for death. And it may also be something entirely different, like the cruelty of the inexhaustible.

Life continuously produces bodies that we cannot enjoy; they imperturbably pass us by, indifferently brushing against our gaze. Beauty is the cruelty of this infinite excess of nature, the sudden awareness of the fragility of our conscious organism, the intuition of the impossible infinity of experience.

Art, aesthetic creation and the gesture of suspension are playing with the tolerant irony of beauty. But there is a beauty that the language of eroticism de-reasons about, that gushes out of the blind and merciless game of nature, the tenderness of sensual energy and decomposition.

The Western philosophical tradition has conceived of aesthetics as a theory of beauty. But this conception has revealed rather inconclusive. Therefore I think that it should be better to conceive of aesthetics as the science of semiotic emanation in its interaction with sensibility. Aesthetics should return to its etymon and should refer to sensibility as experience of the object, rather than to beauty (a quality of the object in itself).

Democritus conceived of sensation as the chemical integration of sensuous and environmental matter. Sensibility can be seen as a modulation of this *syntonia* (tuning). Sensibility is the certainty of judgement, the singular certainty of good and evil. According to Gabrielle Dufour-Kowalska,

> "Sensibility is not simply the faculty of the beautiful and artistic beauty does not constitute a separate realm. […] Sensibility belongs to a sphere of certainty that no objective knowledge can lay claim to, because the real source of human knowledge is not the intellect, but sensibility. […] In its radical subjectivity, sensibility is the faculty of the real." (G. Dufour-Kowalska 1996, 11-12)

What makes possible the harmonious or disharmonious vibration between singularity and cosmos? What is the similarity, what is the difference between aesthetic and erotic pleasure? Should we think that in the human mind there is a neuro-physiological predisposition, an innate program of sensuous reception of the world, a bio-grammar of aesthesia and eroticism? Or should we think that the conditions of harmony are exclusively cultural?

Harmony and disharmony are not intrinsic to the cosmos. They are modalities of a relationship between the singular receptive psyche and cosmic becoming: here lies the secret of pleasure and beauty.

Genealogy of the skin

Techno-semiotic emanation and sensibility are the two poles between which the scene is set: the cultural, historical and social becoming of the planet can be viewed in the perspective of the techno-semiotic and cultural modulation of human sensibility.

Accelerated by the power of technologies, the environment exceeds human measure. Human reason is exhausted. The observer is overwhelmed by the infinite complexity of phenomena. Thrust beyond the realm of the properly human, sensibility involves the inorganic.

Sensibility can be regarded as a particular realm of what Foucault defines as episteme (Foucault 1966): the shaping of social perception that makes possible a common projection of the world, and therefore social discipline. It is now necessary to outline a phenomenology of the mutation of sensibility.

Semiocapitalism penetrates deeply into the neural circuits of social culture thanks to the permeation of sensibility.

Let us distinguish the sensory from the sensuous level. Sensory is the perceiving faculty of the organism, while sensuous is the organism in so far as it selectively projects. Sensibility is the singular faculty that allows for a projection of the real. It is therefore morphogenetic and continuous in its creation of forms. Sensibility is certainty of judgment in this respect, because aesthetic judgment does not apply to something separate from pleasure and pain, and thus entails the singular certainty of good and evil.

The idealist vision here is turned upside down: whilst for Hegel art (the activity of morphogenetic creation) is a moment of the process towards knowledge, we would say on the contrary that thought is a moment of sensibility: the tuning of *atman* and *prana* (singular breath/cosmic rhythm).

Thought tends towards the conceptual capture of the world, while sensibility is caressing and shaping the world without interrupting it's becoming, without pretending the establishment of any absolute truth.

Epidermis is the point of contact, the sensitive interface between the conscious self and the infinite emission of signs. In the night sky, desire is the order of constellations. The epidermis is the stratum where order is opened and created on the coordinates of pleasure and pain. Among the infinite signs coming from the cosmos and from the artificial info-sphere, constellations emerge, ruled and designed by epidermal intuition and desire which create, compose, choose, hide and make world. But the epidermis is not a biological or natural stratum. The skin is shaped by touch, caresses, suffering and scars. The info-sphere shapes the sensors that create world constellations in the info-sphere. The epidermis is a memory of caresses. It is the interface of the social, and its sensibility is the place of the utmost intensity of mutation.

I'm questioning here the common assumption that sensibility is passive and purely receptive, whilst imagination is creation, falsification and simulation.

I view sensibility as an action on the environment and as emanation as well as reception and perception.

Info-sphere and sensibility

The info-sphere is the sphere of intentional signs that surround the sensible organism.

Perception and the technological architecture surrounding the perceptive organism are intertwined. The theoretical innovation of Marshall McLuhan consists essentially of this breakthrough: the technical structure of semiosis (the emission format of semiotic flows) shapes perception and imagination.

In the Renaissance, man's perception of the space of everyday life changes because of the innovation in the representational technique (perspective).

Prior to modernity, a regime of slow transmission characterized the info-sphere and this slowness was shaping lived time and cultural expectations. Throughout the history of civilisation, perception has been moulded by artificial regimes of images and techniques of the circulation and production of representations of the world. The modern acceleration of the transmission of signs and the proliferation of sources of information has transformed the perception of time. The info-sphere became more rapid and dense, and the proliferation of info-stimuli subjected sensibility to a mutagenous stress. Due to an intensification of electronic signals, the info-sphere acceleration drags sensibility into a vertigo of simulated stimulation. The perception of the other and its body is reshaped too. Pressure, acceleration and automation are affecting gestuality, postural dispositions and the whole of social proxemics.

The images proliferate and our faculty of imagination undergoes a vertiginous acceleration. The image is not the brute perception of empirical data brought to our attention by matter, but the imaginational elaboration of visual matter by our mind, and the technical mode in which we receive and elaborate images acts upon the formation of our imagination.

Techno-media adjustments and psycho-cognitive mutations are as interdependent as the organism and its ecosystem. The conscious organism is a sensuous organism as well: it is a bundle of sensitive receptors. The connective techno-sphere we inhabit today resembles the outcome of a projective zapping where we combine sequences coming from different sources. The social unconscious is reacting to this continuous deterritorialisation in various ways: adaptation, disconnection, pathology.

Suddenly awoken by the eruption of semiotic proliferation and deprived of the filters inscribed in the critical and disciplinary mindset of modernity the nucleus of identity is fleeing and dissolving in all directions.

Emotion in cybertime

Let's call "Info-sphere" the Universe of transmitters and "social brain" the Universe of receivers. The Universe of receivers, who are human beings made of flesh, frail and sensuous organs, is not formatted according to the standards of digital transmitters. The neural system however is highly plastic and can mutate according to the Info-sphere's rhythm. But the format itself of the transmitter is not corresponding to the format of the receiver. So what happens? The interfacing of the electronic universe of transmission with the organic world of reception is producing pathological effects: panic, over-excitement, hyper-motility, attention deficit disorders, dyslexia, info-overload and saturation of the neural circuitry.

In the late modern times, during the transition from the alphabetical to the electronic regime of communication, the universe of transmission has been constantly accelerating, and the universe of receivers has desperately tried to follow the rhythm, accelerating and standardizing the cognitive response.

The neuro-system is plastic, nevertheless human mind is evolving with a rhythm which is totally different from the rhythm of evolution of machines. This is why the expansion of cyberspace implies an acceleration of cybertime that has pathological effects on the living terminal, the human mind which has physical, emotional and cultural limits.

Multitasking implies the quick shift from an informational frame to another. Human mind seems to be perfectly suited to perform multitasking, but this kind of practices are triggering a psychological mutation, and this mutation is producing new forms of mental suffering like panic, attention deficit1 disorders, burnout, mental exhaustion, depression.

We are taken in a frenzy of forced socialization: producing and working imply being connected—so connection means working. The economic

1 Interesting by this point of view the Dave Eggers novel titled *The Circle*, published in 2013.

obsession brings about a sort of permanent mobilization of productive energy. According to Jonathan Crary "the relentless capture and control of time and experience are the form of contemporary progress." (Crary 2013)

This is the main focus of the semio-corporation whose mission is the flexibilization and dynamization of the relation between the Net and the netter, between the machine and the cognitive worker: Google.2

The overproduction that was leading to cyclical crises in the age of industrial capitalism according to Karl Marx becomes permanent in the sphere of semiocapitalism, as the proliferation of sources of nervous stimulation implies infinite overload of the attention market. According to Crary the expansion of the attention time leads to the permanent siege and relentless expansion of alert time. Attention has turned to be the scarcest of resources: we no more have time for conscious attention, so our dealing with information and taking decision needs to be more and more automated. We tend to be governed by decisions that are not responding to a long term rational strategy, but only to binary alternatives…

The psychiatrist Eugene Minkowski, author of *Lived Time: Phenomenological and Psychopathological Studies,* published in 1933, has stressed the link between mental suffering and the perception of time: the way we perceive our flowing through time, the lazy or frantic mood of experiencing life.

Clearly influenced by the thought of Henry Bergson, who thinks of time as duration, or projection of the existential *vecu,* Minkowski does not speak of "time", but of "lived time". Following Minkowski's suggestions we may label as cronopathology the prevailing forms of psychopathology.

In the American schools the diagnosis of ADD (Attention deficit disorders) is more and more common. This disease is manifesting itself in form of hyper-motility, and consequential inability to focus attention on a subject for more than a few seconds. The daily exposure to electronic flows of psycho-stimulation since early age is provoking effects which imply affection, emotionality language, imagination, and the very perception of lived time.

2 "In the late 1990s, when Google was barely a one-year-old privately-held company, its future CEO was already articulating the context in which such a venture would flourish. Dr. Eric Schmidt declared that the twenty-first century would be synonymous with what he called the attention economy and that the dominant global corporations would be those that succeed in maximizing the number of eyeballs they could consistently engage and control. The intensity of the competition for access to or control of an individual's waking hours each day is a result of the vast disproportion between those human temporal limits, and the quasi infinite amount of content being marketed." (Crary 2013, 75)

In the work process humans are transformed into connected elaborators of information, and the increase of productivity is based on the acceleration of the info-flows. The contraction in time and the acceleration of the brain activation has an effect of fragilization of personal experience.

While cyberspace can be infinitely expanded, as it is the virtual dimension of info-productive interaction between agents of communication, cybertime, the duration of perception cannot be expanded beyond certain imits, as it is limited by emotional and cultural temporality, and by organic restrictions. Emotional and cultural elaboration of stimuli happens in time, and time for psychological and bodily elaboration cannot be shortened beyond a certain point.

The more the amount of information demanding our attention expands, the less attention time for elaboration is available. The technical composition of the world has changed, but the modalities of cognitive appropriation and elaboration cannot adapt in a linear way. Technical environment is changing much faster than culture, and especially cognitive behaviour.

We can increase the time of exposure, we can increase our efficiency taking drugs, but experience cannot be intensified beyond a limit. Therefore acceleration is provoking an impoverishment of the experience, as the intensive modalities of pleasure and knowledge are stressed up to the point of exhaustion.

This conflict—or incompatibility—between cyberspace and cybertime is a marking paradox of our society, and because of capitalist exploitation it is producing pathological effects.

This gap is the source of a sort of desensibilization. Beyond a limit, the experience acceleration leads to a contraction of conscious elaboration time and to a loss of sensibility—which has also ethical consequences. Sensibility is in time, and cyber-space has grown so thick that the sensible organism—as conscious singularity—has no time for extracting meaning and pleasure from the experience.

The drugs for erectile problems, like Viagra and similar products have more to do with attention time than with physical impotence. As time for caresses and words is no more available for precarious lovers, fast sex needs pharmaceutical support: sex without attention, as attention needs time.

Prozac-crash

The universe of transmitters (cyberspace) can no more be translated by the universe of receivers (cybertime). Here lies a pathogenic gap: the flourishing industry of psychopharmacology is selling more pills every year, because drugs are the only way to manage mental suffering, anxiety, sadness.

At the end of the '70s, when an acceleration of productivity was forced on workers, a huge epidemic of drug addiction swept the late-industrial metropolitan areas. Capitalism was entering in the age of neo-human acceleration, and cocaine, a substance which accelerates mental and bodily rhythm, became very fashionable. In the same period, however, many people started injecting heroin, a substance that allows a deactivation of the link between individual perception and surrounding rhythm. In the years of passage from the '70s to the '80s the white powders epidemic triggered existential and cultural devastation whose traces can be found in music, literature, and visual arts of the American no-wave and of the British punk culture. Then the psychopharmacological products spread, and we entered the age of antidepressants and mood enhancers: Prozac, Xanax, Zoloft and so on.

As semiocapitalism is based on the constant exploitation of mental energy, and competition is the general form of relation in the precarious labour market, mental suffering has become a social epidemic. The main source of pathology is competition in connective conditions: constant attention stress, reduction of time available for affection, loneliness, existential misery, then angst, panic, depression: the are the individual symptoms of this epidemic. Psychopathology and economics become more and more interlinked. In the transition to Semiocapitalism mental suffering is no more the problem of a small minority of weird people, but tends to become the normalcy of a system which is based on the exploitation of precarious cognitive work.

As long as capitalism was looking for physical energies to extract from the bodies of salaried people, psychopathology could be secluded in a marginal space of the city. Who cares about your suffering, as long as you are just screwing, hammering, working on a lathe, and assembling pieces of a machine? You can feel alone as a fly in the bottle, but your productivity is not hindered by your loneliness and pain, as your muscles can work. Nowadays, on the contrary, semiocapitalism needs essentially neural energies for mental

work, and alienation is exploding at the core of social machinery. Ups and downs, panic and depression are words that the economic parlance shares with psychopathology: these words have not metaphorical meaning, they are clues of the growing interdependence between economic behaviour and mental pathology.

Desensibilization

After the end of the Avant-garde, after the infiltration of art in the territory of social communication, aesthetic stimulation invasively spread in every space of the mediascape: advertising, television, design, web design. The conscious and sensible organism is enveloped by a semiotic flux which is not only an information carrier, but a factor of perceptual stimulation and psychological excitement. Widespread aesthetization absorbs erotic energy, and diverts it from the body towards the signs.

The classical aesthetic philosophy was based on the conceptual and sensible centrality of the catharsis. In the Aristotelian vision art work was conceived as the trigger of a captivating wave, exciting and leading to a climax, a cathartic emotion. In the Classic, Romantic and also in the Modern conception, beauty was identified with the moment of culmination relaxing the tension implied in the relation between sensitive body and the world: catharsis, harmony, sublime detachment. Reaching the cathartic climax of the aesthetic emotion is an event that can be assimilated to the orgasmic discharge that ensues from the exciting contact between sexual bodies, when muscular tension falls down in relaxation and pleasure.

If we introduce an inorganic item in the circle of excitement-pleasure, if we introduce for instance electronic stimulation, if we accelerate the intensity and frequency of the stimuli, the result will be a contraction of the psychophysical time of reaction, and a spasm of unconcluded excitement will replace the orgasmic discharge.

In late-modern art, the idea that catharsis is the aim of art is fading, giving way to a more cold cerebral conception of the relation with art: beauty splits from pleasure, and tends to resemble a conceptual game, the space of unresolved tensions. Late modern art often looks like a frozen gesture of desensibilization.

Rather than the cathartic excitement of the Modern tradition these artists prefer the conceptual recombinant montage. A sort of an-emotional trend marks the art-scape of the late modern age, anticipating the emergence of an-affective forms of life.3

Aphasia seems to prevail in the social behaviour of the connective precarious generation, while verbal elaboration is compressed and accelerated up to the point of provoking emotional disease.

Also dyslexia can be read as a symptom of this acceleration.

The emotional elaboration of meaning is deranged by intensified stimulation. Affection and sexuality are wavering between loneliness and wild predatory aggressiveness: rituals of emotional detachment, virtualization, pornography, sexual anorexia.

Sensitivity enters into a process of re-formatting: in order to be compatible with the digital machine, language is to become smooth exchange of information. Sexual imagination is invested in the hairless surfaces of the digital image. The first digital generation shows symptoms of emotional atrophy: impressive disconnection of language and sex. In the media, advertising, television, everywhere there is talk about sex. But sex is no more talking, as it is disconnected from language.

Sex is babbling, stuttering, mumbling, or screaming in desultory way. Words are drying out.4

Electronic media act as an accelerator of info-stimulation and simultaneously as a desensibilizer of the collective psyche and the collective skin.

3 In the works of artists like Philip Glass, Jean Tinguely, Nanni Balestrini, the artistic intention seems to be hinting at the conceptual algorithm, the graphic-viral replication, the an-emotional unconcluded cycle.

4 "Japan's under-40s won't go forth and multiply out of duty, as postwar generations did. The country is undergoing major social transition after 20 years of economic stagnation. It is also battling against the effects on its already nuclear-destruction-scarred psyche of 2011's earthquake, tsunami and radioactive meltdown. There is no going back. 'Both men and women say to me they don't see the point of love. They don't believe it can lead anywhere,' says Aoyama, a Tokyo based psychologist and counselor. 'Relationships have become too hard.' Marriage has become a minefield of unattractive choices. Japanese men have become less career-driven, and less solvent, as lifetime job security has waned. Japanese women have become more independent and ambitious. Aoyama says the sexes, especially in Japan's giant cities, are 'spiraling away from each other'. Lacking long-term shared goals, many are turning to what she terms 'Pot Noodle love'—easy or instant gratification, in the form of casual sex, short-term trysts and the usual technological suspects: online porn, virtual-reality 'girlfriends', anime cartoons. Or else they're opting out altogether and replacing love and sex with other urban pastimes." (Haworth, A. 2013. "Why have young people in Japan stopped having sex", *The Observer*, October 20 edition).

Emotion: trace and body

What is emotion? Max Pagès tries to overcome the separation between the Freud's conception of emotion as a sign and Reich's conception of emotion as a bodily instinctual reaction.

According to Pagès, emotion is the trace of psychological and physiological events, linked by not gratuitous connections as the expressions of joy, anger, and fear. (Pagès 1986, 109).

Corporeity and culture together contribute emotional value to objects, signs, acts. The modes of sensuous and sensitive reaction of a body are linked to a cultural context. According to Pagès we can speak of a sensible memory, a bodily recording of the history of contacts, of tenderness and violence: bodily traces of psychic events, particularly at the level of emotional inhibition and of psychosomatic troubles. (Ibid., 118).

The skin, which is covering our body and sheltering it from the external world, is also the most ancient and sensible of our sensory organs, our first tool for communication. Although covering and closing, skin is also opening the body to the world, as it is bringing messages from the surrounding environment towards mind. In the sensory system's evolution, the sense of touch, whose organ is the skin, comes first and has fundamental importance, introducing our organism to the sensuous knowledge of the world. The world becomes part of our experience only when the other's body (human or not human) enters in contact with our skin, and warmth can flow from an organism to the other.

Society is first of all the space where we encounter other bodies to touch, smell and see, however it is also the space where touching is submitted to rules. Culture implies a regulation of touching and of proxemics—the way bodies locate and position each in relation to the other. There are cultures in which touching—starting from the relation between mother and child—is considered part of daily life, and societies in which touching is strongly ritualized, and is considered as something embarrassing, something that we should deal with only secretly in a closed space of the house, something we should reduce to a minimum when in public spaces.

"*Noli me tangere*" (do not dare touching me) seems to be the rule of behaviour of modern society, where the hygienic obsession is joining and reinforcing the religious obsession. Monotheistic religions tend to identify

contact and guilt, and submit touching to rigid symbolic regulations. But in the hygienic modern times, medical more than religious dissuasion is detaining people from touching and seeking pleasure. Michel Foucault has described medicalization as a process which marks social spaces and functions, disciplining bodies and submitting them to the order of economic production.

As long as touching the body was a danger for the religious soul, human beings defied the sense of guilt, but when the body of the other is felt as the carrier of epidemic disease, then desire itself is repressed and reshaped, not only its expression. When desire becomes a danger for the body, then fear threatens desire from inside, and desire is assimilated with disease. Eroticism takes then a morbid turn, and starts being aestheticized and transferred in the realm of social taboos and individual transgressions.

Epidemics proceeding from touching have marked the cultural history of human kind, particularly in modern urban, crowded, promiscuous times: think of the place of syphilis in nineteenth century's cultural scape.

On the threshold of post-modernity epidemics have been amplified by the mediascape, and have gone psycho-viral, transferring their dangers in the semiotic space, then shifting from the semio-sphere to the space of emotions, then back to the Mediascape, in a sort of Larsen effect of the psycho-sphere.

AIDS, the acquired immunodeficiency syndrome is the perfect metaphor of this anthropological shift: more than ever this disease has produced its effects on the sphere of communication. In the last decades of the past century AIDS has acted as a media epidemics and simultaneously it has frozen and sanitized the act of touching, transferring erotic energy in the media space of pornography and in the always postponed excitement of the social network rituals of courting. The cultural virus has so deeply permeated the collective psyche that we are unable to ponder the effects it has produced in the quality of experience and in daily life. Even if the actual fear of the acquired syndrome is mitigated by the medical science, its cultural and psychological effect is here to stay, transformed into ritual, fashion, life-style.

Frail Psychosphere

The arts of the 1900s favoured the register of utopia in two forms: the radical utopia of Futurism and Surrealism, and the functional utopia of Bauhaus.

The dystopian thread was hidden in the folds of the artistic and literary imagination, in Fritz Lang's expressionism, and in a sort of bitter surrealism that resurfaces in the novels of Philip Dick.

In the second half of the nineteenth century the literary dystopia of Orwell, Burroughs and De Lillo flourished. In the years of transition from the twentieth century to the twenty-first century dystopia takes centre stage and conquers the whole field of the artistic imagination. In the expressions of poetry, cinema, visual art and novel, the marks of an epidemic of mental suffering proliferate.

All along the late modern age artists have been the harbingers of precariousness, internalized in an aesthetic of uncertainty, randomness, and excess. But in the first decade of the new century precariousness has turned into a social condition, pervading the labour market and the very self-perception of the workers.

Precarious art is an attempt to mitigate social pain and political impotence with a sort of dystopian irony.

At the Exhibition of Visual Art of Limerick 2012 I saw *The Trainee*, a distressing work by the Finnish artist Pilvi Takala. *The Trainee* has been produced in collaboration with Deloitte and Kiasma Museum of Contemporary Art. In order to realize the project, the artist has been working for a month as a trainee in the marketing department of Deloitte where only few people knew the true nature of the project. She is initially a normal-seeming marketing trainee, then she starts to apply peculiar working methods. We see the trainee sitting at her workstation in the consultants' open plan office space or in the tax department library all day doing nothing. One of the videos shows her spending an entire day in an elevator. These acts or rather the absence of visible action slowly make the atmosphere around the trainee unbearable and force the colleagues to search for solutions and come up with explanations for the situation. Gradually she becomes an object of avoidance and speculation. Her colleagues start asking her embarrassing questions, between sincere interest and bewildered amusement. Demands are directed at the superior regarding the strangely behaving worker. Masking laziness in

apparent activity and browsing Facebook during working hours belong to the acceptable behavioural patterns of a work community. However, sitting silent and still in front of an empty desk, thinking, smiling and gazing at the wall threatens the peace of the community and breaks the colleagues' concentration. The non-doing person isn't committed to any activity, so she has the potential for anything. It is non-doing that lacks a place in the general order of things, and thus it is a threat to order. The degrading religion of labour is exposed here together with uselessness of contemporary work.

In her videos, Eija-Liisa Ahtila (*Wind, If 6 was 9, Anne Aki and God*) narrates the psychopathology of relations, the inability to touch and to be touched.

In the film *Me and you and everyone we know*, Miranda July tells the story of a video-artist who falls in love with a young man and the difficulty of translating emotion into words, and words into touch. Language is severed from affectivity. Language and sex diverge in everyday life. Sex is talked about everywhere, but sex never speaks.

A film by Jia Zhangke, entitled *Still life* (*Sanxia haoren*) and produced in Hong Kong in 2006, shows an unfolding devastation of contemporary China. The predominant colour is a rotten, greyish, violet green.

The story is simple, but cruel: Huo Sanming returns to his place of birth in the hope of finding his wife and daughter, whom he had left years earlier to go and find work in a distant northern mine. His village, along the riverbank of the Yangtze no longer exists. The construction of the Three Gorges Dam had erased many villages. Houses, people and streets have been covered by water. The building of the dam proceeds, the destruction of villages continues and the water keeps rising. Huo Sanming arrives in this scenario of devastation and rising water and he does not find his wife and daughter; so his search begins. He looks for them while groups of workers armed with their picks take walls down, explosives demolish buildings and landscape is transformed into a huge sprawl of garbage.

After long searches he finally finds his wife; she has aged and been sold by her brother to another man. They meet in the rooms of a building as it is being demolished and, in whispers, they talk about their daughter, their heads down. A dark green spaceship is flying in the background of bricks and iron spattering onto a shit-coloured sky. In the last scene of *Still life* a tightrope walker walks on a rope from the roofs of a house towards nothingness, against a background that recalls the dark surrealism of Dali's bitter canvas.

Still life is a lyrical account of Chinese capitalism acted inside out, from the standpoint of submerged life.

The Corrections, a novel by Jonathan Franzen, speaks of the psychopathological micro-shifts and of the psychopharmacological micro-adaptations of the humanity increasingly devastated by depression and anxiety: the attempts to adjust to an existence that must be normal and pretends to be normal while the brain is unable to deal with the surrounding chaos and the intimate chaos as well. Corrections are the adjustments needed in a volatile stock market in order to avoid losing the money invested in private pension funds that might suddenly disappear.

Franzen recounts a couple of aging person in the Midwest: thy have gone nuts as a result of decades of hyper-labour and conformism. Corrections are the small and unstoppable slides towards the point of turn-off, the horror of old age in the civilization of competition, the horror of sexuality in the world of puritan efficiency.

In the novel, published in 2001, Franzen digs deep into the folds of the American psyche and describes in minute details the pulpifaction of the American brain, the depression and dementia resulting from a prolonged exposure to the psychic bombardment of stress from work, apathy, paranoia, puritan hypocrisy and the pharmaceutical industry around them, the psychic unmaking of men who are encapsulated in the claustrophobic and illusory shell of economic hyper-protection, the infantilism of people who pretend to believe, or perhaps really believe in the fulsome Christmas fairy tale of compassionately liberalist cruelty. By the end of the long awaited Christmas dinner, as the psychopathic family happily gathers together, the father tries to commit suicide by shooting himself in the mouth. He does not succeed.

Yakizakana no Uta starts with a fish in cellophane wrapping on a supermarket shelf. A boy grabs it and takes it to the till; he pays, leaves, puts it in the bicycle basket and cycles home.

> "Good morning Mr. Student, I'm very happy to be with you. Do not worry, I'm not a fish who complains,' the fish says whilst the student briskly pedals home. It's nice to make the acquaintance of a human being. You are extraordinary beings; you are almost the masters of the universe. Unfortunately you are not always peaceful, I would like to live in a peaceful world where everyone loves one another and even fish and humans shake hands. Oh it's so nice to see the sunset, I like it ever

so much,' the fish becomes emotional and jumps in the cellophane bag inside the basket. I can hear the sound of a stream… I love the sound of streams, it reminds me something from my childhood."

When they get home the boy unpacks the fish and puts it on a plate, throws a little salt on it, as the fish gets excited and says "Ah! I like salt very much, it reminds me of something…" the boy puts it on the grill in the oven and turns the knob.

The fish keeps chatting: "Oh Mr. Student it's nice here, I can see a light down there… I feel hot… hot…" until its voice becomes hesitant.

It starts singing a song, more and more feebly and unconnectedly, like the Hal in *2001: A Space Odyssey* as his wires are unplugged.

Yakizakana no Uta, by Yusuke Sakamoto, is perhaps the most harrowing animation film I saw in June 2006 at the Caixa Forum of Barcelona, during the *Historias animadas* festival. Yet I perceived a common tone running through all of the works presented at the festival, one of ironic cynicism, of ironic despair.

Animales de compania by Ruth Goméz uses ferocious images to tell the story of a generation of well dressed anthropophagi, young beasts in ties; they run and run to avoid being caught by fellows, colleagues, friends, and lovers who wound, kill and eat them as soon as they fall into their grip, with terrorized smiles and dilated eyes.

This art is no denunciation. The terms "denunciation" and "engagement" no longer have meaning when you are a fish getting ready to be cooked.

Artists of the twenty-first century no longer show that kind of energy, even though they keep using expressions taken from the lexicon of the past century, perhaps because they are scared by their own truth. Artists no longer search the way to a rupture? They seek a path that may lead to a state of equilibrium between irony and cynicism, they seek a way to suspend the execution, at least for a moment.

Geo-cultures: skin and imagination

In my research I retrace the mutation that techno-media globalization has produced in the living body of cultures, and I'm trying to describe

the anthropological mutation that follows the wide diffusion of electronic technology and digitalization of social communication by the point of view of the different cultures and their internal conflicts.

Contrary to the presupposition of the clash of civilization theory, I think that identities do not exist as such: they are fragile and changing constructions, based on the social history of human groups, and on the changing effects of flows of techno-psycho stimulation.

Civilizations are not homogeneous blocks of consistent identity, rather the space of continuous negotiation between differences.

If we look at the geopolitical and geocultural map of the world, we see that most of the current conflicts nowadays are happening inside the space of a so called civilization. In his book *Clash of civilizations* (1996) Huntington writes that the Christian West is destined to clash with Islam—but the experience of the last ten years has shown that the main source of war is the opposition of Sunni and Shia Islam.

Far from being the natural evolution of a long dated legacy, identities are shifting, fragmented, continuously reshaped by the media flows that cross them.

Strictly speaking civilizations do not exist, and the transversal factors of mutation (technology, the Net, financial collapse) are permeating the different cultural landscapes with similar colours.

The word "civilization" is not defining some sort of political homogeneity, and the transition is not opposing races or religions, but technologies and economic lifestyles in a common framework marked by exploitation, social misery and mental suffering.

My research is intended to retrace the molecular evolution of geo-cultures, focusing on identities only as temporary constructions.

In order to draw a map of this mutation I will follow two different pathways:

I'll start tracing a sort of phenomenology of the skin, then a genealogy of the global imagination.

The phenomenology of the skin draws a map of the multifarious approaches to the perception of the body of the other, so "culture" is reframed as the sphere of social imagination: perception and projection of the environment.

Sensibility and social imagination in the Modern age will be subjects of the next chapters of this text.

CHAPTER 2

GLOBAL SKIN: A TRANS-IDENTITARIAN PATCHWORK

> *An uncanny geography, uncanny in Freud's sense of that class of frightening which leads back to what is known of old and long familiar… uncanny is actually the* unheimlich*, the unhomed or that which is not at home. Both it's frightening and its familiar qualities come from its awkward relation to being not at home, to the strangeness which that condition assumes.*
>
> —Irit Rogoff

> "Skin is basically a two-layered membrane. The lower, thick spongy dermis, one to two millimetres thick, is primarily connective tissue, rich in the protein collagen, it protects and cushions the body and houses hair follicles, nerve endings and sweat glands, blood and lymph vessels. The upper layer, the epidermis, is 0.07 to 0.12 millimetres thick. It is primarily composed of squamous epithelial cells, which begin their lives round and plump at the boundary of the dermis and over a 15-to-30 day period are pusher upward, toward the surface, by new cells produced below. As they rise, they become flattened, plate like, lifeless ghosts, full of protein called keratin, and finally they reach the surface, where they are ingloriously sloughed off into oblivion." (David Hellerstein 1985)

Skin stays between us and the world and acts as sensitive processor of the worldly experience. It is continuously re-generated, emerging at the surface, aging, decaying and finally disappearing, melting into air, forgotten. But the sensitive data it has recorded do not die, do not disappear: they are "stored" in the brain, transformed into memories, and turned into sensitive expectations. Skin is feeding the brain with perceptions of the world, but conversely brain is supplying the skin with sensitivity, aesthetic inclinations, and tendencies: desire. Desire is not the need of something, but the sensible creation of the world as aesthetically meaningful environment.

Cultural history, therefore, has something to do with the history of the skin. Experiences deposit sediments in our bodily memory—these sediments give shape to our selves.

However, as Marc Pagès suggests in *Traces ou sens* (1986), we should not infer that there is a sort of collective memory or a collective skin: ethnic or cultural identity. Bodily memory is singular, not collective, and the interplay between individual selves is not pre-determined by any super-individual identity. That means that collective identity (ethnos, Volk, Nation and so on) is only a fiction, an arbitrary fixation of identification processes.

The current transition from the conjunctive to the connective environment reshapes self-perception, in a context defined by the different forms of life.

In the English language there is a slight but abysmal semantic difference between the words sensibility and sensitivity. Sensibility refers to the ability of detecting meaning (moral and conceptual meaningful implications) in non-verbal enunciations (gestures, hints, existential situations). Sensitivity refers rather to the ability of detecting meaningful implications in tactile perception, epidermic stimulus, sexual innuendo. These two words give access to the sphere of Aesthetics and to the sphere of Eroticism.

The mutation that we are living in our time is provoking a painful dissonance between the sphere of sensibility and the sphere of sensitivity that is experienced in many ways. The sensuous opening of the conscious organism to the bodily otherness is resonating with the pleasure raised by the artificial aesthetic sign. Eros and Art interfere, creating disturbances, overlappings, contaminations.

Natural and Artificial dimensions cannot be dissociated by the point of view of the emotional response. The erotic language is obviously implying aesthetics, and aesthetic production is stimulating erotic effects in the social sphere.

Inner touch

In the book *The Inner Touch*, Daniel Heller-Roazen retraces the philosophical sources of self perception as sensitive self-awareness.

"(…) the experience of the one sense shared by all the individual senses and felt, however faintly and however intermittently, in all sensations: the sense of sensing." (Heller-Roazen 2007, 17)

Diane Ackerman, in *The Natural History of the senses*: "What is the sense of one's self? To a large extent, it has to do with touch, with how we feel. Our proprioceptors (from Latin for one's own receptors) keep us informed about where we are in space, if our stomachs are busy and so on." (Ackerman 1991, 95).

Kant speaks of apperception in order to define the self-perceived unity of consciousness, as the space in which the cognitive activity can take place, and Heidegger speaks of *Da-Sein* in order to define the perceivable presence of the existence of the self.

Heller-Roazen reframes in his book the problem of the unity of consciousness by the point of view of the "aisthesis": sense of sensing.

> "The distant origin of the modern synesthesia, the Greek term was no neologism when the thinkers of late Antiquity bestowed upon it a technical sense in the doctrine of the soul. Formed by the addition of the prefix with (*sun-)* to the verb 'to sense' or 'to perceive' *(aisthanesthai)*, the expression in all likelihood designated 'feeling in common', a perception shared by more than one... At this point in the development of the Greek language, the term applied to the communal life of many, and its meaning lay far from the one that would later be attributed to it by the commentators. One of the earliest indications of a shift in the sense of the expression can be found in the medical literature that flourished after the beginning of the Christian era. It has been noted that Galen, for instance, employs *sunaisthesis* to designate a sensation in common not in that it is shared by many but in that it reaches a single body all at once, while consisting, in effect, of multiple physiological affections." (Heller-Roazen 2007, 81)

The shift from the notion of synaesthesis as perception shared by many, to the notion of synaesthesis as inner touch highlights the relation between sensitive consciousness of the self and the proxemic consciousness of the others. Self-perception does not only imply the synaesthetic act of the inner touch, the singular sensing of the body of the self, but also implies the others who are perceiving your body and your existence in their space. Self-consciousness and proxemics mutually interfere, and the processes of individuation and of identification are narrowly linked.

According to the anthropologist Edward Hall,1 proxemics is a discipline that studies non-verbal communication and the disposition of bodies in the space.

The connective transition is transforming the conditions of social proxemics, i.e. the arrangement of bodies in the space. The media are transforming the way people interact in space, and the disposition of bodies in the urban scape.

Proxemics also defines the physical substratum of what Gilbert Simondon names "individuation."2 By this word Simondon refers to the separation of the individual from the undifferentiated continuum of the environment, and to the specification of self as conscious and sensible organism. The individual that Modern philosophical tradition has generally considered as the premise of every discourse about society, should instead be rethought as the product of social relations, and as the result of a process of differentiation from the pre-individual reality of organic matter.

The liberal thought views the social relation as the interaction between individuals whose existence is taken for granted. On the contrary we should view the individual as the product of a maze of relations and implications. Only on the backdrop of this maze the self perception of the individual emerges. Sensitivity, the ability to feel the meaning of the other, is the passage leading to a differentiated perception of the self.

In the following pages I'll map out some lines concerning processes of identification in the context of different psycho-cultural contexts. I do not pretend to any kind of exhaustive taxonomic description, and I don't even try to draw a detailed psycho-cultural cartography, but I'll simply go meandering around in the contemporary cultural scape, trying to enlighten some crucial passages in the history of sensibility, aiming to prepare the ground for a deeper understanding of the current techno-cultural mutation.

Psycho-cultures are located in a geographical dimension, but the geographical location has very little, if anything, to do with belonging, as Irit Rogoff argues in *Terra infirma*: "My inquiry does not attempt to answer the question of a location for belonging; it is by no means prescriptive since I have no idea where anyone belongs, least of all myself. It is however an attempt to take issue with the very question of belonging, with its naturaliza-

1 Hall, E. T. 1966. *The Hidden Dimension*. New York: Doubleday.
2 Simondon, G. 1989. *L'individuation psychique et collective.* Paris: Aubier.

tion as a set of political realities, epistemic structures and signifying systems." (Rogoff 2000, 21)

I'll begin my geo-psycho-cultural wanderings from an Indian writer who has particularly (almost obsessively) focused on the problems of identity, then I'll try to consider the contemporary (post-colonial) cultural globalization, as a process of de-sensibilization but also a process of new sensibilization. Then I'll go back to the sources of the Modern sensitivity: starting from an investigation on the Christian concept of love and eroticism I'll arrive to an appreciation of the Romantic and late Romantic aesthetics. By this point of view I'll try to appreciate the sex appeal of electronics, and the digital effect of de-sensibilization in the contemporary psycho-culture. Finally I'll try to describe this process of desensibilization (or sensibility mutation) in the contemporary life of countries like Japan and South Korea where digitalization has deeply affected the psycho-sphere.

Homelessness and identity

Although in the coming pages I will speak of identities, my intention is not at all to celebrate them, or accept their definition as a natural given. I'm rather interested in deconstructing their genesis and criticizing their political and psychological function. The word "identity" is generally fixing a stage of the process of identification, and hypostatizing it into a natural given.

I'll borrow the expression "cultural psychology" from the writings of Sudhir Kakar,3 the Indian psychoanalyst who has written extensively about Hindu sexuality and mythology. Cultural psychology is the discipline which retraces the process of identification in the context of different cultural environments, while avoiding the fixation and hypostatization of particular stages of identification.

The literary and theoretical writings of Vidiadhar Surajprasad Naipaul are the perfect starting point for a reflection on the identity traps, because in his works we can retrace the pathway from individuation to identification by the point of view of the emotional loneliness of the post-colonial nomad.

Cultural nomadism has become a widespread condition in the age of globalization of the labour market and of the media: nomadism, intended

3 Kakar, S. 1990. *Intimate relations, Exploring Indian sexuality*. New Dehli: Penguin Books India.

as cultural deterritorialization and also as psychological rooting out, deeply affects self perception, causing psychological suffering but simultaneously opening new perspectives of imagination and identification.

This is why I start from Naipaul's literary experience for an overview of the contemporary cultural mutation.

Born in a family of Southern Indian origin, grown up in Trinidad, the Caribbean island where many Indian indentured workers migrated during the first part of the twentieth century, Naipaul was raised according the Hindu tradition, but in his youth he went to London, studied in Oxford, and became one of the most important English writers of our time. In his books he narrates his travels, the meetings with people belonging to distant cultural environments, and describes various cultural contexts—the Indian, the Islamic, the European, the South American and the African worlds—trying to look at them by a deterritorialized point of view, one that is external to the multifarious situations in which he happens to be involved.

In his books, Naipaul attempts what he calls "a synthesis of the worlds and cultures that made me." (Naipaul 1987)

Fears, inhibitions, shyness, aversions emerge from his psycho-cultural formation and marks his judgments, his gestures, the special irony and sarcasm that he puts between himself and the others. The disease of touching, so deeply rooted in the Indian Brahmin life style and character, is constantly showing through his words, denouncing the embarrassment that other's body, other's food, other's beliefs and other's sexuality are provoking in him.

His books are speaking of a sort of repulsion that human physical presence is arousing and instilling in his perception.

Naipaul can paradoxically be viewed as a witness of the global Eros, although one can say that his subject is the contrary of eroticism: his subject of writing is rather a particular feature of the erotic (mis)feeling and (dis) pleasure that accessibility of bodies is provoking.

As far as I can understand reading his books, Naipaul deeply despises individuals and human groups that he meets during his travels in the world, but the person that Naipaul seems essentially to despise is himself: his own skin, his own body, his own face, his own story, his own past.

Even language he hates, the English language that he is mastering in a perfect and crystalline way but that is not his language. Also his linguistic matter he hates, although he writes bowing down and crawling into the shin-

ing heights and the obscure intricacies of the colonizer's tongue, which he has received as a poisonous gift, and transformed into something that is absolutely intimate.

> "The world is illusion, the Hindus say. We talk of despair, but true despair lies too deep for formulation. It was only now, as my experience of India defined itself more properly against my own homelessness, that I realized was how close in the past year I had been to the total Indian negation, how much it had become the basis of thought and feeling." (Naipaul 1964, 266-7)

Homelessness is the keyword of Naipaul's experience and work, and possibly it is the keyword of our time, a time of which Naipaul is possessing the key. Homelessness is the condition of people who have no dwelling, homeland and identity, and also have no place to return.

The psychological and political universe of the post-colonial age is traversed and perturbed by the lack of belonging, the desire of belonging, the emptiness and the deception of belonging. The root of this anguish is to be found in the space of sensitivity, of sexual proxemics. This anguish is linked by the vanishing of the body in the sphere of virtual globalization, and the obsessional return of the body as unfulfilled desire. "To us, without a mythology, all literatures were foreign. Trinidad was small, remote and unimportant, and we knew we could not hope to read in books of the life we saw about us. Books came from afar; they could offer only fantasy. I went to books for fantasy; at the same time I required reality." (Naipaul 1972, 24-5)

In the colonial world the center was clearly the colonizing West, while the colonies—both Trinidad and India—were the periphery. The post-colonial reality has jeopardized the centered perception of the world, and everybody is left with the question: "Where is here?" But no answer is possible, as the reference is lost, and identity at last is exposed as a deception, an infinite search for something that does not exist.

> "The customs of my childhood were sometimes mysterious. I didn't know it at the time, but the smooth pebbles in the shrine in my grandmother's house, pebbles brought by my grandfather all the way from India with his other household goods, were phallic emblems: the pebbles, of stone, standing for the more blatant stone columns. And why was it necessary for a male hand to hold the knife with

> which a pumpkin was cut open? It seemed to me at one time—because of the appearance of a pumpkin halved downward—that there was some sexual element in the rite. The truth is more frightening, as I learned only recently. The pumpkin, in Bengal and adjoining areas, is a vegetable substitute for a living sacrifice: the male hand was therefore necessary. In India I know I am a stranger; but increasingly I understand that my Indian memories, the memories of that India which lived on into my childhood in Trinidad, are like trapdoors into a bottomless past." (Naipaul 1977, 10)

This is a very interesting definition of the concept of belonging, and also of the concept of identity: trapdoors into a bottomless past. The identity trapdoor loses meaning and foundation in the sphere of contemporary globalization. But paradoxically the rooting out and the loss of living memory are feeding the nostalgic desire of an identity which has never really existed. The need for belonging has paradoxically been excited by the historical exposure of the groundlessness of the identitarian roots. "I began to feel when I was quite young that there was an incompleteness, an emptiness, about the place, and that the real world existed somewhere else." (Naipaul 1988, 58).

The real world is always somewhere else, but this outlandishness is difficult to consciously assimilate and to accept. So we tend to identify the real world with our surrounding environment. But in the current cultural transition identity is reframed: deterritorialization, virtualization of the social space and the replacement of physical experience with simulation have produced a new dimension of synthetic identity. America is the name of this identification by deterritorialization.

Becoming Americans

The Nazis conception of eugenics was based on exclusive characters: only those who belonged to the Arian race were allowed a privileged access to the future world, cleansed of all impure residuals: Jews, Roma people, Africans, homosexuals, communists were barred from the Nazi paradise. American identity on the contrary, is moved by an inclusive intention. Since the colonization of the new found land everybody can become American, and actually every ethnical and linguistic group is admitted in the American ecumenical

world, in the melting pot where different identities have melted and forged the American identity.

Simultaneously, however, the cultural identity of the American history is based on the puritanical cult of the Word of God—as Samuel Huntington has argued in his book *Who are we?* (2004). These two things are not contradictory, as Puritanism is not an identity, but a process of cancellation of the past identities. It was so in the seventeenth century, since when English Puritans left the British island and the European continent in order to forget about their past belonging to the impure Church of Roman descent. The act of the Pilgrim Fathers was first of all an act of abandoning, forgetting and erasing their link to the impurity of the past, then it was an act of foundation of a new homeland, which was not the continuation of the past history, but the empty space where the Word of God could create institutions and forms of life. A sort of neo-human dimension was opened this way in the North-American space.

Inclusion in the neo-human results from a sort of multilayered re-formatting of the individuals who want to be admitted to the new world.

It is a cultural, linguistic and emotional process of re-formatting that interweaves with a technological re-formatting and enables the functional integration of individuals into the connective universe.

This integration does not take the form of a cultural linguistic and emotional assimilation, but the form of an operational compatibilization with the connective rationale. Expectations and desires are reshaped in this process of operational compliance.

While the ethnic nationalism excludes on the foundation of an inaccessible identity, the American identity resides exactly in this expansive becoming. The American history is an experiment in synthetic construction progressively absorbing organic identities, and consequently marginalizing or cancelling what cannot be bent to an operational principle, what cannot be translated into the digital language.

American exceptionality consists firstly in the fact that this country is inheriting the essential legacy of all the cultures of the world, but simultaneously it is evacuating their historical sensible materiality, the heaviness of their living experience. Secondly the exceptionality of America consists in the pretention of economic, political and military self-reliance, which is defining the strategy and the vision of the American leading class. Actually

when we speak of America we are not talking of the North-American territory which is subjected to the jurisdiction of the United States of America, but of an anthropological principle which has a pervasive feature and defines the way of life and self-perception of the global class connected in the circuit of the global economy.

Becoming Americans is a process that has been undertaken by the planetary population since the Second World War, thanks to the adhesion, mostly wilful, to the mythology propagated by the Hollywood production, the global advertising industry and the political machine of the human rights. Becoming Americans means first of all being part of the global circulation of goods and images, then it implies the possibility of getting free from the heaviness of tradition, belonging, subjection and tribal rules of women's oppression. But simultaneously it implies losing contact with the concrete experience of affective singularity, purifying the social existence of everything that may obstruct the perfect integration in the productive cycle.

We can find plenty of literature about the double meaning of becoming Americans: on one hand the euphoric feeling of freedom that everyone can experience walking in the streets of a city where nobody is looking upon you or bothering you, the euphoric perception of an sort of emptiness that opens the door to adventure, self-discovery, initiative, success. On the other hand the sense of loneliness, of impoverishment of the sphere of shared sensibility. Tens of millions of people have experienced this in the age of modernity, and many writers (and particularly women writers) have narrated this process of becoming Americans. Just three names for all: Bharati Mukherjee, Chitra Banerjee Divakaruni, Jhumpa Lahiri, three women who have compared the thickness of their Indian memory with the experience of their (not always easy) American present.

The Indian imaginary they are bringing in their memory is packed with myths, rituals, forms of life, affections, emotions, and by their gender point of view each of them can differently retrace the transformation of the emotional landscape, the relation to food and to the city, the arrangement of bodies in the space, the interactions, the looks and the gazes, the social proxemics.

In *The Interpreter of Maladies*, Jhumpa Lahiri is gracefully embroidering the problematic of the painful exciting encounter between the heavy Indian existential universe and the anxious lightness of the American universe. The book is a collection of short stories. One of them, titled *Mrs. Sen's* is about

the daily life of a woman who comes from Calcutta to Boston in order to stay with her husband, who is teaching at the University. Her days are endlessly empty, suspended in an atmosphere of loneliness and meaningfulness. She compares the affective density of the world she has left behind her, the extended family, the crowded city, the childhood memories, with the emotional desert of her days in the new world, where work is the only common ground of exchange and of understanding.

The short story which gives its title to the book, *The Interpreter of Maladies,* is reflecting the trauma of self-transformation through immigration, which often results in a series of broken identities that can be seen as multiple anchorages. The loss of identity can result in the discovery of a wide range of never before imagined possibilities.

Lahiri's stories show the diasporic struggle to keep hold of culture as characters create new lives in foreign cultures as a hybrid realization which is simultaneously exciting and frightening.

This becoming American, that can be viewed as a passage to the sphere of the neo-human, goes through a process of purification from the residuals of identity and belonging: not exactly the erasure of memory, rather a sort of re-coding and re-semiotization of the contents of memory.

Arjun Appadurai (*Modernity at large*, 1996) is talking of "diasporic public spheres," in order to refer to the shift from an imagination to another imagination, and to the overlapping of different layers of memory. But this co-existence and overlapping of different cultural worlds, that Appadurai views as a pulverized and expanded sphere of modernity is re-coded and re-functionalized by a sort of abstract machine of cognitive operationality.

Only those who are able to comply with the digital mind that is embedded and objectified in the techno-economic universe can be fully integrated in the neo-human sphere. This modernity at large, incorporated in the techno-economic compatibility infiltrates every fragment of life of people who are free from the traditional and colonial constraints, and are shaping and concatenating the cognitive response of individuals, nevertheless preserving at some extent their cultural differences.

Sin and pleasure

The Christian myth of Incarnation implies a radical break with the Jewish legacy of an inaccessible God whose name cannot be spelled and whose image cannot be portrayed. Since God becomes human, the implication of flesh in the religious sphere gives a new meaning to the concept of love.

The opposition of fleshy finitude and the infinite of the relation with God is one of the basic obsessions of Western culture, and the precondition of that kind of "romantic hysteria" that emerges in the Christian sphere during the modern times.

In the Augustinian opposition between Eros and Agape a depreciation of desire as self-centered and egoistic is involved: Christian culture that in the beginning was based on love and compassion came to be transformed into culture of renouncement. Eros was stigmatized as selfish research of lust, while the altruistic side of pleasure was forgotten and denied, paving the way for a phobic conception of the individual. The dissociation of love and eroticisim reduced compassion to a merely moral sentiment, whilst the etymological root of the word means "shared perception."

The separation of pleasure and interest, that can be viewed as a pathology of self-love, is the condition of the separation and opposition of interest and pleasure, that prepares the cult of accumulation and capitalist valorization in the modern times.

Notwithstanding the culpabilization of erotic pleasure that emerged in the Christian sphere after Augustinus, at the beginning of the Second Millennium a new sensibility, based on the notion of love as spiritual knowledge rose from the meeting of Christian and Muslim culture in the West-Mediterranean area of Andal'ous: here we can find the origins of the Courtly Poetry (*poesia cortese*, in the Tuscan denomination of the *dolce stil novo*) that flourished from the twelfth to the thirteenth century all along the Mediterranean coast from Seville to Florence.

From the meeting of two religious cultures which are in themselves rather sexuaphobic and intolerant, in those centuries a new form of imagination and expression emerged paving the way to the modern prospects of freedom and sensuousness.

In the works of the philosopher Ibn Arabi (end of the twelfth century) Eros and Agape far from being opposed, are mutually feeding and exalting,

and in the same period the poet Ibn Hazm, author of *Tawq a-hamama fi-l-ulfa wa-l-ulla,* (*The Ring of the Dove)* writes poems which praise erotic love as a condition of spiritual elevation.

Love is mobilizing energies, this is known. And these energies can provoke destabilizing effects. This is why woman sexuality is feared by monotheistic religions that are linked to patriarchal power and tend to protect its stability.

According to Fatima Mernissi, in the Muslim cultural sphere "women are feared because uncontrolled sexuality is regarded as destabilizing to the community—and female sexuality is regarded as the most dangerous. The Arabic word *fitna* means disorder or chaos, but it can also refer to a beautiful woman, thus demonstrating a link between women and instability." (Mernissi 1987, 17)

But desire can be seen as a force of elevation, of spiritual mobilization, as Ibn Hazm writes in his poems.

> "And I suppose desire
> is like a coal
> that feeds upon the fire
> still in my soul."
> (Ibn Hazm)

Retracing the origins of passional love as a defining feature of the Western modern sensibility, Denis de Rougemont argues that romantic love as we know it, is a relatively recent development peculiar to Western Culture, is usually entailing an illicit rapport such as adultery, and is inextricably psychologically linked with death.4

Commenting on the Béroul adaptation of the myth of Tristan and Isolde, De Rougemont writes that:

> "Passion means suffering, something undergone, the mastery of fate over a free and responsible person. To love, love more than the object of love, to love passion for its own sake has been to love to suffer and to court suffering all the way from Augustine's amabam amare down to modern Romanticism. Passionate love, the

4 Rougemont, D. 1940. *Love in the Western World*. New York: Harcourt, Brace and company.

longing for what sears us and annihilates us in triumph—there is the secret which Europe has never allowed to be given away; a secret it has always repressed—and preserved." (De Rougemont 1940, 50)

And also:

"No passion is conceivable or in fact declared in a world where everything is permitted. For passion always presupposes subject and object, a third party constituting an obstacle to their embrace—a King Mark separating Tristan from Iseult—the obstacle being social (moral, conventional, even political) to such a degree that we even find it identified, at its limit, with society itself, though it is generally represented by a dramatis persona, in accord with the requirements of narrative, the rhetoric of romance." (De Rougemont 1963n, 41)

According to De Rougemont, in the *topos* of passional love a double meaning is involved: the ambivalence of pleasure and sin.

Since the IInd century of the Second Millennium, in some areas of the Christian world (namely Andalous, Languedoc and Tuscany) love is emancipating itself from the passional chains of sin, and is deployed as a path to elevation.

In the words of Guido Guinizelli, who is considered as the initiator of the Italian School of *Dolce Stil Novo*, love is free from the schizophrenic duplicity of sin and pleasure, and is conceived as a channel to the divine enlightenment. Looking at the beauty of the other body is a way to get closer to the vision of God. No more opposition between earthly and spiritual, no more traumatic separation between Eros and Agape.

"Al cor gentile rempaira sempre amore
Come l'ausello in selva a la verdura
Né fe' amor anti che gentil core,
né gentil cor anti ch'amor natura:
ch'adesso com' fu il sole,
sì tosto lo splendore fu lucente
né fu davanti 'l sole;
e prende amore in gentilezza loco
così propriamente

come calore in clarità di foco.
……..
Splende ‘n la ntelligenzia del cielo
Dio criator più che ‘n nostri occhi il sole
Ella intende suo fattor oltra il cielo,
e l ciel volgiando a Lui obedir tole;
e con’ segue al primero
del giusto Deo beato compimento
così dar dovrai al vero
la bella donna poi che n gli occhi splende
del suo gentil, talento,
che mai di lei obedir non si disprende.

Donna, Deo mi dirà: che presomisti?
Siando l’alma mia a lui davanti
Lo ciel passati e ‘nfin a Me venisti
E desti in vano amor Me per semblanti:
ch’a me conven la laude
e a la reina del regname degno
per cui cessa onne fraude.
Dir Li porò: Tenne d’angel sembianza
Che fosse del Tuo regno;
non me fu fallo, s’in lei posi amanza.”

Facing God, Guido Guinizelli does not beg forgiveness for his love to a woman, because he says “I did no sin, because she looked like one of your angels.”

Christian love is taken in a sort of double bind insofar it is pronouncing contradictory injunctions like: “Love your neighbour as yourself” and also “Thou shalt not commit adultery”. Free love conflicts with the institutionalized bond of marriage.

In Béroul’s adaptation of the myth of Tristan and Isolde, Tristan—deceitful in spite of himself—betrays Mark, and suffers for his own betrayal. His passion debases rather than elevates.

The simultaneous Christian exaltation and condemnation of sensuousness praises the desire of knowledge, and therefore is a gateway to the Humanist revolution.

"Passion is that form of love which refuses the immediate, avoids dealing with what is near, and if necessary invents distance in order to realize and exalt itself more completely," (De Rougemont 1940). Here we find the symptom of a self-feeding malady and the origin of a feverish discourse that will result in the Romantic impulse to continuous overcoming of the limits, the psychological motivation to the unceasing investment of energy, to accumulation, and to progress.

The extreme form of this paradox is to be found in the Catholic mysticism. Pleasure and torture are mutually involving in the ecstatic vision, which makes of the Cross the universal aesthetic paradigm. Think of Juan de la Cruz, the extreme lover who is consuming (burning) his flesh in a fever of mystical desire. Think of Zurbaran, Murillo, and particularly El Greco, the painters who established the model of the Sacred Heart of Jesus. In this popular mithologeme of the Modern Mediterranean religiosity, the physical representation of the tearing asunder of the flesh of Jesus resounds of the sadistic mixture of piety and pleasure that people experienced when attending the public torment inflicted to the victims of the religious show.

The Christian process of modernization implies simultaneously the repression of the wild side of the sensorium: touch, smell, sexual pleasure, and the regulation of the civilized senses, hear and vision. The visualization of eroticism is the prevailing trait of the modern regulation of sensuousness.

The flesh is sad

Romantic aesthetics reconfigured the very idea of beauty according to the ambiguous lines of the notion of sublime. This reconfiguration is parallel to the Modern reframing of erotic sensibility.

Before the Romantic age, in the late eighteenth century, the geometric spirit (*esprit de géometrie*) of Rationalism coincided with the geometric spirit of libertinage. In the wake of the Restoration the enlightened scene was obfuscated by the new sense of historical tragedy and human weakness, and sensibility was invaded by a sentiment of exhaustion and of in-distinction. In Schelling—the thinker who fully expressed the twilight of the Enlightened spirit and the emergence of a more nuanced and blurred sensibility, the sublime is a way to express the raising awareness of infinity.

When confronted with the Cosmic infinite our senses are induced into a condition of confusion, of panic: in the Greek mythology Pan is the divinity who symbolizes the infinity of Nature. As soon as the geometric Rationalism of the Enlightened century receded, leaving room for the disturbing experience of boundlessness, Pan came back.

Sublime and panic are bordering concepts: panic is the opening of consciousness in front of the infinity of nature, the failure of rational filters of experience, and the sublime is epiphany of the unknowable.

Pan submerges perception almost to the point of drowning, and the sudden arrival of Pan is provoking fear and pleasure, malaise and excitement. This panic perception is well expressed in the paintings of Caspar David Friedrich, or in the poems of Percy B. Shelley.

In the late modern language of psychopathology the word "panic" is used by doctors in order to define a new sort of pathology whose symptoms are heartbeat acceleration, intense perspiration, shortness of breath, mind confusion, anxiety and trembling.

In a sense the shift from the rationalist *esprit de geometrie* to the Romantic return to the *esprit de finesse* can be seen as a modulation of the dilemma opposing Leibniz and Spinoza, the founding fathers of Modern philosophy: recombinant rationale of the finite divisibility of matter (the monad as information), *versus* the infinite substance of the universe as inexhaustible source of experience.

I'm referring here of the genealogy of the main subject of this dissertation: the dilemma conjunction/connection, the historical shift from the conjunctive mode to the connective mode of social communication and of epistemic approach to the experience. We can re-read the history of Modern culture—philosophy, and aesthetic sensibility—by the point of view of this dilemma that only now, in the age of the digitalization, can be fully appreciated.

Whence the romantic passion for the sublime is coming from? Beauty, not sublime, was the value that Classical Art cherished more. Classical Art—and the Humanist return to Classicism—identified beauty with splendour and light, with symmetry and proportionality, with the worldly finiteness and measurability of the body and of the objects created by human artifice.

Monotheistic religions devaluate sensuousness, the region of sin and temptation, so beauty becomes an ambiguous concept, as beauty is diverting the energies of man from the true object of spiritual life, the infinity of transcendence.

The devaluation of the senses is inherent to the Monotheistic religious cultures. Whilst in the sphere of Pagan cultures the entheutic experience of drugs, hallucinated visions and mysticism are part of the religious sensibility, in the sphere of monotheist religion mysticism is suspicious, because it is mixing the sensuous experience of pleasure, exhilaration, excitement, and the spiritual knowledge of God.

The erotic perception of beauty, in this context, is demonized, veiled, forbidden as it is identified with sinful distancing from God.

After the protestant Schism, something happened in the Christian cultural area: while Protestant Reformation established an aesthetic space of severity and essentiality, the Catholic Baroque entered the aesthetic space of phantasmagoria: the Wonderful, the spectacular product of the human artifice, which is charged to excite the mind and to lead the imagination towards the vision of God.

But the Baroque aesthetics has been marginalized by the Modern culture of Northern bourgeoisie. It is here, in the Northern space, afar from the Baroque phantasmagoria, that the Romantic sensibility thrives, and Sublime meets horrid, and excitement mixes with agony. And finally Romantics melts and trespasses into the sphere of Symbolism.

"Viens tu due ciel profond ou sors-tu de l'abime,
O Beauté? Ton regard, infernal et divin,
Verse confusement le bienfait et le crime…"
(Charles Baudelaire, *Hymne à la Beauté)*

The perception of aesthetic beauty is ambiguously and intimately blending with the distressing perception of the erotic sensuousness.

"L'amoreux pantelant incliné sur sa belle
A l'air d'un moribond caressant son tombeau
Que tu viens du ciel ou de l'enfer, qu'importe,
O Beauté! Monstre enorme, effrayant, ingénu!
Si ton oeil, ton souris, ton pied m'ouvrent la porte
D'un infini que j'aime et n'ai jamais connu?"
(Ibid.)

Symbolism emerges from the sublimation and the exhaustion of the flesh. Mallarmé's azure is coming out from a frigid mental ecstasy taking the place of sensuous pleasure.

"Mon ame vers ton front où reve, o calme soeur,
Un automne jonché de taches de rousseur,
et vers le ciel errant de ton oeil angelique
monte, comme dans un jardin melancolique,
fidèle, un blanc jet d'eau supire vers l'Azur.
Vers l'Azur attendri d'Octobre pale et pur
Qui mire aux grands bassins sa langueur infinie
Et laisse, su l'eau morte où la fauve agonie
Des feuilles erre au vent et creuse un froid sillon,
Se trainer le soleil jaune d'un long rayon…"
(Stephane Mallarmé, *Soupir)*

The autumnal frigidity of the extinguished sensuousness permeates the symbolist poetry.

"La chair est triste, et j'ai lu tous les livres.
Fuir. Là-bas fuir! Je sens que des oiseaux sont ivres
D'etre parmi l'écume inconnue et les cieux!"
(Stephane Mallarmée, *Brise marine)*

The flesh is sad because of the exhaustion of the body taken in the flight towards infinity of experience. In the symbolist sphere sweetness, pleasure and sensuousness are totally absorbed by language, by word's sound and by the trans-mental ancestry of resonance.

The body (of the woman) is charged of ambiguous meanings—euphoria and danger, extreme spirituality and devilish carnality.

At the end of the nineteenth century the metropolitan condition is marked by the spread of sexual diseases like syphilis, and the *belle dame sans merci* of the late-romantic mythology is seen as the bearer of the contagion (see: Mario Praz in *Romantic Agony*, 1933).5 The culpabilization of the woman

5 Italian original title: *La carne la morte il diavolo nella letteratura romantica*, 1930.

takes here a new turn: *la belle dame sans merci*, the beautiful pitiless woman is the sinner who spreads moral and physical contagion in the promiscuous whirlwind of metropolitan modernity.

The frigid sublimity of abstraction

Symbolism was the pinnacle of Romantic sublimity, but also the doorway to the linguistic abstraction of art and of living experience in the new century.

According to Wassily Kandinsky "the more frightening the world becomes, the more art becomes abstract." In late modern times the frightening face of the world is in full display. According to Natalia Ilyin abstraction was born out of the trenches of World War I. In *Chasing the Perfect*, a theoretical and historical book on the origins and the meaning of Modernist design, she writes the following words:

> "My grandfather fought in World War I: ten million soldiers died and twenty million were wounded in the four years of the war to end all wars, which was declared in 1914. Those numbers don't include the civilians who died, the children caught in cross fires. At the Battle of Verdun alone, a battle that went on for six months, 350.000 Frenchmen and 330.000 Germans died. That's about 3.778 killed a day, that's one World Trade Center a day, fors six months. Imagine coming back to your nice Victorian home after that. Imagine having just lived through four years of watching your friends die hangin in the tangled barbed wire of no man's land. Imagine yourself, hunkered down in your trench, listening to them scream all night until the screaming stopped. Imagine coming back home after that, putting on a dinner jacket for Mama's evening musical, and listening to a matronly soprano singing: The last rose of Summer. How were you supposed to sit on your little gold ballroom chair, wearing your dinner jacket and sipping your digestif, after what you had been through, pretending nothing had changed?" (Ilyin 2006)

"No poetry after Auschwitz." told Theodor Adorno after the Second World War. But this was only a way to say: empathy is dead, only abstract forms will be possible in the aftermath of the unspeakable horror. "Just as the urge to empathy as a pre-assumption of aesthetic experience finds its gratification in

the organic beauty, so the urge to abstraction finds its beauty in the life-denying inorganic, in the crystalline or, in general terms, in all abstract law and necessity." (Worringer 1997, 4)

The history of Western civilization and particularly the history of late modern art may be viewed as a slow irreversible turning away from nature. The will to abstraction is simultaneously expression of the anxiety and fear pervading the historical environment, and the condition for the digital perfection.

After the sensuousness of Symbolism, after the precipitation into the historical abyss of violence, the sentiment of sublime moved towards the frigid regions of digital disembodiment. In the process of late modern Abstraction, the body is denied and turned into a sanitized object. Sex is replaced by pornography and happiness by psychopharmacological maintenance. The abstract perfection of the digital world is the arrival point of this late modern trajectory: abstraction of finance from production, abstraction of work from activity, abstraction of goods from usefulness, abstraction of time from sensuousness.

Confronted with the ultimate threat, the nuclear destruction and the sexually transmitted immunodeficiency syndrome, the cyberpunk culture prepared the jump in the hyper-world of abstraction. In the cyberpunk imagination the body is perceived as the heavy painful residual of the organic past. Cyberculture replaces the body with the sanitized clean smooth surface of the screen.

A sort of masculine hysteria is hidden in the digital culture of the '80s and of the '90s. The late nineteenth century Decadence was originated by the spread of sexual infectious diseases like syphilis, the techno-glamour aesthetics of the late twentieth century flourishes in the aftermath of the sexuo-viral epidemics of AIDS.

The prosthetic-aesthetics of the cyborg, imaginary organism enhanced by digital prosthesis can be seen as the arrival point of the romantic male hysteria that wants to escape the dangerous ambiguity of sensuousness. When the Romantic sublimity meets the frigid surface of the digital experience, panic and depression are the outcomes. Panic crisis is a symptom that spreads widely in the experience of the connective generation. No more the passionate panic resulting from the confusing inexhaustible possibilities of nature, but a frigid panic resulting from the contraction of time: frantic time, unat-

tainable body, fragmented experience, ever widening space of possibilities that never get real.

The anaesthetic aesthetics of virtuality is the last avatar of a process of sublimation of the body (of the woman) that in the Christian area descends from Quevedo, through Des Esseintes, to Bataille, down to David Bowie.

In 1977 David Bowie released the single *Heroes*.

He sings of a new brand of hero, just in time for the neoliberal revolution and for the digital transformation of the world.

Bowie's hero is no longer a subject, but an object: a thing, an image, a splendid fetish—a commodity soaked with desire, resurrected from beyond the squalor of its own demise.

The video-clip shows Bowie singing to himself from three simultaneous angles, with layering techniques tripling his image; not only has Bowie's hero been cloned, he has above all become an image that can be reproduced, multiplied, and copied.

Bowie's hero is no longer a larger-than-life human being carrying out exemplary and sensational exploits, and he is not even an icon, but a shiny product endowed with post-human beauty: an image and nothing but an image.

This hero's immortality no longer originates in the strength to survive all possible ordeals, but from its ability to be xeroxed, recycled, and reincarnated. Destruction will alter its form and appearance, yet its substance will be untouched. The immortality of the thing is its finitude, not its eternity. The hero is dead, long live the hero!

Videoporn and the vanishing body

The effects of connective mutation on sensitivity do not develop in a uniform way, because of the dishomogeneity of geo-psycho-cultures. Nevertheless a general trend seems to emerge, both in cognitive and in sexual behaviour of the first generation of people who have grown in a mainly connective environment.

According to the World Health Organization suicide has increased impressively, particularly among young people. Depression and panic are spreading in the same generational area.

Pornography is taking an ever wider space in the emotional life, and religious identity takes the place that in the Modern times was taken by social solidarity.

Should we see a relation between the expanding space of pornography in the emotional life, and the expanding space of religion in the processes of self-identification?

According to Freud's 1907 essay on the symptomatology of obsession and the religious practices, the ritual has something to do with the obsession because it has the same character of irrealization and of compulsion. (see: Freud, Sigmund, *Obsessive Actions and Religious Practice*).

Irrealisation and compulsive repetition are peculiar in religious behaviour as in pornographic sex. Although one can find peace and well being in the religious ritual, and pleasure in pornographic consumption, nevertheless ritual and porn image share the stigma of the obsessive neurosis: repetition of acts that are devoid of semantic meaning and devoid of specific efficiency.

Obsession is compulsive repetition of a ritual which does not fulfil its aim. The ritual is a conjuration whose aim is to keep the (rite maker's) own world together. By this point of view porn has something to do with the ritual. In the experience of the first video-electronic generation porn becomes the repetition of an act of seeing which does not attain its emotional end: the ritual is taking the place of pleasure.

Here I'm neither reclaiming any kind of original authenticity of eroticism, nor implying a supposed golden age of sexual happiness, I'm just asserting that the current proliferation of pornography is linked to an emotional pathology, highlighted by the mediatisation, and especially by the net-proliferation of the porn. The prevailing perception of the body in the saturated info sphere is simulation of pleasure and reduction of the other to a mind projection. Since image is separated from touch, the pornographic act, which is essentially an act of vision, does not produce the promised synesthetic pleasure, so we repeat the act of vision again and again. Net is the place of endless replication, therefore it is the ideal place of pornography. Hypertrophic stimulation and simulation of pleasure are generating obsession.

During their long evolution human beings have slowly learned to elaborate the stimulus of sexual excitement: the entire history of culture can be viewed as a way to the elaboration of sexual desire. Through imagination and

language human beings have learned to balance the stimulus coming from the environment, and the psychic and sexual response to it.

In the dimension of info-proliferation, the saturation of the Info-sphere provokes a stimulus overload, and this has an obvious cognitive effect: time for attention decreases.

Affective attention takes time, and cannot be shortened or fastened. Hyper-stimulation and visual overload are leading to a disorder in the emotional elaboration of meaning. The affective attention suffers a sort of contraction, and it is forced to find ways of adaptation: the organism adopts tools for simplification, and it tends to smooth out the living psychic response, to repackage the affective behaviour in a contracted and fastened framework.

The focal point in this process of de-sensitivization is the shortening of time for emotional elaboration: pornography is in turn one of the causes of this saturation, and one of the effects, or, better, one of the symptoms of it. Pornography concurs to the saturation of the Info-sphere, and it is simultaneously an escape from the disturbed Psycho-sphere. Emotion is the meeting point between body and cognition: it is bodily elaboration of the information that is reaching our mind. Time of emotionality can be fast (very fast) and can be slow, but the elaboration of sexual emotion needs time.

Although pharmacology can fasten the sexual reactions, and speed up erection, the emotional time of caresses cannot be shortened by automatic engines. The use of sexual stimulants like Viagra has not so much to do with impotence, but with haste and emotional disturbances.

The electronic excitement conveyed through the entire Mediascape puts the sensitive organism in a state of permanent electrocution. Time for linguistic elaboration of a single input is reduced as the number of inputs increase, and the speed of the input gets higher. Everywhere sex is spoken, but sex is not speaking anymore. It is rather babbling, and faltering, and suffering of it, or (worst) it's ignoring it. Too few words, too little time to talk. Too little time to feel. Porn can be viewed as an essay in emotional automation and uniformity of emotional time of response.

A process of re-formatting of the mental sphere implies a process of reformatting of the emotional dimension. The new format is smooth, connectible, recombinant. Sexual imagination is invaded and mutated by the hairless smooth of the digital image. Video-porn experience is expanding as much as the physical presence of the body of the other rarefies.

Similarly we can say that religious belonging becomes more important in the life of the post-modern population just as it rarefies the sense of belonging to a territory, a community a social class. The current resurgence of religious forms of self-identification has little to do with spirituality, and also little to do with piousness or sacrality. It has much to do, on the contrary, with the craving for belonging, which seems to come with the deterritorialization and de-solidarization provoked by virtualization.

Russian spiritualism and the wreckage of communism

In the essay *The Revelation about Man in the Creativity of Dostoievsky*, Nikolaj Alexandrovic Berdyaev speaks of "metaphysical hysteria of the Russian spirit", which is based on the ethical and aesthetic exaltation of unhappiness, and is leading to a sort of mysticism based on suffering.

Russian literature can be considered as an extreme manifestation of the theatrical Romantic self-immolation. In order to understand the peculiar vibration of Russian subjectivity I refer to the cultural and theological specificity of Eastern Christianity. The Orthodox difference is essentially based on the spiritualization of the person of Christ, whose carnality is denied or at least eclipsed. If Plotinus was ashamed of having a body, Russian culture seems to be haunted by the idea of corporeity as execration, as a crime finding penance in itself.

Having a body is source of continuous, unavoidable pain, and pain is the deserved punishment for the guilt of being here, of having been born in this horrible place called Russia. All the rhetoric about the beauty of the homeland and all the rhetoric about the beauty of the Russian people can be read upside down, as manifestations of the Orthodox masochistic taste for self-inflicted pain. Russian writers are chanting the infinite pain that life is inflicting on living beings, and this pain they call joy.

The theological questioning of the fleshy humanization of Christ, which is the core of the debate about the nature of Christ is crucial for the genealogy of the Orthodox culture. Here lies the exacerbation of spirituality, and of the search for purification that runs through the history of Eastern Christianity taking an historical and political shape in the Russian subjectivism. In the cultural sphere of Eastern Christianity the human existence on this planet

is felt as condition of absolute alienation, source of perpetual unhappiness.

The Italian Slavist Vittorio Strada writes: "Western Christianity acts in the space of History, Eastern Christianity is striving for Eternity." (Strada 1991)

Desire for the Absolute is visible in the historical sphere as a will of total palingenesis, purification of the social community from the traces of the past. The reference to purity is transparent in the Russian conception of Revolution, particularly in the Leninist persuasion that the revolutionary political party is the "incarnation" of the pure idea coming down from German Philosophy, and must be embodied by a small organization of professional bearers of the Revolutionary Truth.

The Russian exacerbation of the role of pure subjectivity entered the scene of the world history in 1917. The Soviet Revolution—that Lenin managed to unleash against the will of many prominent leaders of the Russian socialist movement, provoked a catastrophic polarization in the worldwide social conflict, and forced the worker's movement to identify with a totalitarian experiment, based on the authoritarian statalization of class struggle.

The Russian revolution provoked an irreversible rupture and a permanent laceration in the body of society whose effects persisted worldwide all along the century. Lenin forced the workers of the world to defend the Socialist State of the Soviets, and to enter a process of permanent war. This war lasted until 1989, but since the beginning the worker class was doomed to unavoidable defeat.

The messianic utopianism, widespread in the Russian society of the nineteenth century merged with the hyper-voluntaristic project of the Bolsheviks, so the history of Communist revolution began as a tragedy in the context of the immolation culture, and since the beginning was destined to end as a tragedy. The violence and the authoritarianism that the Leninist experiment unleashed in the country and exported worldwide brutally changing the prospects of the international movement for worker's emancipation, were inscribed in the Russian history of the previous centuries, and still prevail in the Russian political life, after the end of the Soviet dictatorship.

Bolshevism and psychic depression

Leninist communism may have ruined Russia, but certainly Russia has (forever?) ruined Communism as a possible alternative to Capitalism, as the Russian subjectivism and cult of purity have dragged the international movement of the workers into a vision of permanent military mobilization that was not part of the Marxian imprinting.

The Leninist conception of Communism has little to do with Marx's thought and with the history of the worker's struggle against capitalist exploitation. It has much more to do with the history of chiliastic sectarianism and of dualistic (Manicheistic) spiritualism that is permeating Russian culture since the age of bogomil influence on Orthodox Church.

According to Nikolaj Alexandrovic Berdyaev:

> "The Russian people did not achieve their ancient dream of Moscow, the Third Rome. The ecclesiastical schism of the seventeenth century revealed that the muscovite tsardom is not the third Rome. The messianic idea of the Russian people assumed either an apocalyptic form or a revolutionary; and then there occurred an amazing event in the destiny of the Russian people. Instead of the Third Rome in Russia, the Third International was achieved, and many of the features of the Third Rome pass over to the Third International. The Third International is also a Holy Empire, and it also is founded on an Orthodox faith. The Third International is not international, but a Russian national idea."

The spontaneous goal of the workers movement is to expand the space of autonomy from capitalist exploitation. The idea that the movement is taken in a dialectical contradiction is an effect of the Hegelian interpretation of the social process: this idea becomes historical reality when the Russian palingenetic cult of pureness melts with the Hegelian tradition.

The fusion of Marxism and Leninism is the origin of the workers defeat, in mu opinion. Lenin brings into the worker's political discourse an element of subjectivism and of purity that did not belong to the experience of autonomous social movements. The workers movement was aimed to emancipate spaces of life and of the territory from the capitalist domination, but the Leninist breakthrough transformed the movement into a project of absolute

separation from the existing world, of radical demolition and of palingenetic purification.

Based on the denial of the human carnality of Christ, the distinctive particularity of the spiritualist hysteria of Russia is purity. The cult of purity is inherited by Lenin who builds his revolutionary party on this premise.

The fundamental text of Leninist politics is *What has to be done?* (1902). In this book the revolutionary party is described as a collective intellectual pursuing a project that does not depend on the concrete history of the social struggle.

In the first part of the book, Lenin confirms Lassalle's argument: the purification (epuration, cleansing) is strengthening the party. This idea of ideological cleansing (epuration) is the main thread of the history of the Soviet Communist Party, particularly in the Stalin age.

According to the words of Lenin: "the worker class is only able to elaborate an economic unionist consciousness, but is unable to understand the radical opposition to the system." (Lenin, *What has to be done?*)

This impurity of the worker class has to be overcome, so that society can adapt to the purity of the communist ideal. Only a party which is the bearer of the pure Logos can be the bearer of the revolutionary project—not the aggregation of impure social bodies.

If we look at the reality of the social conflict we understand that it has nothing to do with the purity of ideas: the struggles of the workers are expression of a radical refusal of the exploitation but also expression of the ability to coexist and coevolute with the capitalist machine. Thanks to this contamination the worker's struggle can simultaneously be a practical critique of the political economy, and a dynamic engine of the industrial development. The worker's struggle has deployed in a space that is autonomous from the capitalist rationale, without breaking the link with technical and political innovation. Social conflict has simultaneously acted as cause of the disruption of the production process and as cause of its innovation and transformation.

I think that it should be useful to link the catastrophic revolution in Russia 1917, with the intellectual (and also the psychological) biography of Vladimir Ilic' Ulianov, also known as Lenin.

In her biographical essay on Lenin, the French historian of Georgian origins Hélène Carrère d'Encausse speaks of two major episodes of clinical depression in the life of Lenin that are generally ignored by the hagiografic

Leninist tradition. The book (*Lenine, la Revolution et le pouvoir*, 1979) is interesting especially because it is focusing on the affective life of the communist leader: the importance of the relation with the mother, the sister, and particularly of the wife, Nadeezda Krupskaja, who took care of him in the periods of acute psychic crisis. The book also speaks of Ines Armand, the lover who disturbingly entered the life of Lenin, and was later removed, neutralized, as a potential danger for the political integrity of the leader.

Depression is the peculiar feature of the psychological description of Lenin, and depressive crises are coinciding with the most important political decisions of his life. The first major crisis, according to Hélène Carrère d'Encausse, occurred in the year 1902, and coincided with the decision of founding the Communist party and the draft of *What has to be done?* The second occurred in 1914, when Lenin takes the decision of breaking with the Second International before Zimmerwald Congress, and the Communist Schism at the European scale. The third occurred in Spring 1917 and coincided with the decision of launching the Soviet insurrection which actually took place in October.

These decisions, that marked the emergence of the Communist identity, and forced a voluntary acceleration on the history of class struggle all over Europe and worldwide, can be linked in my opinion with the depressive cycle of Lenin. When intelligence is depressive, only will is the therapy that makes possible ignoring the abyss. The abyss is not removed, not resolved, not avoided or overcome. It is ignored, but still it is there, and the decades following the Revolution have actually exposed its persistence, so that the century sunk down into the abyss.

More than in the political meaning of the decisions of Lenin, here I'm interested in the relation between Bolshevik voluntarism and the male inability to deal with depression.

By the political point of view, the Bolshevik breach provoked a general precipitation of the confrontation between workers and capital in the world: workers were pushed everywhere towards a totalizing form of opposition, and actually towards civil war. The social autonomy was obliged to choose between revolutionary terror and capitulation. And where the communist parties succeeded in seizing political power, this was turned into violent dictatorship and submission of social life. This way the Leninist strategy prepared the worldwide catastrophe that at the end of the century has provoked

the worst possible defeat whose effects we'll be experiencing for decades.

The project of a rebirth of the world beginning with the palingenetic violence of the revolution is a mythology that has no historical foundation. History has never known abolition, palingenesis or rebirth. History is always about stratification, negotiation, coevolution, autonomy or dependence, identification or extraneousness. Not about abolition.

Leninism can be considered as an attempt to deny depression, as an assertion of the purity of will, as a refusal to accept the finiteness of human potency: male hysteria that was already at work in the Dostoevsky's writings.

According to Berdyaev (1915) "In the Russian character there is a certain metaphysical hysteria, which Dostoevsky so powerfully sensed and revealed." (Berdyaev 2007, 276-281)

The hysteria that Berdyaev is writing about can be seen as a mystical euphoria for the unhappiness that human action and nature are inflicting on the human body.

"Don't cry, mother, life is a paradise, but we don't want to acknowledge it."

Dostoevsky writes in *A Gentle Creature,* (original title*: Krotkaya*) a beautiful frightful short novel where the author seems almost ironically conscious of the hysterical feature of his narrative imagination.

In the nineteenth century, hysteria was seen by the psychiatrists as an essentially feminine affection, linked to the negation of the sexual body. Male hysteria is concealing itself behind high ethical values, and spiritual excitement. But the truth is the same: the terror of being in contact with the body, which is always the body of the other, because also one's own body is other in relation to the inner self. In Tolstoj's *Kreutzer Sonata*, like in Chekhov *A Dreary Story* the male fear of the woman's body is provoked by the cultural inability to imagine love as mutual availability and ironic game, and because of the dramatization of touch, intrinsically viewed as metaphysical guilt. The unbridgeable distance between the sphere of spirituality and the sphere of physical pleasure is feeding the hysteric inability to experience joy in life.

Japanese dis-identification

Back and forth in the labyrinth of late Modern times I have tried so far to find the relation between psycho-cultures and sensibility, and also between

sensibility and historical subjectivation processes. The mutation deploying in the new century can be basically linked to the technological transition to the digital environment, but this transition takes different forms and clings in different ways according to different cultural environments. This is why I'm trying to retrace the different ways of going through the cultural mutation according to the different psycho-anthropological configurations in their geo-cultural location.

A privileged point of view for the investigation of the current mutation is Japan, because the Japanese experience of Modernity has been especially marked by the dynamic relation between obliteration and persistence of the denied cultural past.

According to the psychoanalyst Takeo Doi the marking feature of Japanese psychology is *amae*, a concept that designates a passive form of love, or better a form of entrusting and self-committing. (Takeo Doi 1973).

Amae is described by Takeo Doi as the emotion experienced by the unweaned child, but *amae* may also be seen as a sort of indulgent dependency based on the attribution of a reassuring symbolic function to the other (the father, the husband, and also the political authority and the corporation). This attribution is putting the other in a condition of authority and assurance.

Felix Guattari sketched interesting anthropological considerations about Japanese subjectivity in articles, interviews and speeches delivered during his journeys to the country. Some of his reflections correspond to Takeo Doi identification of *amae* as the marking feature of the Japanese psycho-culture.

Guattari was fascinated by the fusional genesis of Japanese subjectivity, by the openness and the prehensile disposition of the Japanese mind. In the discussions that he had with Japanese philosophers and intellectuals like Masaaki Sugimura, Asada Akira and Shin Takamatsu, Guattari seems to be interested in how the relationship between technological modernism and archaic cultural traits are creatively combined in Japan.

Despite the persisting myth of ethnic homogeneity (Oguma Eiji 1995), the reality of Japanese culture and particularly of Japanese language is one of openness and permeability. Religious faiths actually melt into the life of the Japanese, and Japanese language is a mix of Chinese influences, and of Western borrowings. This adaptability was first manifested with the assimilation of Chan Buddhism coming from China. Confucianism influenced the

formation of the leading political class, and easily coexisted with the original indigenous Shintoism.

> "Ideas are for the Japanese nothing more than tools that can be used for various purposes. If a saw does not do the job, you can use an axe. In the same way, if Confucianism does not give the desired result, resort may be to Buddhism." (Yosiyuki Noda 1976)

In the second part of the nineteenth century the political crisis of the Shogunat opened the way to the so called Meiji Restoration, which was not a Restoration in fact, but the establishment of a process of modernization based on the import of Western techniques and procedures.

The educational system was reformed according to the suggestions of Prussian consultants, and the industrial system was created and developed in collaboration with British and American experts. Even the Constitution of the Modern Meiji State was written along the lines of the Prussian Constitution. The history of the so called Restoration—which was in fact the creation of a new political reality specifically inspired by Western experiences and institutions—is the artificial reinvention of the past in function of a political and cultural project which is completely oriented towards the future. The past is forgotten, obliterated, as Japanese identity seems to be definable as a process of continuous self-definition.

Nervous breakdown

In *Hakuchi* (1999), a film based on a short novel by Ango Sakaguchi, the director Macoto Tezuka has imagined that the nuclear bomb has not been launched on Japan, and war goes on for twenty or thirty years. Madness is the centre of the movie: craziness of people who have been forced to live in conditions of permanent stress all their life long.

Since the end of the nineteenth century the forced modernization of Japan has strained the nervous energies of people who were deeply immersed in their traditional way of life.

Natsume Soseki, the most brilliant novelist of his time, author of *I'm a cat* and *Sanshiro* among many other books, at the beginning of the twentieth

century warned that Japan was heading for a collective nervous breakdown because of the attempt of quickly digesting the Western civilization and the Modern rhythm.

While staying in London, during his journey to Europe, Soseki experienced the suffering and the stress provoked by the different rhythm of Modern Westernized life, and wrote the following words: "The two years I spent in London were the most unpleasant years in my life. Among English gentlemen I lived in misery, like a poor dog that had strayed among a pack of wolves." (*Theory of Literature* May 1907, introduction)

The sentiment of being like a poor dog among a pack of wolves is extraordinarily touching, but also conveys the sentiment of humiliation that the forced mutation imposed by the Meiji reformers provoked in many intellectuals, and, in different ways, on the population at large.

A peculiar aspect of the psychological violence intrinsic to the forced modernization lies in my opinion in the forced masculinization of the Japanese psychology—that resembles by many ways the violent de-feminization forced by the Italian Futurism in the psycho-political self-perception of the Italian people during the Fascist Revolution.

Italian poetry and art have always portrayed their Mediterranean country as a beautiful woman.

"Italia mia, benché il parlar sia indarno /Alle piaghe mortali / Che nel bel corpo tuo sì spesse veggio" writes Francesco Petrarca in the poem *All'Italia*, identifying Italy with a beautiful feminine body.

In the *Manifesto Futurista* Filippo Marinetti expressed "despise for the woman" because he intended to emphasize the manly values of the Nation facing the proofs of economic growth and colonial wars, and international competition.

In a similar vein the Japanese were obliged to strengthen their character and to deny their feminine kindness and timidity, when forced to become a colonial power and to fight modern wars, in order to compete in the world system. Despite the rhetoric of honor embodied in the tradition of the samurai, traditional Japanese culture is marked by self-restraint and apprehensiveness. Stress and psychological self-violence resulting from the repression of their spontaneous emotionality during the Modernization process led to the collective nervous breakdown that Natsume Soseki is warning about, and that becomes totally evident in the years of massive conversion to the

tenno psychopathic ideology, a sort of hysteric version of Hitlerian political aggressiveness.

In *Bodies of Memory* Yoshikuni Igarashi describes the most dramatic moment of the fascist adventure of Japan: the defeat, the surrender, and the meeting of Emperor Hirohito with General MacArthur.

> "Immediately after the defeat, the United States and Japan recast their relationship in terms of a melodrama of rescue and conversion. According to this melodrama, the United States rescues a good enemy, Hirohito, from the deleterious elements in the enemy country, and the good enemy becomes converted into a representative of US values. Hirohito emerges as a desirable object in the drama to explain why he deserves to be rescued; both countries' relations are expressed through a drama that features an entanglement of desire for the other. The relationship between the United States and Japan in the postwar melodrama is highly sexualized. The drama casts the United States as a male and Hirohito and Japan as a docile female, who unconditionally accepts the United States' desire for self-assurance." (Igarashi 2000, 28-9)

In his journal MacArthur describes the scene of his meeting with Hirohito in an overly theatrical fashion that speaks volumes about this sexualization, and underlines the feminine nature of the Japanese psycho-cultural condition.

> "He was nervous and the stress of the past months showed plainly. I dismissed everyone but his own interpreter, and we sat down before an open fire at one end of the long reception hall. I offered him an American cigarette, which he took with thanks. I noticed how his hands shook as I lighted it for him. I tried to make it as easy for him as I could, but I knew how deep and dreadful must be his agony of humiliation." (Mac Arthur *apud* Igarashi, 29)

After the defeat and the conversion to Western economic values, the competition shifted from the field of military aggression to the field of productivity and economic growth. No doubt that the Japanese performance was highly effective in the post-war decades, but the price that this strain demanded was similarly high. This is why it is possible to assert that contemporary Japan is a sort of laboratory of stress-related psychopathology, and particularly a sort

of laboratory of the pathologies related to the connective mutation of technology and of social behaviour.

The suicide of the writer Yukio Mishima, in 1970, was a sort of alarm bell, signalling the psychic suffering provoked by the forced homologation of Japanese culture to the Western values. Mishima was certainly a nostalgic of the past military tradition of his country, but what is more interesting in his last words and in his self-immolation is the perception of an unbearable cognitive dissonance, that grows more and more painful, notwithstanding the triumphal successes of Japanese capitalism.

Thanks to the systematic cancellation of the memory, and to the rewriting of the collective identity, the smooth surface of social life becomes perfectly suited for increasing productivity and ever-growing consumption. Social language is purified from historical incrustations, and from the impurities of emotional life, so that the economy becomes the universal language.

Once more the puritanical denial of the past acts as an introduction to the process of virtualization. Cleared from the superfluous hair of cultural identity and psychic emotions, the smooth surface of social life becomes perfectly compatible with the digital system of exchange. Posthuman mutation deploys more efficiently where dusty memories are cancelled.

Hikikomori

At the end of 1977 Summer holidays a wave of children suicides caused general outcry in the country: within a few days thirteen primary school children killed themselves. The gratuitousness and the incomprehensibility of the gesture sounded particularly disconcerting: in all these cases, there were no motivations or reasons for the act. There was a striking lack of words, an inability on the part of the adults that lived with the children to predict, understand, or explain what was happening.

In 2002 the filmmaker and poet Sion Sono wrote and directed the movie *Suicide Club*, featuring a massive wave of apparently unconnected suicides committed by young students.

A sort of suicide epidemic seems to grip this country.

In 1983, a group of students in a secondary school murdered some old and homeless people in a park in Yokohama. When questioned, the children

offered no explanation other than that the homeless people they killed were *obutsu*, dirty and impure things. As in *manga* comics, which achieved mass readership precisely in the second half of the seventies, the enemy is not evil, but dirtiness. Cleanliness, ridding the world of the 'waste products' of the indefinite, the confused, the hairy or the dusty, prepares the way for the digital, smoothing surfaces without asperities. Erotic seduction is progressively disconnected from sexual contact until it becomes sheer aesthetic stimulation. It is in Japan that the first symptoms of this trend can be spotted.

Furthermore, since the first years of the new century a new behaviour started to spread in Japan: many people, mostly young, break any relation with the outside world, and lock themselves in their room refusing any kind of socialization except the virtual connection with birds of same feather. They are so many that they are officially labeled *hikikomori* and the Japanese State administration is obliged to take account of their figure, and to provide social aid for those of them who need assistance.

According to the official definition *hikikomori* is a person who lives in a state of complete isolation. Researchers have suggested six specific criteria required to "diagnose" *hikikomori*:

1) spending most of the day and nearly every day confined to home,

2) marked and persistent avoidance of social situations,

3) symptoms interfering significantly with the person's normal routine, occupational (or academic) functioning, or social activities or relationships,

4) perceiving the withdrawal as ego-syntonic,

5) duration at least six months, and

6) no other mental disorder that accounts for the social withdrawal and avoidance.

According to the estimates of the Ministry of Health of Japan, in 2010 700.000 persons were living as hikikomori with an average age of 31, and 1.5 million people are estimated by the government as being on the verge of becoming hikikomori.6

Psychiatric definitions of the *hikikomori* culture seem to me quite elusive as they don't get the crucial problem that is implied in the behaviour of so many Japanese kids. This behaviour is not only to be seen as the symptom of a pathology, but should also be understood as a form of adjustment

6 Hoffmann, M. "Non profits in Japan help shut ins get out into the open". *Japan Times*, October 2012.

to the anthropological and social mutation that is underway, as an answer to the unbearable stress of competition, mental exploitation and precarity. According to Michael Zielenziger's book,7 most of the *hikikomori* persons he has interviewed show independent thinking and a sense of self that the current Japanese environment could not accommodate. Considering the stress of competition that the Japanese economic context is provoking, one may argue that the *hikikomori* behaviour is a healthy reaction to the frantic precarious life that late capitalism has provoked: a fully understandable withdrawal from the hell.

The dark side of Superflat

In the last decades of the past century, Japanese financial power, desperate to find a new image for Japan internationally, exploited artists as a resource for the export of the brand Cool Japan. The time of fast growing economy was over, and the stagnation was looking like a long lasting condition of the ageing Japanese society, when Superflat Art came to dominate the world's view of Japanese contemporary art, monopolizing spaces and offering a distorted vision of young people's life: cute schoolgirls, Gothic Lolitas, sweet colorful gadgets.

Cool Britannia was the trademark of the post-Thatcher age, when the Young British Artists managed to reinvent London, hiding the reality of the aggression against the welfare state, the impoverishment of large areas of the country, and the exploitation of precarious young workers. The Young Japanese artists—Takashi Murakami, Yoshitomo Nara and Mariko Mori among others—replicated the process and invented Cool Japan, and exported Superflat art in the West. They joined forces with art world entrepreneurs, fashionable gallerists, foreign dealers and curators who helped them to create the image of Cool Japan for the world market. Big financial groups such as Mori Building Co. and political leaders of the conservative Liberal Democratic Party appropriated the creative surge and the glamour coming from the Super Flat wave.

7 Zeizinger, M. 2006. *Shutting out the Sun: How Japan Created its Own Lost Generation*. New York: Random House.

"With American pop as its antecedent, Japanese neo-pop parodied the infantilism of post-war Japanese consumer culture, making art by sampling and remixing the endless array of consumer junk with which Japanese filled their passified US-dependent lives." (Favell 2011, 19)

Otaku is the Japanese version of the international nerd, who tries to embody the positive values of the creative class, but simultaneously suffering the stress and affective misery that is part of the competitive game. SuperFlat was an attempt in translating the *Otaku* style for the American mass audience, and this worked at the level of market. *My Lonesome Cowboy,* the pop sculpture of Takeshi Murakami was sold for 13.5 million dollars, and the cute glamour high tech gadgetry by Mariko Mori went mainstream in the global video-scape.

"Mariko Mori trapped herself in a classic neo-Japoniste trope: Japan as futuristic techno-paradise. There she was: the pretty girl in an astronaut's jump suit welcoming the tired space traveler with a few words of mystical Asian religion. It was contemporary Japan as it had been envisaged in the Osaka World Expo 1970." (Favell 2011, 40)

But, according to Adrian Favell:

> "the easy eye candy of superflat art was, to anyone who knew anything about the place, a blatant caricature and distortion of modern Japan. For a decade it became practically the only Japanese contemporary art ever seen internationally. In fact the success of their *otaku* (obsessive nerd) style art stood as the stunning exception to the dismal failure of much Japanese contemporary art to match the international impact of Japan's other creative industries."

Super Flat did not help to understand of the psycho-cultural reality of the country, particularly the reality of the precarious generation, "a generation who, according to Favell, had never held a proper job, never had to deal with a real relationship, lived with its parents, and sat day and night at home poring over its obsessively catalogued collections."

As Japan's postwar boom years came to an end at the beginning of the 1990s, the country entered a period of long, slow decline that has continued through to the environmental disaster of 2011.

And the year of Fukushima has marked a change in the perception of Japanese society, haunted by depression, loneliness and suicide.

Superflat aesthetics emphasized the glamorous side of the smooth sensibility emerging from the process of digitalization. But the glamour has dissolved, and what is left is the pathological side of the smooth sensibility, the lonely depression of the nerd.

Connectivity and suicide in South Korea

As I'm trying to retrace the anthropological and psycho-cognitive effects of the connective transition underway, I cannot neglect South Korea, which is the country with the highest rate of broadband connectivity in the world.

Like in Japan, and possibly more, the first part of the twentieth century has been marked by a continuous state of war, violence, devastation and bombing. The Japanese colonization has aimed to cancel national identity, and two wars have physically destroyed most of the urban territory of South Korea. Finally, in the last decades of the century the intense process of industrialization and redesigning of the territory have erased what of the natural landscape had not been destroyed by war.

In South Korean capital city, Seoul, the traces of traditional life are overwhelmed by the artificially redesigned life. Social communication has been thoroughly transformed by the mobile smartphone bringing the network in the daily life and urban wanderings. The majority of people are looking all the time at their small cell-phone screens. In the land of Samsung and LG, connection is permanent: when walking or sitting in the coffee shop or standing, or waiting for the subway train to approach, the hands of city dwellers are busy in bringing around and fingering their screens.

Urban vision has been thoroughly redesigned by screens of all sizes placed everywhere: big screens on the walls of skyscrapers, middle-seized screens in the station's halls. The small private smart-phone screens prevail in the attention of the crowd, calmly and silently shuffling and seldom looking around. The South Korean mind has been reshaped in this artificial landscape, and has smoothly entered the digital sphere with a low degree of cultural resistance if compared with other populations of the world.

In a cultural space emptied by military and cultural aggression, the Korean experience is marked by an extreme degree of individualization and simultaneously it is headed towards the thorough wiring of the collective

mind. The individual is a smiling monad walking alone in the urban space in tender continuous interaction with the photos, the twitters, the games coming out from the small screen. As social relation is mediated by connection, its rules and procedures are hidden in the technical format of the net.

Perfectly insulated and perfectly wired, the organism is a smooth interface of the flow. In order to get access to the interaction, the individual has to adapt to the format, and his/her enunciations have to be compatible with the code.

Korean cultural history seems to be particularly suited for this transfer of social life into the digital format: Hangeul, the Korean alphabet invented in the fifteenth century by King Sejong, seems to be one of the sources of the late modern economic success of the country. According to many linguists and anthropologists, in fact, the ability of Koreans to transmit digital content faster than in any other country of the world has something to do with the Hangeul writing system, ideally suited for the digital technology.

> "Korea is a world leader in cell phone technology and production, while the speed with which users can exchange text messages via cell phone keypads, is unquestionably the fastest in the world. Like Hangeul alphabet, Korean cell phone keypads are based on a principle of adding strokes to basic consonants and vowels, which means that a minimal number of keys are needed to create the entire alphabet." (*Korea's Unique Alphabet, Seoul Selection 2010, 60)*

Within the span of a single working life, the Korean economy has grown 17-fold, but the prosperity Koreans enjoy has not relieved the competitive pressure they endure. In the space of two generations South Koreans have stepped from starvation to advanced levels of consumption, but the last generation is taken in the trap of labour precarity, competition and social anxiety. Young people are obliged more and more to take debts with the banks if they want to study, to marry and to rent a house.

South Korea has not only the highest rate of connectivity, but also the highest suicide rate in the world. Korea leads the gloomy contest with 28,4 per 100.000. Second comes Hungary with 17, then Finland, and Japan.

Even if I want to avoid deterministic causation, I'm obliged to underline this significant point: three of these highly suicide-prone countries (Japan, Finland and South Korea) have also high connectivity rate. Is there a link between high connectivity and suicide?

As a result of my research on the psychological effects of the technological evolution I have to answer: yes, there is a link between connectivity and social proxemics, there is a link between connectivity and dis-empathy, there is a link between connectivity precarization of labour and de-solidarization. There is a link between connectivity and suicide.

Suicide is the most common cause of death for those under 40 in South Korea. Most interestingly, the toll of suicide deaths in South Korea has doubled in the last decade, and quadrupled in the three decades of the electronic transformation: from 6.8 per 100,000 people in 1982 to 28.4 in 2011.

In the space of two generations their living condition certainly improved by the point of view of revenue, nutrition, freedom and the possibility of travelling abroad. But the price of this improvement has been the desertification of daily life, the hyper-acceleration of rhythms, extreme individualization of biographies, ferocious competition in the school and in the labour market, and work precariousness that also means unbridled competition. Here probably lies the explanation of the extraordinary propensity of Koreans (both young and middle aged) to commit suicide.

High tech capitalism implies an improvement in revenue and consumption, but also implies ever increasing productivity, constant competition and ceaseless intensification of the rhythms of work. Koreans look back at the condition of their grandparents and the impressive improvement of the economic condition is obscuring the present alienation. But for some of them the present alienation is not bearable. The desertification of the landscape and the virtualization of the emotional life are converging in an effect of loneliness and despair that is difficult to consciously refuse and oppose in the social dimension. Loneliness, stress, competition, sense of meaninglessness, compulsion and failure: 28 persons out of 100.000 every year succeed in their attempt to escape and many more unsuccessfully try.

CHAPTER 3

AESTHETIC GENEALOGY OF GLOBALIZATION

> *When we reflect on the modern age, we inquire after the modern world picture... world picture does not mean picture of the world, but rather the world grasped as picture. The fundamental event of modernity is the conquest of the world as picture. From now on the word "picture" means: the collective image of representing production.*
>
> —Martin Heidegger

The idea of writing something about the transition from the conjunctive to the connective dimension of sensibility came to my mind in Spring 1997 after two successive journeys, one to Cordoba, Andalusia, the second to Jaipur, Rajahstan. In Cordoba I visited the Mesquita, then in Jaipur I visited the Amer Palace. Both places are remarkable for the mingling and overlapping of the Islam style abstract decoration and elements coming from the figurative style of Catholic and Hindu visual culture. Cordoba and Jaipur have been border cities for centuries.

Since that moment I started to think about the points of overlapping and transition in aesthetic sensibility and aesthetic production.

In those years Cyberculture and the new economy were at their pinnacle, animating new expectations of development and civilization. Notwithstanding these optimistic expectations of expansion, prosperity and peace, in the underground was audible the implosion sound of the old modern world. Fundamentalism was sweeping Algeria, civil war was destroying Jugoslavia, and oppression of women in Taleban Afghanistan financed by the US was systematic. The millennium of bourgeois civilization was approaching its end while a new barbarianism was visible in the distance. It took a thousand years to make the barbarian a bourgeois, but only a few decades to make the bourgeois a barbarian.

After my journeys in Andalusia and Rajahstan I focused my attention on the psychopathology of desire. In the second half of the decade the first

post-alphabetical generation was emerging on the world scene: a generation of humans who have been exposed since their birth to electronic flow of synthetic images, and whose perception has formed in an environment where most experiences are effects of simulation. Involved in a process of mutation this generation was developing new cognitive competences, while others atrophied.

The sphere of eroticism and the sphere of aesthetics have always been linked during the history of human evolution, and their contamination has generally emphasized erotic pleasure while enriching aesthetic sensibility. At a certain point of Late Modernity, when proliferating information has invaded the social organism, aesthetics and eroticism have entered an area of disturbance: the conscious organism confounds the access codes, exchanging aesthetic signs and erotic signs up to the point of getting lost in a labyrinth.

More than fifteen years have gone, and my work seems interminable: as the focus of my research is an ongoing mutation, the territory is expanding as I'm trying to map it, and the scenario is continuously changing, jeopardizing provisional systematizations and interpretations, and continuously displacing the point of view. Therefore I've renounced to any systematic pretension and I'm just trying to map local, special objects: artworks, novels, movies, events that can be considered as examples of the mutation.

Connection is introducing pathological contractions in the flow of conjunction, and simultaneously opens a new horizon to communication. Can we imagine a new happy balance of sensibility and sensitivity, a new post-natural nature of the human sensorium? Or should we imagine lines of escape from the spreading universe of unhappiness, in terms of islands of slowness, of convivial corporeality?

The invisibilization of the world: capitalism and semiocapitalism

I call Semiocapitalism the present configuration of the relation between language and the economy. In this configuration the production of any kind of goods (material and immaterial) can be translated into the combination and recombination of information (algorithms, figures, digital differences).

The semiotization of social production and economic exchange implies a deep transformation in the process of subjectivation. The Infosphere is

directly acting on the nervous system of society, affecting the Psychosphere, and particularly affecting sensibility. This is why the relation between Economy and Aesthetics becomes crucial for the understanding of the present cultural becoming.

During the last decade of the past century, the Info-Econosphere has emerged as unified field of research for the social sciences. Economics and Media Sociology have undergone a process of integration and many Authors have underlined the relation between Net-Economy and socio-cultural becoming (see: Geert Lovink, Derrick de Kerckhove, Manuel Castells among others).

Understanding the historical and anthropological process that has produced the modern subjugation of social activity to the economic reason is a task for social science, but in my view it is a task for aesthetic theory as well.

In his seminary on the birth of bio-politics (published with the title *Naissance de la biopolitique*) Foucault links the genesis of the Economic Reason to the history of capitalist domination and particularly speaks of the universal uniformation of human culture in the operational model of the enterprise as the core Neoliberal project. Capitalism is described by Foucault as the subjugation of social potency (physical and intellectual) to the rule of scarcity and accumulation, and Economics is seen as the ideological technique intended to transform use value into abstract value, to erase the concrete reality of human activity and to emphasize the abstract function of labour: creating plus-value which makes accumulation possible. The potency of labour is forced to bend to rules of exchange that are not natural laws, but social rules, effects of a political decision and of a language act that is marking the social body.

According to Foucault the genesis of Economic Reason can also be described by the point of view of the modelling of sensibility.

Economics is a special way of making things visible.

In Plato the sphere of the visible is despised and condemned, on behalf of a higher sphere, the sphere of pure Understanding, of spiritual intellection. A wide iconoclastic tradition has marked the history of Monotheistic religions.

From the point of view of the ancient dichotomy of materialism and idealism—which has something to do with the dichotomy of the visible and the invisible—Modern Economic Reason is playing an ambiguous role.

In its industrial phase, Capitalist economy was assessing the dignity of

the visible materiality, of physical transformation of material stuff and of the bodily enjoyment of material things: the creation of the Indust-Reality has been linked to the secularization of the visible.

During the transition to the Modern civilization, the shift from the Renaissance perspective to the Baroque proliferation of perspective viewpoints has conjured to install the Economic Reason in the space of visibility and of the image. In the centuries of Modern evolution Indust-Reality produced a change in the field of visibility. The physical world was modelled and transformed according to the rational prospects of the urban landscape and according to the standards of mass manufacturing.

Then, in the most recent phase capitalist production has marginalized the physical transformation of matter, and the physical manufacturing of industrial goods, and has enabled capital accumulation by the recombination of information and the manipulation of financial abstraction.

In the sphere of capitalist production the visible, material physicality of use value is only the introduction to the holy abstraction of exchange value. This is the double movement that Marx is calling "fetishism of the merchandise".

The process of invisibilization of the world is the core of the abstraction process that is the main trend of the relationship between Real world and the Economy. "All that is solid melts in the air," wrote Marx in *The Communist Manifesto* of 1948. But in the Indust-Reality the invisible goal of abstract valorization was obtained by physical manipulation of visible things.

Semiocapitalism dissolves the visible process of production, and financial capitalism, at last, is the utter dissolution of the sphere of visibility and the melting of capital accumulation into the abstract kingdom of virtual exchange.

Global imagination and Baroque

While the territorialized economy of the bourgeoisie was based on the iconophobic severity of iron and steel, in our age the economy is based on the kaleidoscopic, deterritorialized machine of semiotic production: the commodities that circulate in the economic space are signs, figures, images, projections, and expectations.

No longer a mere tool for the representation of the economic process, language becomes the main source of accumulation, constantly deterritorializing

the field of exchange. Speculation and spectacle intermingle, because of the intrinsic inflationary (metaphoric) nature of language. The linguistic web of semio-production is a game of mirrors that inevitably is disturbed by crises of over-production, bubbles, and bursts.

In order to grasp the general sense of the postindustrial cultural transformation it's useful to reassess the role that Baroque has played during the age of Modernity and is playing now, in the backstage of contemporary imagination and perception.

According to Deleuze "Baroque is a transition" (Deleuze 1988) which involves perception, imagination and the social environment as well.

Let's go back to the golden age of Baroque.

The discovery of the New World and the colonization of the Americas marked the beginning of modern expansion. The sudden change and enhancement of the universe of experience was the source of the Baroque spirit, which was based on the idea of the infinity of God's creation. Since the golden centuries of Spanish expansion, the Baroque sensibility opened the door to the Ontology of infinite proliferation and therefore to the experience of modernity.

In the seventeenth century, at the highlight of Baroque, the Infosphere underwent an impressive mutation: a distorting expansion of the experience was provoked by the discovery of new lands, and the printing technology made possible the diffusion of the written text. Previously a rare and expensive source of privilege, the book, and written text in general spread largely in Europe in the sixteenth century. The dissemination of copies, of reproductions, together with the propagation of perspective in paintings paved the door to the simulation of imaginary words invading the sphere of daily experience and social culture.

In the sixteenth century, for the first time, the Economy is disarranged by Inflation. This new economic phenomenon is recorded as an upsetting event affecting exchange, but also the psychic and linguistic sphere. (see: Antonio Maravall 1975).

Spanish poets (Quevedo, Gongora) refer to "*locura*" (madness) as an effect of the inflation of meaning that is provoked by the proliferation of semiotic stimulations. Semiotic inflation goes along with the monetary inflation.

In the lexicon of the economy we speak of inflation when more and more money is buying less and less goods, and similarly we can speak of

semiotic inflation when more and more signs are buying less and less meaning. Semiotic inflation can be described as an excess of signs overwhelming the conscious attention, up to the point of breaking the link between the sign and the referent.

Baroque is the recording of this exorbitation, of this excess of signs, of a randomization of the relation between meaning and signs.

The phenomenon of fashion (*la mode*), the infinite game of the appearance of things (dress, buildings, styles…) is linked with the aleatorization (becoming random) of the referent: everybody is taking the signs of the other in order to refer to the self. Self is the product of a creation, of an artificial construction, mixing and combining signs from the kaleidoscope of imagination. The self is simulation: becoming other. (see: Néstor Luján 1988).

The establishment of the capitalist cultural space is marked by a perturbation of the codes of belonging. Who are you? Whence do you come? Whose son are you? What is your role? What's your value?

Before modernity, in the age of aristocratic order, the social hierarchy was fixed forever by the theological knowledge: every question had an answer, every person had a place and a value. Everything is displaced since when the Copernican revolution states that man is no more the centre of the universe, and a new world is discovered beyond the Ocean, and the proliferation of printed texts and painted perspective images replaces the divine Creation with the human simulation.

Capitalism finds its anthropological dimension and its epistemic foundation in this space of groundlessness that is also a space of freedom. Value is no more defined by God, no more it is something fixed and referable to a natural criterion. Value is the product of labour, of time, and of force: value is simulation.

The picaresque novels that became incredibly popular during the Spanish Empire's golden centuries (see: *El buscòn* by Francisco Quevedo) are the narration of this disorientation, of this effect of a social and cultural deterritorialization. The word *Buscon* in Spanish means "seeker". Lazarillo, the *buscon* par excellence, is someone who is looking for something. Looking for what? He is looking for food, for money, but mainly he is looking for his own identity. The *picaro* is representing the passage from a society based on blood and traditional belonging to a society that is based on money. Blood and tradition were a guarantee of descent and of belonging, they were the proof of the link to the origin.

Traditional belonging was implying a relationship to the Truth (Truth is the origin: God), a reference to the ultimate Reality, beyond the appearance, beyond the mundane fabrications.

Money is the contrary of belonging and foundation. Money is groundless, and the wealth of the bourgeoisie is implying a perpetual shift from one appearance to the other. Money is an abstract equivalent, not the signifier of a fixed referent. The *picaro* is son of nobody (opposite to the *hidalgo*, who is *hijo de algo*, son of someone), therefore the *picaro* is looking for his own identity, and in this search he is playing the game of appearance, of simulation.

The Baroque search of meaning throughout the vertiginous kingdom of proliferating appearances is doomed to fall into the *desingano* (deception) because the general condition of modernity is based on the consciousness of the absence of ontological foundation, on the perpetual sliding and shifting from one level of simulation to the next.

When the visual space is invaded by ostensible representations, simulated spaces, perceptual tricks, the Infosphere is getting more and more complex and thick. Maravall speaks of Baroque cosmovision, a cosmology which is based on the relativism of the vision.

"The Renaissance sees in the phenomenal world the manifestation of a reality, while Baroque thinks that the experience is transmission of inner vision… Appearance and mannerism are not falsehood, but something belonging to the reality of the world, a face of a world which for us is anyway a phenomenal world." (Maravall 1975)

According to Panofsky, perspective is a symptom of the exhaustion of ancient theocracy, and of the emergent anthropocentric vision: the possibility of simulating the space leads to the dissemination of perspective viewpoints.

The Baroque mind has forgotten that the Faith is the foundation of imagination, and has acquired a new consciousness of the surface, of the persuading power of artificial simulation.

There is a political problem, in this passage: creating consensus and propagating faith are goals of the Catholic Church and of the *reyes Catolicos* in the fight against Protestant Schism, and in the project of evangelization and colonization of the new world. In the pursuit of this project the visual scene of the Counter-Reformation is not based on ascetic contemplation, but on a spectacular profusion of images. Not the silence of monastic ecstasy, but the noisy explosion of the endless image production is the condition of the *propaganda fide*.

The capitalist frenzy started in similar cultural conditions. As the perceptual experience is deceiving, and the proliferating simulation (labour, creation, invention, knowledge, art, technology of reproduction) is overflowing the mind with semiotic inflation, Economy takes the place of Theology as the ultimate source of truth.

Since the age of the Spanish colonization up to the Hollywood colonization of the planetary mind, the saturation of the space of imagination has been the condition of capitalist penetration into the collective Unconscious.

Don Quijote is wandering in this syndrome of pathological deceptions: absorbed by his world of chivalrous fantasies he is fascinated by the spell and finally he finds himself in a no more existing world.

Truth and measure

While the Baroque mind is haunted by the perception of open interminability of God's creation, and by the consequent phantasmagoria, or plurality of the possible worlds, the Protestant imagination—suspicious of the tricky language of the images—is essentially trusting in the severity of verbal semiosis. The Gothic vision of the protestant bourgeoisie relies on the perfection of a technological God which is speaking an un-ambiguous language: the language of deeds, of mechanical precision, of equivalence and measurement: we may also call it the Language of Reason.

Whilst the Baroque draws imaginative energy from deterritorialization (conquest, proliferation of the images, triumph of dissipative energy of the imagination) the puritanical core of protestant culture affirms that individual consciousness is the site of the uniqueness of truth.

The purity of puritans is essentially effect of the erasure of the past, of the historical and religious memory. This erasure creates the smooth space of a future without limits that has to be written in a purely technical code.

Modern capitalism is predominantly based on the affirmation of a measurable relation between labour and value: the dynamics of accumulation defines the measure of good's value on the basis of the time that is necessary for the production of that good.

The bourgeoisie is essentially a territorialized class. The very definition of this class is related to the territory of *bourg*, the city, the place where the

productive energies are assembled, where factories are built and property is protected. The protestant ethics supports the sense of belonging to the local community because the community is the witness of the grace of God, testified by the accumulation of wealth.

Also the wealth of the bourgeois is territorialized, and the accumulation of capital is enabled by the production of things that are made by physical materials linked to the place, the land, the territory.

Work time and territoriality are the condition of universal rational measurement. While Baroque culture emphasizes the ambiguity and multifaceted deceiving nature of language, the Protestant culture is based on the assumption of a fixed relationship between sign and meaning, signifier and signified.

Puritanism and Virtualization: neo-human culture

Look at the difference between the Catholic style of cultural colonization in Mexico and South America and the Puritan style of colonization in North America.

After the discovery of the new continent, at the beginning of the Spanish colonization of Central America, Bartolomeo de las Casas, a religious man who accompanied the Spaniards in their conquest, asked a question: "Should we consider the natives we have found in the new territories as humans? Do they have a soul as we do? Can they receive the Christian message that can only be transmitted to human beings?"

The answer of the Catholic Church was the evangelization of the "Indians", the conquest of the soul of natives, and a certain degree of tolerance for a syncretic religious imagination. The evangelization went along with the colonization.

The Puritans who occupied the Northern American lands were less tolerant and their religious activity was less inclusive. They did not ask themselves the baroque question about the soul of the natives. The Indians were only seen as an obstacle to the expansion, not as people to convert. The people who lived in the Northern prairies had to be removed, cancelled, exterminated. Their obliteration was the condition of the establishment of the new perfect humanity, whose goal was the realization of the word of God on the smooth space of Newfoundland. The Northern Indian's genocide was not an

accident, but the distinctive character of an arising neo-human culture.

The cultural environment in which the monetary abstraction can thrive is not the Mediterranean territory densely fertilized by religion and history, but the newly discovered space inhabited by synthetic faiths, artificial constructions presupposing the cancellation of historic legacy.

The purified form of economic reason paves the way to the long process of mathematical mutation of language that leads to the creation of the calculation machine, and to the mathematical reformatting of the social mind, and, in the late modern age, to the shift from the alphabetical to the digital language and techno-scape.

The historically and ethnically purified territories of Northern America were the perfect space for the dis-embodiment of language, for the process of abstraction that leads to the digital culture and to the process of virtualization.

The political entity that has been generated in the virgin territories of the American Utopia, a smooth space oblivious of the roughness of historical and cultural legacy, may be viewed as a neo-human civilization. The continuity of human history has been broken by the Puritan purification, and humanism has been reinstated on the basis of the an-historical truth of the texts.

In the puritanical space, language is conceived in terms of pure information: operational truth, reduction of signifiers to unambiguous signified.

In the puritan's view America is the land without history, and American history is based on the ceaseless displacement of the frontier. There is no feudal past or tradition holding back and influencing the creation of a pure community.

Past is nothing, and the frontier is all: future with no contamination and resistance. American Puritanism is first of all purity of the horizon of time.

"The Unites States is unique in the extent to which the individual has been given an open field unchecked by restraints of an old social order, or of scientific administration of government." (Frederick Jackson Turner 2008, 48)

Cancelled is the mythology of the roots, which is so heavy in the Euro-Asian history, and the new world is conceived as a place where choices are perfectly binary: good and evil, light and darkness.

Civil and religious spheres have to merge, purified of the emotional reference to the body and to the ethnical memory, so that perfect Reason can reign.

"Always the mere emotion of religion was to be controlled by reason. Because of this, the university trained Puritan clergy prided themselves on the lucidity and rationality of their sermons." (Carl Degler 1959, 16)

The Puritan spirit, diluted in the denominational field of American Protestantism deeply marks both religious and civil culture, as the American national culture does not recognize the distinction between religious and civil structures.

Technology is religiously conceived as *eupraxia*, correspondence of human and divine art. A mentalist and functionalist God is helping humans provided that they have purified their mind from any residual of the cultural past. The purification and emancipation from history opens the way to an epistemological space where the code abstraction can be conceived and the operational potency of technology can be deployed.

The obsession of purity translates reality into written code: only what can be verbalized is real, and all of reality can be verbalized. What cannot be verbalized is demoniac suggestion. God is speaking words, and at the beginning was the Verbum, a purely operational language.

"The primary problem of Protestantism is word fixation: Scripture study is at its heart. No fleshy mediator is needed between the soul and God; no images of saints, Mary or God are permitted... In highly ritualized Italian and Spanish Catholicism, by contrast, there is a constant, direct appeal to the senses. (Camille Paglia 1992, 29)

The purification of language from the bodily ambiguity is pre-condition of the reduction of social relationship to calculation, and of the superior potency of capitalism in the field of operational efficiency.

The trans-historical Enterprise has to face only an ever displacing frontier with no contamination and no resistance. American Puritanism is first of all purity of the horizon: the Universe is smooth and prepared for a binary ethical perception. The world is emanation of a verbal flow, and God is the original code that can act on the minds of men, provided that they are pure, clear from the impurities of cultural becoming.

The Manifest Destiny of the neo-human entity that is embodied in the United States of America is this: cleansing the world, removing human imperfection and perfecting the identification of world and God's will, a will that is written in plain unambiguous words.

Resurfacing Baroque in post-bourgeois Semiocapitalism

Indust-reality and the mechanization of labour have shaped the perception of the modern world, culminating in the aesthetics of Modernist Avant-garde.

The effect of coincidence of the Avant-garde, industry and the media is the art-object proliferation, the overlapping of art and production, and therefore the aestheticization of the daily environment, distinctive features of late modernity. Aesthetics has invaded mass production, and every real object, losing its singularity, appears as the reproduction of a model. By this point of view late modernism can be viewed as a process of replacement of the original reality by the artefact. Art is dead, says Jean Baudrillard, not only because critical transcendence is dead, but also because reality itself is being confused with its image.

Then, the process of digitalization has transformed things in signs, objects in messages. The proliferation of semiotic goods is producing the effect of a saturation of social attention, a neo-Baroque effect. The passage from Modern capitalism to Semiocapitalism is marked by the end of measure and by the come-back of the Baroque spirit.

In the book *Vuelta de siglo*, Bolivar Echeverria argues that the spiritual and immaterial power of the Church of Rome has always been based on the ideological control of the imagination, but this influence was hardly considered by the pragmatic ethics of industrial culture.

Catholic Spain of the golden centuries was the harbinger of a non-industrial brand of accumulation, based on massive robbery of the Americas. This strain of modernity was marginalized after the military defeat of the "Invincible Armada" in the naval war with the British Empire, which started the economic and political decline of Spain. Protestant modernity defined the canon, but the Baroque strain of modernity was not erased: it went underground, tunnelling deeply into the recesses of the modern imaginary only to resurface at the end of the twentieth century, when the capitalist system underwent a dramatic paradigm shift towards post-industrial production.

Semiocapital is centred on the creation and commodification of techno-linguistic devices that have by their very nature semiotic and deterritorialized character.

We need to grasp the social implications of the two different strains of modernity: the relationship between the industrial bourgeoisie and the worker class was based on conflict but also on mutual cooperation. The bourgeoisie and worker class could not dissociate their destiny, despite the radical conflict opposing salary and profit, because they were dwelling in the same physical space, and they needed each other in order to survive and to grow. Although this alliance between labour and capital broke down in the '60s and in the '70s, a new alliance was possible in the last decade of the twentieth century. The experience of dotcom enterprises was the expression of an alliance of venture capital and intellectual work, and this temporary convergence of engineers and artists and venture capitalists made possible the extraordinary technological progress of the digital sphere and the creation of the Internet. But this alliance has been broken when financial power prevailed on cognitive labour, and the financial predatory machine has invaded the empty space of randomized value.

When language becomes the general field of production, when the mathematical relation of labour-time and value is broken, when deregulation destroys all liabilities, predatory behaviour becomes the norm. This is what has happened since financial capitalism has occupied the scene of the world. Deregulation has to be seen in the context of the technological and cultural evolution which has displaced the process of value creation from the field of mechanical industry to the field of semiotic production. The relation between work time and valorization becomes uncertain, undeterminable, as cognitive labour is hardly reducible to the measure of time, and when the relation between labour and value becomes undecidable, what reigns in the global labour market is the pure law of violence and of abuse.

Neo-Baroque and Deregulation

Simulation and fractalization—features of Semiocapitalism—are essentially Baroque categories. In his book *L'età neo-barocca* (1989) Omar Calabrese claims that the style of Postmodernism is recuperating aesthetic and discursive models that first emerged in the 1600s. Baroque was essentially proliferation of the points of view, and the contemporary digitalization of labour displaces production and exchange into a regime of indetermination.

After Nixon's 1971 decision to deregulate the American dollar, emancipating it from the golden standard American economy has been freed from the rule of law, so the American debt has been allowed to grow indefinitely, since the debtor was militarily stronger than the creditor. Far from being the subject of an objective science, in this case economics shows to be an enterprise of violent obligation modelling social relations. In *Symbolic exchange and death*, Baudrillard writes the following lines:

> "The reality principle coincided with a determinate phase of the law of value. Today, the entire system is fluctuating in indeterminacy, all of reality absorbed by the hyperreality of the code and of simulation. It is now a principle of simulation, and not of reality, that regulates social life. The finalities have disappeared; we are now engendered by models. There is no longer such a thing as ideology; there are only simulacra." (Baudrillard 1976)

The entire system precipitates into indeterminacy, since the correspondences between referent and sign, simulation and event, value and time of labour, are no longer guaranteed.

Since the '70s, the shift to immaterial production has been eroding the identification of wealth with physical property and the identification of value with territorialized labour.

Deregulated semiocapital has marginalized the bourgeoisie replacing it with two distinct and opposing classes: the cognitariat, i.e., the precarious and cellularized cognitive workers, and the managerial financial class, whose only competence is competitiveness and financial manipulation.

The process of deregulation paves the way to the Baroque space of randomness. Paradoxically the baroque imaginary can be productive only when the puritan spirit has utterly reduced language to algorithmic operational processes. When the purification of capital accumulation has been accomplished by finance, Baroque enters the scene of hyper-real production.

Iconophobia

Pagan cultures often attribute to the image a value of trans-real reality. Images may have magic effects. Pagan gods are not jealous of the images because their

divinity resides in the image itself. The image is part of the animist continuity that is pervading both nature and artifact. The spirit cannot be separated from the environment.

The iconophobic sentiment has two main sources: one is the platonic philosophy that implies a contradiction between the image and the truthful idea, the second is the biblical interdiction of image replication.

In the Monotheist space the word (*Verbum*), the voice and the Law are the semiotic forces that define the religious psycho-culture.

"Listen, Israel" says the God whose name cannot be pronounced. The word is His force, and by the word he is creating and governing the world. By the word God spreads terror, by the word he consoles. And in fact His name cannot be contained in a word.

Jewish iconophobia comes together with an obsessional deification of the word. In the Jewish diaspora too the literary tradition has played an outstanding role, making the transmission of a strong cultural identity possible. This explains why Jewish visual art does not really exist, although Jewish artists do exist.

Jewish painters as Chagall have taken their inspiration from the Christian mythological and iconographic repertoire, while other painters, like Mark Rothko have chosen the way of abstraction, of non-figurative expressionism. Jewish iconography is a sort of non existing space, which is filled by calligraphy, words and inscriptions.[1]

On this point the Scriptures are explicit:

> "I am the Lord your God, who brought you out of Egypt, out of the land of slavery.
> You shall have no other gods before me.
> You shall not make for yourself an image in the form of anything in heaven above or on the earth beneath or in the waters below. You shall not bow down to them or worship them; for I, the Lord your God, am a jealous God, punishing the children for the sin of the parents to the third and fourth generation of those who hate me, but showing love to a thousand generations of those who love me and keep my commandments." (Exodus, 20)

1 "In its origin the Jewish aesthetics is not based on a theory of natural or artistic Beauty, but on non representational thought. The representation of the body is absent in the Torah's Jewishness: particularly the human body, and the created bodies in general (animals, astronomic bodies) and mostly the shape of God are excluded from the field of the image and representation. God appears to the man but is not seen: he manifests Himself through the Alliance and the Revelation, but this revelation is accompanied by the interdiction of doing simulacra." (Sigal 1996)

Nothing, among those things which exist in nature or in the Heaven can be represented by the hand of man. A question is open: is it allowed to represent what does not exist neither in nature nor in the high of Heaven, but only in the human imagination? Can the unreal be represented? What about drakes and chimerical beings, what about phantasmagoric imagination? And what about decoration, the visual play of abstract geometries? Can these non existing things be painted? By this viewpoint, Chagall may be considered as a Jewish painter who does not represent something which really exist, but only dreams, hallucinations, fantasies. Both geometrical abstraction (Mondrian) and expressionist abstraction (Chagall) are certainly influenced by the need of painting what exists only in the human mind.

The Veil and the face

In the Islamic area the prohibition of visual representation becomes explicit since the third generation after the Prophet's life, but according to Andre Grabar, author of *L'iconoclasme byzantin*, (1984) the horror for the images has been a constant feature of Muslim civilization since the beginning.

A sort of an-iconic purism seems to be inscribed in the cultural code of Islam, something that reminds of the desert, the un-representable space of emptiness. Only the perfect harmony of geometrical forms, emerging from the mental abstraction deserves to be painted and seen, not the irregular changing forms of the human body and of physical matter: abstract decoration and calligraphy are allowed forms of vision in this cultural space.

"A sufi master said: I never saw something without seeing God in it. Another answered: I've never seen anything but God. The invisibility of God brings in itself the invisibility of those terrestrial things that have been made to be seen." (Besançon 1994, 112)

The Muslim an-iconicity seems to be rooted in the absolute transcendence of divine, and does not come as an effect of prohibition and of repression of imaginative faculty. Therefore a wide range of iconic profane production is tolerated in the Muslim area.

Decorative calligraphy appears as the highest form of artistic symbolism. Beauty is all inside the calligraphic gesture. In the sixteenth century Qadi Ahmad writes, in the book *Gulistan-i Unar* (*Rose Garden of Art*):

"The essence of writing is in spirit. The excellent writing makes the eyes free because writing is soul's geometry."

As writing creates the world as world of the soul, writing is the geometry of the world. The Creation itself can be conceived as a calligraphic gesture that decorates the pages of Time according to God's design. God is the first Painter, rather the first Calligrapher as the Creation seems to be more an intellectual act of conception and writing than emanation or projection of images.

Rumi, the most celebrated Islamic poet, says that God is the Calligrapher who draws his works with the pen of the human heart.

In the book *Soufisme et art visuel Iconographie du sacré*, (1998) Laibi Shakir outlines the psychological dynamics implied by the Islamic rejection of figuration, and the marginal almost secretive flourishing of talismans, objects with strong magical undertones.

"Islamic art is based on the exclusion of what is considered as a secondary reality, the human body and the representation of objective reality, in favor of what is considered as the only true reality, the invisible. The paradox of Islamic art resides in the desire of representing a reality which is outside the visible real." (Shakir Labi 1998, 14)

The talisman, which already existed among the Caldeans, the Egyptians and the Latins, suggests the surfacing of a representative visuality which is not allowed in the recognized sphere of art. What is denied in the sphere of official art—the visual representation of the body—reappears as transgressive experience in the Sufi mystical experience. The body (*jism*), the shape (*sura*) and the visible (*ruy'a*) are linked by a relation of hiding, denying and transgressing. On this dialectic tension is grounded the Islamic aesthetic sensibility, that can is expressed by the veil, as a form of hiding and simultaneously hinting to the hidden visibility. According to Dominique Clévenot: "the face of God is hidden, although the believers are turning their gaze towards it. The Quran defines the believers as those who desire to see the face of God. Here is the core of the Muslim conception of the veil, a screen that encloses the vision, but simultaneously exalts desire." (Clévenot 1994, 85)

Clévenot shows that the Islamic psycho-sphere is based on the shadowing of visuality. Also the Arab urban landscape can be described by this point of view: "In these cities the street is a sequel of visual breaks. The traditional urban house of the Muslim-Arab world tries to escape the gaze. Turned towards the inside, it shows to the outsider only some scraps of wall." (Ibid., 8)

The veil, obstacle placed between the face and the vision is a crucial piece of the Islamic imaginary. The visibility is cause of danger, mind's vertigo, fatal attraction. "God has seventy [seventy thousand?] veils of light and of darkness. Without these veils the lightening of His face would burn everyone seeing it." (Bukhari *apud* Clévenot, 86)

Hagar

Investigating the problem of the veil in the context of a wider consideration of femininity in the Islam world, Fethi Benslama speaks of denial (*refoulement*) of the visibility of the woman, and more generally of denial of the bodily singularity.

The mobility and visibility offered to women by the global media have exacerbated the reactive attitude of men in the Islam world.

In *Psychoanalysis and the challenge of Islam* Fethi Benslama speaks of the nostalgic torment for the origins as a peculiar feature of Islam psycho-culture. According to his insight, the 'torment' of origin manifests itself in Islam in the form of suppression of the feminine, and particularly in the form of denegation of the person of Hagar, who, in spite of her foundational mothering role is never mentioned in the Qur'an and is also 'evicted' from the Biblical narration, so that Abraham the father could be reconciled with his son.2 Hagar is the slave that gave Abraham a son named Ismail, while Sarah, the legitimate wife, was considered infertile. Later on, according to the Bible, Sarah became pregnant and gave birth to Isaac. Hagar, who had never been fully accepted into the tribe despite being the mother of Abraham's child, after the birth of Isaac was completely rejected and expelled into the desert. Hagar means 'stranger': she was from Egypt, and when she became pregnant God promised that her child would be the ancestor of a great nation. This nation is the Arab people.

Benslama underlines the fact that the theological foundations of Islam are marked by the identification of the woman as danger. The Qur'an (XII, 28) speaks of immense trickery of the woman, who has neither reason nor

2 "Sarah, Abraham's wife, took Hagar the Egyptian, her slave-girl, and gave her to her husband Abram as a wife. He went in to Hagar, and she conceived; and when she saw that she had conceived, she looked with contempt on her mistress." (Genesis 16:1-6)

religion. The visibility of the woman's face is the origin of the guilt, because the male is unable to control his own reaction to the vision.

According to Benslama, the Islamic rejection of the visibility (particularly the visibility of the woman's face) is not, as in the Platonic philosophy, a consequence of the deceptive feature of the visible. On the contrary, vision and truth have a direct relation: seeing opens the eyes to the vision of truth, and truth has to be hidden. "Voiléee, devoilée, revoilée, voilà les trois sequences de l'operation feminine de la theologie. Voilée initialement, dévoilée pour la demonstration de la verité originaire, revolée ensuite par l'ordre de la croyance en cette vérité de l'origine; car la verité instituée aspire à recouvrir le néant par lequel esse est passée." (Benslama 2005, 208)

The woman's visibility is a danger for masculine identity and for the community itself:

> "Tel un orifice visual incontrollable, il est penetrable par les monstration feminines qui le possedent et le subjuguent, au point de lui faire oublier sa loi…. Le discourse theologique ne cesse de mettre en scène le trouble de l'homme devant la femme, trouble par rapport à sa puissance voyante, trouble par rapport à son savoir, sur l'altérité, precede par le trouble originaire devant l'identité de son etre." (Ibid., 211)

Hiding the disturbing truth is the true motivation of Muslim veiling that permeates daily life, and political relations: the truth of the body, the truth of singularity and desire has to be denied and hidden in order to protect the cohesion of the community. Muslim culture is essentially based on the assumption that the individual draws legitimity and psychological consistency only by belonging to the community: singularity marks are therefore to be hidden and possibly cancelled.

Truth effectiveness Iconocracy

In the Christian world, both the orthodox iconofilia and the iconoclasm share the same furious passion for transcendence. The humanist representation emerged from the abandonment of that passion, and from a much more rich and multifarious interest in the reality of human life. According to

Mondzain *Image Icône Economie*, (1996) the icon should not be mistaken as a representation. What counts in the icon is not the object of representation, but the lack of it, the spiritual absence. The icon is the actual figuration of the impossibility of figuration. Mondzain retraces the history of the general system of visibility starting from the war between iconoclasm and iconophilia in the Byzantine age.

The relation between visible and invisible is at the heart of the history of the Economy, according to Mondzain. The economy in fact is the sphere in which material things, visible, touchable and usable, are interpreted and exchanged in terms of abstraction: money, value.

Orthodox sensibility is essentially focused on truth, interiority, intensity, and pureness—while the Catholic version of religion is aimed to the effectiveness of the word, of the image, of the gesture.

The Eastern Christian world is divided between iconoclasm and iconodulia in the name of truth: for the iconoclasts the image has to be rejected because it is lie, for the iconodules it has to be embraced as a step in the pathways of ascetic experience, as the sign of an absence, and also as a crutch for the majority of the faithful.

But the Catholic Church, in the age that followed the Protestant Schism, is no more thinking in terms of truth, but in terms of persuasion and effectiveness. The baroque innovation is essentially here: the image is an artefact and artefacts cannot be judged upon the presupposition of truth or lie. It has rather to be judged in terms of effectiveness.

Effectiveness is not limited to the problem of the propagation of faith, but has to be referred to the creation of power, political consensus.

Here we find the foundation of Modern iconocracy, the power of the images.

In the Modern age the image is invading the urban space thanks to the reproduction technology, thanks to printing machines, and electric energy, and at the end thanks to the digital simulation. Economy and the spectacle are developing together.

The process of image globalization runs parallel to the process of economic globalization, and the integration of the image in the process of valorization is simultaneous to the process of subsumption of the human creativity and intellectual potency by the general form of Semiocapital. Therefore we can view Modernity as an Iconocratic age.

Visual culture and globalization

Immersed in the video-connective environment in a short deal of time the human mind has acquired cognitive competences like reading the electronic image, understanding the meaning of the recombinant flow of visual information, interacting with the connective machine. The modes of cultural and psychological elaboration, however, have not been so fast in adaptation.

Identitarian reterritorialization is often the answer to techno-imaginary deterritorialization, and this reaction has led to the surfacing of pathologies of maniac-depressive nature: panic, depression, and the political pathology of massive fanaticism. This is why the vision of a peaceful global Empire prevailing in the '90s has failed. Shared by techno-liberal thinkers like Kevin Kelly and radical Marxists like Toni Negri, that vision was based on the assumption that democracy and technological implementation of the intellectual potency of the social brain were within range.

After the dotcom crash of April 2000, and after the World Trade Center bombing of September 2001, war has taken the central place of the world-scape, although globalization has not receded having already re-codified both the imaginary and the techno-cognitive styles of communication. The deterritorialized Empire has provoked a resurgence of aggressive territoriality, but territorial identities can only express themselves in the deterritorialized language and through the deterritorializing technical media of the global Net. And this language is mostly visual. (Mirzoeff 2009, 5)

According to McLuhan the transition from the Modern industrial to the electronic environment, implies the prevailing of the configuration in the culture-scape: as the sequential pattern of the printed writing is replaced by image configurations, social mind tends to replace the critical with the mythological methodology of interpretation. Critical evaluation is possible when the exchange of signs is slow enough to be sequentially scrutinized by the reader, and the receiver has time for that discrimination between false and true that is called critique.

Visual information, particularly the electronic flow of configurations is too fast for critical examination, therefore the visual mind tends to understand the flow according to mythological frameworks of interpretation.

Visual—in this context—has little to do with representation: the concept of visual culture is not about the figurational or representational forms. It

is about the mode and the speed of emanation and reception of any kind of sign. Words, texts become part of visual culture when their exposure is accelerated so that they are synthetically apprehended as visual stimulation, rather than sequentially decoded and interpreted.

The written text is not disappearing as an effect of the electronic media technology. Cellular text-messaging, indeed, has enormously increased the number of written texts circulating in the Infosphere. But text-messaging becomes part of the visual, and demands visual configurational procedures of reception and interpretation. The writing techniques change and become more and more synthetic, configurational, fast, uncritical and mythological: think of Twitter.

Images work as activators of cognitive chains transcending the limits of verbal language and local national interpretative grids. The more a cultural content can be translated into images, the more can be widely diffused, as images are less dependent than words on the territoriality of a national language.

The integration between Western culture and Far Eastern culture based on ideographic writing has been fostered by the integration of visual configuration: advertising, television, Hollywood and Bollywood blockbusters (not books) have been the bearers of the process of globalization.

The process of globalization is developing at a level which is much deeper than the level on which political processes develop: the collapse of the Soviet Empire was not an effect of political persuasion, but an effect of the cultural globalization that electronic media made possible in the '80s.

In the book *La guerre des images* (2001) the anthropologist Serge Gruzinski retraces the origins of the process of visual globalization starting from the meeting of pre-colombian Mexican visuality and the Baroque. The visual legacy of the indigenous populations, linked to the use of hallucinogenic substances, and to the multifarious religious imagination was overpowered and absorbed by the Christian mythology and imagination, but this did not imply a cancellation of visual and mythological memory, rather a contamination which led to a reframing of the Catholic doctrine itself.

The suggestive power of the Baroque imaginary penetrated the imagination of local population. Indigenous people reacted to the Catholic repression of pagan images with manipulations, translations, assimilations which finally resulted in the rich imaginary syncretism that is popular culture of large part of Latin America.

In the Imaginary, the contradiction principle does not work, and in-compossible prospects can coexist, like in the Unconsciousness according to Freud.

PART II

THE BODY OF THE GENERAL INTELLECT

In the second part I'll retrace the history of the relation between techno-scientific potency and the social body. I will investigate the genealogy of semiocapitalism, and particularly of financial capitalism by the point of view of language and by the point of view of the technical evolution of production. According to Marx we may use the expression "general intellect" in order to refer to the development of scientific and technical knowledge as a force of production.

"The development of fixed capital indicates to what degree general social knowledge has become a direct force of production, and to what degree, hence, the conditions of the process of social life itself have come under the control of the general intellect and have been transformed in accordance with it." (Marx 1973)

As the general intellect develops as a productive force, it is captured by the abstract machine of semio-valorization, and is separated from its social and affective body. The capture of the general intellect, and the submission of knowledge to the rationale of the profit economy is the defining feature of semiocapitalism.

The cognitive workers—the cognitariat—suffer of a new kind of alienation, descending from the separation of virtual activity and bodily existence and communication.

The recomposition of the general intellect as a social and political force is only possible when the intellectual potency of labour reconjoins with the affective body of the cognitarians.

The process of recomposition of cognitive work is therefore simultaneously traversing language and the body.

CHAPTER 4

MONEY, LANGUAGE AND POETRY

Word and mantra

The semiotic production is taken between the poles of representation and immersion: the sign can act as a re-presentation of reality, or as an activator of associative chains and a stimulator of sensibility. In the first case the artist is active, and those who surround him are only spectators. In the second case art is the nootropic source of mental stimulation, directly acting on perception, cognition and behaviour: the artist is acting like the shaman who knows the rules of the ritual and the effects of the substance (both organic and semiotic) which is able to trigger a psychedelic process of mind stimulation.

Immersivity is an intrinsic feature of music. Music does not "signify" rather acts as a flow of stimulation and immediate modification of the state of mind without going through the mediation of signification. This is why Symbolism emphasized the immersive effect of words, their sonic matter, their audible sensuousness. So musicality became most important in poetry because the evocational potencies of musical vibration directly act on the mind. In the musical action, in fact, signifier and signified are not separated, and music triggers effects of a-signifying immersive stimulation.

"Poetry is subtler than prose, because its rhythm produces a higher unity and loosens the fetters of our mind. But mystic is subtler than poetry because it carries us beyond the meaning of words into a state of intuitive receptivity." (Govinda 1960, 22)

Alexander Blok, the symbolist poet who was so important in the Russian literary landscape in the first decade of the past century, writes: "Music is the most perfect of arts, as it expresses the project of the Architect, creates the world, and is the spiritual body of the world, fluid thought… poetry, reaching beyond its limit, will probably drown into music."

Music is ritualization of noise: ritual without a meaning. And René Daumal, speaking of Indian music in the book *Bharatha*, starts from the distinction between *mot* and *parole: "La parole est plus réelle que les mots…"*

Parole in this context is the non denotative word: sensible stimulation, different from the word as denotation (*mot*). The difference between

these two French expressions (that is based on the theory of Ferdinand de Saussure) is the difference between sonic materiality and denotational signification. In the *parole* the singularity of the voice is resounding. Western music has internalized the rule of the sonic succession which takes form in the melodic order, in the construction of the *contrappunto*, and in conventional notation. This formalization tends to subtract music from the singularity of the voice as an event, an unrepeatable situation in time.

Indian music has resolved its relation with melody in a peculiar way: the individuality of the Western musician is manifest in the creation of an original melodic succession, while the Indian musician sticks to the rules and melodic sequences established from time immemorial, as an ancient tradition has limited the range of available musical themes. So, the melodic structure being minutely detailed, Rag music is all about singular vibrations of the interpreter. The interpretation is not a re-actualization of the musical score, as it is for the Western musician, but it is singularization of a traditional tune.

Raghava R. Menon writes:

> "A note-based tradition has no use of personal transmission in the style of the Guru as there an external mechanical measure of musical sound whose personal characteristics are minor and merely interesting. The note standardises music, *Swara* liberates it. It is in this liberation that the secret of the Guru lies, and his vital connection with the preservation of the flaming interior of the art." (Menon 1996, 58).

The musician's performance is a singular, unrepeatable event. Music is ritualization of sound and also ritualization of silence, building rhythmical pathways through the infinite noise of the Universe, sonic constellations.

Felix Guattari speaks of *retournel*, a singular a-signifying rhythm that helps to find orientation in the world (Guattari 1979).

According to the Italian music critic Salvatore Sciarrino, European Romanticism has transformed music from a time-based machine into a space-based machine. Traditional music flows from the beginning to the end as a quiet river, while the classic symphony is a spatial construction. Symphonic music is obeying to structural rules, patterns which submit the natural flow of the river. Beethoven is the watershed between music as flow and music as highly structured form. Music is passing—according

to Sciarrino's critique, from acoustic and time-prone to visual and spatial (Sciarrino 1998, 27).

And Mircea Eliade, in the book *Images et symboles* (1952) speaks of "increasing sterilization of imagination provoked by a deep unbalance in the individual and collective psyche of the Modern world", and argues that word standardization is linked with the reduction of language to a mere tool for exchange. Eliade's words echo Anagarika Govinda:

> "In this age of broadcasting and newspapers, in which the spoken and the written word is multiplied a millionfold and is indiscriminately thrown at the public, its value has reached such a low standard, that it is difficult to give even a faint idea of the reverence with which people of more spiritual times or more religious civilizations approached the word, which to them was the vehicle of a hallowed tradition and the embodiment of spirit." (Govinda 1960, 19)

Semiotic overproduction and the reduction of sign to a mere tool for exchange dull the evocational richness of the word, although "symbols never disappear from the deep psychological sphere of human beings" (Eliade).

As Sklovski wrote in his *Theory of Prose*, literature has the power to reactivate the lively strength of words, dulled by daily use, bringing them to their original epiphanic potency.

Similarly psychedelic substances have the power to give new life to perceptual experiences (visual, auditive, proxemic experiences) which have lost any authenticity and freshness because of the repetition and banalization.

Psychedelic drugs enable the mind to evoke visions as correlative of perceptual illusions. The illusion in fact is simply the neural recombination of perceptual engrams, of fragments of memorized previous experiences. This recombination takes epiphanic form. Epiphany (from the Greek root: epi--fanein) means apparition, sensible manifestation of the evoked reality. In the epiphany the meaning appears as perceivable, touchable, visible, audible, and words are not mere denotative indicators, but activators of a chain of sensorial reactions.

Anagarika Govinda distinguishes between the Indian words *shabda* and *mantra. Shabda* is the ordinary word, used to denote objects and concepts in the normal exchange of operational meanings. *Mantra*, on the contrary, triggers the creation of mental images, and of sensible meanings.

> "in the word mantra, the Sanscrit root *man* = to think (in Greek: *menos*, Latin: *mens*) is combined with the element *tra*, which forms tool-words. Thus mantra is a tool for thinking, a thing which creates a mental picture. With its sound it calls forth its content into a state of immediate reality. Mantra is power, not merely speech which the mind can contradict or evade. What the mantra expresses by its sound, exists, comes to pass. Here, if anywhere, words are deeds, acting immediately. It is the peculiarity of the true poet that his words creates actuality, calls forth and unveils something real. His word does not talk—it acts." (Ibid.)

Mantra is a vocal emission which has the power to create mental states with no conventional signification.

Modern poetry, since the end of the nineteenth century has been a conscious essay in the emancipation of the word from the denotational function aimed to emphasize the epiphanic immersive value of the word as mantra.

Reviving the evocational power of the word, Symbolism generated a new sensibility that paradoxically anticipated both the technical virtualization of media communication and the reactivation of the bodily singularity of language.

I want to emphasize the Symbolist ambivalence: symbolist poets cancel the dependence of the word on the referent, but simultaneously they celebrate the bodily vibration that arises from the word.

> "What good is the marvel of transposing a fact of nature into its almost complete and vibratory disappearance with the play of the word, however, unless there comes forth from it, without the bother of a nearby or concrete reminder, the pure notion.
> I say: a flower! And outside the oblivion to which my voice relegates any shape, insofar as it is something other than the calyx, there arises musically, as the very idea and delicate, the one absent from every bouquet." (Mallarmé 1886)

Symbolism opened a new space for poetic praxis. The access to this space is the emancipation of the word from its referential task.

Poetry is the language exceeding the exchange, the infinite return of hermeneutics, and the reactivation of the sensuous body of language.

I'm talking of poetry as excess of language, as a hidden resource which enables us to shift to the suggestive dimension of language.

This is why Symbolism acts in an ambivalent way: it is the trigger of the emancipation from the referent and therefore it acts as an experiment of the semiotic space in which financial abstraction belongs. However it acts also as mantra, musical reactivation of the sensorial body that pulses in language.

The symbolist word wants to get free from the referent, opening the way to a process of evocation, but simultaneously the symbolist word wants to act as bodily vibration, as reactivation of the sensuous bond that is linking sound and meaning: the voice, point of conjunction between flesh and meaning (see: Agamben 2006).

Emancipation of the Sign

Here I want to investigate the genealogy of semiocapitalism, and particularly of financial capitalism from the point of view of linguistic sensibility and its transformations. Symbolism is an experiment in the emancipation of the poetical sign from the referent, and in the attribution to the sign of an evocational power. The symbolist word is not representation of an object, but evocation of an effect of signification.

What is interesting to me is the analogy between the revolution that Symbolism brings about in the sphere of language and the revolution that net-finance brings about in the sphere of the economy.

Money and language have something in common: they are nothing and they move everything. They are nothing but symbols, conventions, *flatus vocis,* but they have the power of persuading people to act, to work, to transform physical things.

"Money makes things happen. It is the source of action in the world and perhaps the only power we invest in." (Sordello 1983, 1-2)

In Money The Poor Man's Credit Card, chapter 14 of Understanding media, Marshall McLuhan writes:

> "Money talks, because money is a metaphor, a transfer, and a bridge. Like words and language, money is a storehouse of communally achieved work, skill, and experience. Money, however, is also a specialist technology like writing; and as writing intensifies the visual aspect of speech and order, and as the clock visually separates time from space, so money separates work from the other social

> functions. Even today money is a language for translating the work of the farmer into the work of the barber, doctor, engineer, or plumber. As a vast social metaphor, bridge, or translator, money—like writing—speeds up exchange and tightens the bonds of interdependence in any community." (McLuhan 1964)

Marx spoke of money as general equivalent, the translator of any thing into every other thing. This was correct, and still is—but money is not only a signifier, whose signified is infinitely various. Money is also an engine, a mobilizer, a source of energy that transcends referentiality and the measurability.

Financial capitalism is based on the autonomization of the dynamics of money, and on the autonomization of value production from the physical manipulation of things and the physical interaction of persons.

Here lies the analogy between the history of poetry as semiotic laboratory, and the history of late modern economy, transiting from industrial capitalism to semiocapital.

Jean Baudrillard has proposed a general semiology of simulation based on the premise of the end of referentiality, in the economic as well as in the linguistic field. In *The Mirror of Production* he writes: "need, use value and the referent do not exist. They are only concepts produced and projected into a generic dimension by the development of the very system of exchange value." (Baudrillard 1975, 30)

The process of autonomization of money, which is the peculiar feature of financial capitalism, can be inscribed in the general framework of the emancipation of semiosis from referentiality.

> "Today, as the new vortices of power are shaped by the instant electric interdependence of all men on this planet, the visual factor in social organization and in personal experience recedes, and money begins to be less and less a means of storing or exchanging work and skill. Automation, which is electronic, does not represent physical work so much as programmed knowledge. As work is replaced by the sheer movement of information, money as a store of work merges with the informational forms of credit and credit card." (McLuhan 1964)

Money de-physicalization is part of the general process of abstraction, the all-encompassing tendency of capitalism.

Retracing the history of money, from exchange commodity to representative

money to standard value to electronic abstraction, McLuhan wrote:

> "the Gutenberg technology created a vast new republic of letters, and stirred great confusion about the boundaries between the realms of literature and life. Representative money, based on print technology, created new speedy dimensions of credit that were quite inconsistent with the inert mass of bullion and of commodity money. Yet all efforts were bent to make the speedy new money behave like the slow bullion coach. J. M. Keynes stated this policy in A Treatise on Money: Thus the long age of Commodity Money has at last passed finally away before the age of Representative Money. Gold has ceased to be a coin, a hoard, a tangible claim to wealth, of which the value cannot slip away so long as the hand of the individual clutches the material stuff. It has become a much more abstract thing--just a standard of value; and it only keeps this nominal status by being handed round from time to time in quite small quantities amongst a group of Central Banks." (Ibid.)

Marx's theory of value is based on the concept of abstract work: because it is the source and the measure of value, work has to severe its relation to the concrete usefulness of its activity and product. Concrete usefulness does not matter from the point of view of valorization. The abstraction process at the core of the capitalist capture (subsumption) of work implies abstraction from the need for the concreteness of products: the referent is erased. Jean Baudrillard speaks of the relation between signification and language in the same vein:

> "The rational, referential, historical and functional machines of consciousness correspond to industrial machines. The aleatory, nonreferential, transferential, indeterminate and floating machines of the unconscious respond to the aleatory machines of the code… The systemic strategy is merely to invoke a number of floating values in this hyperreality. This is true of the unconscious as it is of money and theories. Value rules according to the indiscernible order of generation by means of models, according to the infinite chains of simulation." (Baudrillard 1993)

The crucial point of Baudrillard's critique is the end of referentiality and the (in)determination of value. In the sphere of the market, things are not considered from the point of view of their concrete usefulness, but from that of

their exchangeability and exchange value. Similarly, in the sphere of communication, language is traded and valued as a performer. Effectiveness, not truth value, is the rule of language in the sphere of communication. Pragmatics, not hermeneutics, is the methodology for understanding social communication, particularly in the age of new media.

Retracing the process of dereferentialization in both semiotics and economics, Baudrillard speaks of the emancipation of the sign.

> "A revolution has put an end to this classical economics of value, a revolution of value itself, which carries value beyond its commodity form into its radical form. This revolution consists in the dislocation of the two aspects of the law of value, which were thought to be coherent and eternally bound as if by a natural law. Referential value is annihilated, giving the structural play of value the upper hand. The structural dimension becomes autonomous by excluding the referential dimension, and is instituted upon the death of reference… from now on signs are exchanged against each other rather than against the real (it is not that they just happen to be exchanged each other, they do so on condition that they are no longer exchanged against the real). The emancipation of the sign." (Ibid., 7)

The emancipation of the sign from the referential function may be seen as the general trend of late Modernity, the prevailing tendency in literature and art as in science and in politics.

In the passage from romantic realism to symbolist trans-realism a new space for poetic praxis is opened, and the emancipation of the word from its referential task is the main gateway to the new semiotic laboratory that is art in the century of the Avant-garde.

The emancipation of money—the financial sign—from the industrial production of things follows the same semiotic procedure, from referential to self-referential signification.

Dark pools: financial abstraction

In Marx's writings, abstraction is viewed as the main trend of capitalism, the general effect of capitalism on human activity. Nevertheless in the process of industrial production something useful has to be produced if the

capitalist wants to sell his merchandise, and increase by this way the capital that he invested at the beginning of the production process. The use-value of the worker's product was only a step toward the real thing, which is surplus value. So the capitalist does not care if his work is producing chickens or books or cars… He cares only about this: how much value can his work produce in a given unit of time. Nevertheless something useful must be produced in the process.

This is no longer true in the present condition of financial capitalism, as the increase of monetary capital does not need to go through the production of useful goods. The capitalist is no more obliged to invest money in some useful good in order to cash more money at the end of the exchange. Financial virtualization has made possible a new cycle of valorization: money can become more money skipping the passage of useful good production.

Financial virtualization is the ultimate step of the transition to the form of semiocapital, and in this sphere two new levels of abstraction appear, as developments of the labour abstraction that Marx was talking about.

Digital abstraction adds a second layer to capitalist abstraction: transformation and production no longer happen in the field of bodies, of material manipulation, but in the field of pure self-referential inter-action between informational machines. Information takes the place of things, and the body is cancelled from the field of communication.

Then we have a third level of abstraction, which is financial abstraction. Finance—which once upon a time used to be the sphere where productive projects could meet capital, and where capitals could meet productive projects, has emancipated from the need of production: the process of capital valorization (increase of money invested) no longer passes through the step of use value, or even the production of physical or semiotic goods.

In the old industrial economy described by Marx, the goal of production was already the valorization of capital, through the extraction of surplus--value from labour. But, in order to produce value, the capitalist was still obliged to exchange useful things, so he was obliged to produce cars and books and bread.

When the referent is cancelled, when profit is made possible by the mere circulation of money, the production of cars, books and bread become superfluous. The accumulation of abstract value is made possible through the subjection of human beings to debt, and through predation on existing

resources. The destruction of the real world starts from this emancipation of valorization from the production of useful things, and from the self-replication of value in the financial field. The emancipation of value from the referent leads to the destruction of the existing world. This is exactly what is happening under the cover of the so-called financial crisis, which is not a crisis at all, but the transition to the self-referential financial capitalism.

In his book *Data Trash* (1993), Arthur Kroker writes that in the field of digital acceleration, more information means less meaning, because meaning slows info circulation. In the sphere of the digital economy, the faster information circulates, the faster value is accumulated. But meaning slows down this process, as meaning needs time to be produced and to be elaborated and understood. So the acceleration of the info-flow implies the elimination of meaning.

In the sphere of the financial economy, the acceleration of financial circulation and valorization imply the elimination of the concrete usefulness of products (no matter if material or immaterial, industrial or semiotic). The process of realization of capital, namely the exchange of goods with money, was obviously slowing the pace of monetary accumulation. The virtual technology has created the possibility of skipping this slow passage through concrete meaningful useful goods. This is what Christian Marazzi calls "becoming rent of profit."[1]

The rise of the abstract entity which is money is hastened by the virtualization, and the virtual circulation of abstract value (not even money, but algorithms, electronic impulses) has been accelerated and sped up to the point of totally escaping to the possibility of human understanding and—obviously—of political control.

In the book *Dark Pool* the journalist Scott Patterson speaks of the extreme acceleration of financial technology. The book is an account of how global markets have been hijacked by trading robots. The recent generation of this kind of resources are self-directed to the point that human operators can't predict what they'll do next.

1 "There is a whole tradition, both in orthodox Marxism and Keynesianism, or anyway in something linked to neo-Ricardian visions of finance, that considers finance as a deviation from real productive capital. I don't think that we can talk about finance in this way anymore. This doesn't mean that finance has become sexier. Now it is as painful and awful as it's always been… it is difficult today to make a distinction between profit and rent, the dividing line between them is falling apart, but this is not because capital is not accumulating or growing anymore and so everything is just speculation, but because this is a new mode of production in which the relation between capital and labour has changed." (Marazzi 2007).

Patterson speaks of algo wars, meaning how fiber-optic cables link financial markets at ever-higher speeds, and now these cables are being superseded by even-faster microwave stations relaying High Speed Financial Trade. In the past, economic exchange used to happen in a physical place, where people would come together to buy or sell, hoping to achieve the best price for themselves.

In the last twenty years computers, electronic exchanges, dark pools, flash orders, multiple exchanges, alternative trading venues, direct access brokers, OTC derivatives, high-frequency traders have totally changed the financial landscape and particularly the relation between human operators and self-directing algorithmic automatons. Patterson predicts that the high-frequency trend will continue. The more you remove reference to physical things, physical resources, and the body, the more you can accelerate the circulation of financial flows.

In Greek, *parthenos* means virgin. Jesus Christ was created by parthenogenesis. The Virgin Mary gave birth to her son without any relationship to the reality of sex. Similarly financial economy (like conceptual art) is a parthenogenetic process. Actually the monetization and financialization of the economy represent a parthenogenetic tranformation of the creation of value. Value does not emerge from a physical relationship between work and things, but rather from infinite self-replication of virtual exchanges of nothing with nothing, whose outcome is more money.

Digital abstraction leads to the virtualization of the physical act of meeting, and the manipulation of things. These new levels of abstraction do not only concern the labour process, they tend to encompass every space of social life. Therefore, digitalization and financialization are transforming the very fabric of the social body, and inducing mutations in it.

In the realm of floating values

Chomsky's structural theory is based on the idea that linguistic signs can be exchanged thanks to the bank of shared structures: a common cognitive competence that makes the exchange possible. Like money is a general equivalent, universal translator of different goods, so is language. We can exchange everything with money, we can exchange everything with words.

But money is also a tool for obliging people to do something, and in the sphere of financial capitalism it is more and more a pragmatic act of self--expansion. The present configuration of the economic landscape is emphasizing this side of money, stressing the character of money as a pragmatic tool for obliging people to accept any kind of work, to be submissive, to suffer exploitation and humiliation and violence.

In the sphere of financial capitalism money is less an indicator than a factor of mobilization. Look at the reality of debt, look at the awful effects of submission, impoverishment and exploitation that debt is provoking in the body of society. Debt is a weapon against social autonomy, a transformation of money into a blackmail. Young people are obliged to borrow money from the bank in order to pay for their studies, as the public system of education has been destroyed by the Neoliberal fanatics, and private school is costing more and more. As soon as they come out from the university they have to start paying back their debt, and they are obliged to accept any kind of precarious job, and to suffer any kind of blackmail.

Money, which was supposed to be the measure of value, has been turned into a tool for psychic and social subjugation. The metaphysical debt is linking money, language and guilt. Debt is guilt, and as guilt it is entering the domain of unconscious, and shapes language according to structures of power and submission.

The pragmatic effect of the act of financial language crystallizes into a linguistic structure that everybody is obliged to share. If you want to understand me, if I want to understand you, we have to go to the bank of the universal translation because understanding is based on a common standard, a conventional measure which is deposited in the bank. And the translator is also the fabricator of meaning and the owner of the relation between meaning and life.

Guattari breaks this idea of universal exchange of structural signifiers, and opens the window to a different landscape: language is essentially pragmatic of communication, creation of meaning that did not exist before the act of communication. I want to stress here the analogy between this kind of pragmatics of communication and the financial creation of value from nothing, from pure exchange and virtual activation. In the book *L'inconscient machinique* published in 1979 Guattari speaks of *retournelle* in order to define the relation between singularity and cosmos. Language is creation of singular

retournels that concatenate with the cosmos, as long as they are crystallized by structures of power and of cognitive automation.

L'Inconscient machinique is an attempt to get free from the Chomskian idea that language is governed by the structure of the universal mind. There is no universal mind, no universal structure of language, but there are a-signifying signs which produce meaning thanks to the concatenation with other a-signifying signs. Meaning is not in the universal mind grammar but in the sliding relation between the voice, the listener and the context. Meaning is intention, agreement, conflict, desire.

When we enter the flow of communication we are not interpreting signs in relation to the structure, we are producing, and there is no structure before the act of concatenation. Language is the product of linguistic activity and this activity is constant variation of the existing expectations of meaning.

See what has happened after Arthur Rimbaud declared the *derèglement de sens*. Deregulation of the senses.

Impressionists declared they did not want to show the thing, they wanted to show the impression. The Symbolists invited the readers to forget about the referent. Symbolist poetry wants to be evocation. Breaking the fixed relation referent-interpretation-structure, Symbolist poetry re-invented the relation between words and things. No more representation, but evocation, deterritorialization of meaning, epiphany and simulation.

This process of de-referentialization of language—emancipation of the linguistic sign from the referent—which has been the mark of poetic and artistic experimentation with language during the twentieth century, shows an interesting similarity with the transformation in the relation between economy and monetary exchange.

On August 15, 1971, President Nixon announced dramatic changes in economic policy. Particularly he ended the Bretton Woods international monetary system. The Bretton Woods system, created at the end of World War II, involved fixed exchange rates with the US dollar as the key currency—but also a role for gold linked to the dollar at $35/ounce. The system began to falter in the '60s because of an excess of dollars flowing out of the US which foreign central banks had to absorb. All of this was ended unilaterally by Nixon's decision. After a brief attempt to create a modified fixed exchange rate system, the world moved to flexible rates.

Nixon's decision can be viewed as an act of "dereferentialization" in the

realm of monetary economy. Breaking the Bretton Woods's agreements, the American President declared that the dollar has no referent, and its value is decided by an act of language. This was the starting point of the long lasting process of financialization of the economy, based on the emancipation of the financial dynamic from any conventional standard and from any economic reality. The Neoliberal offensive started in that very moment of arbitrary assertion of the value of the dollar outside the conventional standard. The neoliberal school of the Chicago Boys said "money is creating reality" like the Symbolist poets had said: "words are creating reality".

The hypertrophic self-replication of debt starts here. Financial economy is no more dealing with producing things, but it is evoking the world from the circulation of money.

Some years after the deregulation of the international monetary system, Jean Baudrillard wrote *Symbolic Exchange and Death*, where he announces that the economy has abandoned the old law of determination of value, and that the referent for linguistic and economic exchange was dissolved:

> "The reality principle coincided with a determinate phase of the law of value. Today the entire system is fluctuating in indeterminacy, all of reality absorbed by the hyperreality of the code and of simulation. It is now a principle of simulation, and not of reality, that regulates social life. The finalities have disappeared; we are now engendered by models…
> The entire strategy of the system lies in this hyperreality of floating values. It is the same for money and theory as for the unconscious. Value rules according to an ungraspable order: the generation of models, the indefinite chaining of simulation." (Baudrillard 1976)

Futurist mythology

Futurists rejected Symbolism as faint, languid and womanly style. Nevertheless the Futurist mythology of omnipotence of the constructive act is based on the Symbolist removal of reality as referent from the sphere of poetical creation. Forget about the referent, says the Symbolist, and the Futurist adds: nothing pre-exists to the semiotic activity of the inventor, the destroyer-constructor, the artist. Only future exists, created by the annihilation of past.

On February 20th 1909 Filippo Tommaso Marinetti published the first Futurist Manifesto. In the same year in the automobile factory in Detroit, Henry Ford put into operation the first assembly line, the technological system that best defines the age of industrial massification. Both events can be considered as the inauguration of the century in which society has invested psychic and cultural energy in the future dimension of ever expanding wealth and knowledge. Speed and cult of the machine are the values emphasized by the Futurist Manifesto.

Significantly the Futurist movement surfaced in Italy—and in Russia. These two countries shared a common condition of social and economic backwardness: scant development of the industrial production, marginal expansion of the bourgeois class, heavy reliance on the cultural and religious models of the past, attraction of foreign culture (especially French) for the urban intellectuals.

The mythology of speed supports the whole edifice of modernity: progress in fact is based on the intensification of labour productivity.

The Manifesto asserted the aesthetic value of the machine. The machine par excellence is the speed machine, the car, the airplane, tools making possible the mobilization of the social body.

Futurism exalted the machine as an external object, visible in the city landscape, but in the twenty-first century the machine is inside us: we are no longer focused on the external machine; contemporary "info-machine" now intersects with the social nervous system, the "bio-machine" interacts with the genetic becoming of the human organism. Digital and bio-technologies have turned the external machine of iron and steel into the internalized and recombining machine. The bio-info machine is no more separable from the body and the mind, because it is no more an external tool, but an internal transformer of the body and of the mind, a linguistic and cognitive enhancer. The nano-machine is going to mutate the human brain and the linguistic ability to produce and communicate.

The Machine is us

In the mechanical era the machine stood in front of the body, and changed human behaviour, enhancing bodily potency by means of external imposition. The assembly line, for instance, although improving and increasing the

productive power of the labourer did not modify his/her physical organism and cognition. Now the machine is no more in front of the body but inside the body-mind. Because of this transformation political power has changed its nature. When the machine was external the State had to regulate the body enforcing the law. Agencies of repression were mobilized in order to force the conscious organisms to submit to that rhythm without rebellion. Now political domination is internalized and is undistinguishable from the machine itself.

In the connective sphere the machine is difference of information: no more an exterior device but a system of cognitive automatisms, internal necessity.

A hundred years on since the publication of the Futurist Manifesto, speed itself has been internalized: the colonization of mind and perception is based on the interior acceleration in the perception of time.

Language Rhythm Respiration

Once upon a time, I happened to take part in an action of the Living Theatre. In an old Italian theatre, some hundred people met for a collective mantra: sound collective emission, shared breathing, a vocal wave flowing from one mouth to the next, from one body to the next.

Yoga wisdom conceives of individual breathing (*atman*) as a relation of the organism with the cosmic breath (*prana*).[2]

Physical organisms interact with the natural environment, the city, the workplace, the polluted atmosphere. Also the psychic organisms interact with the environment: namely the infosphere where info-stimula circulate.

The semio-flows spread in the infosphere by the media system are polluting the psychosphere and provoking disharmony in the psychic breathing: fear, anxiety, panic, and depression are the symptoms of the illness provoked by this kind of pollution.

2 "Recitar versos es un ejercicio respiratorio, pero es un ejercicio que no termina en sí mismo. Respirar bien, plena, profundamente, no es sólo una práctica de higiene ni un deporte, sino una manera de unirnos al mundo y participar en el ritmo universal. Recitar versos es como danzar con el movimiento general de nuestro cuerpo y de la naturaleza. El principio de analogía o correspondencia desempeña aquí una función decisiva. Recitar fue—y sigue siendo—un rito. Aspiramos y respiramos el mundo, con el mundo, en un acto que es ejercicio respiratorio, ritmo, imagen y sentido en unidad inseparable. Respirar es un acto poético porque es un acto de comunión. En ella, y no en la fisiología, reside lo que Étiemble llama 'el placer poético.'" (Paz 1956)

Conjunction can be compared to breathing together, as it implies the exchange and transmission of material substance (physical matter contained in the air we breathe, or semiotic matter conveyed by signs). The search for a common rhythm, the tentative interpretation of bodily and semiotic nuances, the non-verbal disambiguation of verbal signs are part of conjunctive communication.

Sensibility is the possibility of entering into relation with entities that do not speak our language and are composed of substance different than ours.

Sensibility is the ability to harmonize with the heterogeneous rhizome.

> "*Collective assemblages of enunciation* function directly within *machinic assemblages*; it is not impossible to make a radical break between regimes of signs and their objects… The orchid deterritorializes by forming an image, a tracing of a wasp; but the wasp reterritorializes on that image. The wasp is nevertheless deterritorialized, becoming a piece in the orchid's reproductive apparatus. But it reterritorializes the orchid by transporting its pollen. Wasp and orchid, as heterogeneous elements, form a rhizome." (Deleuze and Guattari 1980, 10)

On the ontological, teleological, or even the physical plane, the wasp and the orchid are not homogeneous. They even belong to different natural realms. But this does not prevent them from working together in the sense of becoming a concatenation, and in so doing generating something that did not exist before. "Be, Be, Be!" is the metaphysical scream that dominates hierarchical thought. Rhizomatic thought replies: "Concatenate, Concatenate, Concatenate!"

The principle of becoming lies in conjunctive concatenation:

> "…a becoming-wasp of the orchid and a becoming-orchid of the wasp. Each of these becomings brings about the deterritorialization of one term and the reterritorialization of the other; the two becomings interlink and form relays in a circulation of intensities pushing the deterritorialization ever further. There is neither imitation nor resemblance, only an exploding of two heterogeneous series on the line of flight composed by a common rhizome that can no longer be attributed to or subjugated by anything signifying. Rémy Chauvin expresses it well: 'the *aparallel evolution* of two beings that have absolutely nothing to do with each other.'" (Deleuze and Guattari 1999, 10)

The mutation that is currently investing the social and linguistic organism can be essentially described as a transition from the sphere of conjunction to the sphere of connection. In the shift a change occurs: while conjunctive communication is a tentative approach to the intentions of meaning of a body which sends ambiguous messages whose interpretation is object of negotiation and uncertainty, connective communication implies and presupposes a perfectly unambiguous interaction between agents of signification syntactically compatible. If you want to figure out what is conjunctive communication just think of two persons engaged in courting, an activity involving desire, shyness, ambiguity, intuition innuendo and infinite layers of (mis)understanding.

If you want to understand what connective communication is, you have to think to the syntactic overlapping and semantic identification between two strings of information. Connection is the interaction between syntactic machines having the same format. When human beings want to take part in a connection, they must previously accept the syntactic reduction of the contents of their exchange to the format of the machines that are carrying their signs.

Composition and Recombination

Composition is mixture of different chemical substances. Respiration implies a process of composition, of blending, and changing the organism. If you happen to breathe poisonous substances your organism will get sick. Social composition is the process of cultural contamination between conscious and sensible organisms more or less different, as they share the same ability to understand what is not exactly inter-exchangeable, but can be exchanged thanks to small (or big) transformations in the organisms themselves.

In the parlance of the Italian post-operaism (post-workerism), the notion of social re-composition (or class re-composition) plays an important role, as it refers to the process that underlies political solidarity and the creation of cultural and psychological conditions for social autonomy of the workers from capitalist rule. In the process of re-composition the entire range of social life is involved: expectations, coalescing lifestyles, national or ethnic conflicts, psychological empathy, mythologies, cultural traditions and so on.

Solidarity is a pre-condition for political organization and social struggle: the history of class conflicts, victories and defeats cannot be explained without referring to the degree of solidarity that workers have been able to establish. Solidarity is not based on ethical or ideological issues: it depends on the features of the relations between individuals in time and in space. The material foundation of solidarity is the perception of the continuity of the body in the body, and the immediate understanding of the consistency of my interest and your interest.

Solidarity has to do with conspiracy, which means exactly: breathing together (*cum-spirare*).

In the first part of the twentieth century, when industrial workers were fighting worldwide against imperialist oppression and capitalist exploitation the communist conspiracy was the psychic and cultural energy that made solidarity possible inside the social body of the industrial worker class, notwithstanding the authoritarian reality of communist parties and the unspeakable violence of communist states.

The process of re-composition is endangered and jeopardized by the process of technical and social restructuration of the social machinery. In the last decades of the past century the Neoliberal offensive, linked with the technical deterritorialization provoked by globalization destroyed the previous forms of social organization of workers, and started a process of de-composition leading to the precariousness of labour.

Precarity has provoked a process of desolidarization and disaggregation of the social composition of work. The virtualization of production, enabling delocalization, is a complementary cause of desolidarization. Precarious labour triggers social competition between workers. As work is transformed into information, virtualization jeopardizes affective relations between people involved in the labour process.

The product of deterritorialized work is recombined by the network.

Recombination, which is totally different from recomposition, implies compatibility and functional inter-operationality between deterritorialized working bodies. In order to circulate in the network, language has to be made compatible with the code.

The human beings involved in the productive process, precarious cooperators whose social composition is fragmentary, are transformed into fractals, perfectly recombinable segments of a modular flow of information.

The social body is fragmented, and breath is broken and submitted to the rhythms of the virtual machine. Furthermore the fractal fragmentation of labour is parallel and complementary to the fractalization of financial capital, continuous recombination of abstract financial substance: virtual fragments of disembodied depersonalized capital.

CHAPTER 5

AVATARS OF THE GENERAL INTELLECT

The Matrix and the Cloud

In my view the movies of Lana and Andy Wachowski—*Matrix*, and *Cloud Atlas*—are visual meditations about determinism and freedom, about neuroplasticity and the fabric of time. Can the Matrix capture cognition and sensibility, when we know that cognition and sensibility are impossible to map as it is impossible to map a cloud?

The all encompassing web of algorithmic automatons pervading the sphere of financial capitalism is an attempt in mapping and submitting the general intellect. This attempt may succeed as far as the general intellect can be reduced to a system of operational functions, of logical implications and of technological interactions. However it may not succeed because the general intellect has a body, and the body of the general intellect is the body of uncountable cognitive workers who live in precarious conditions of salary, in stressing conditions of competition, exploitation and nervous hyper-stimulation.

Here lies the weak point of the Matrix, here I find the only way out from the process of final domination of the social brain: the neuro-totalitarianism that is today perceivable as a deadly impending possibility.

The cognitarian body—the cognitive work force subsumed by the linguistic machine, is composed of the individual existence of millions of people who are sitting in front of the networked screen, virtual assembly line of semiocapitalism. Consequently it is not entirely reducible to the Matrix, because it is not only intellect, but sensibility as well. The general intellect has a body, and this body is a sensible-sensitive body that feels pleasure and pain, as long as it is not subjected to utter anaesthesia. The body of the general intellect is a cloud, an ever variable vibration: emotions, expectations and fears, desire and exhaustion. The cloud cannot be mapped, as David Mitchell suggests in his novel, and Lana and Andy Wachowski in their film.

Cloud is the irreducibility of the psychosphere to global determinism and ultimate traceability. Sensibility is the excess, the surplus of vibrational life that cannot be translated into algorithm.

Abstract labour and General Intellect in Marx

Let's start from the concept of abstract labour. By this expression Marx refers to value as crystallization of labour time, and refers to labour as time materialized in value. What capital needs to mobilize is not the concrete ability to produce useful things, but the abstract ability of time without quality to generate value.

> "The indifference as to the particular kind of labour implies the existence of highly developed aggregate of different species of concrete labour, none of which is any longer the predominant one. So the most general abstractions commonly arise only where there is the highest concrete development [...] On the other hand, this abstraction of labour is only the result of a concrete aggregate of different kinds of labour. The indifference to the particular kind of labour corresponds to a form of society in which individuals pass with ease from one kind of work to another, which makes it immaterial to them what particular kind of work may fall to their share." (Marx 1973, 704-706)

The abstraction of labour is progressively expanding to all possible forms of social activity. The final point of this process is the subsumption of mental activity itself in the sphere of capital valorization, and abstraction of the mental activity itself.

> "Capital necessarily tends towards an increase in the productivity of labour and as great a diminution as possible in necessary labour. This tendency is realized by means of the transformation of the instrument of labour into the machine […]. The value objectified in machinery appears as a prerequisite, opposed to which the valorizing power of the individual worker disappears, since it has become infinitely small." (Ibid.)

Thanks to the accumulation of science and the general forces of the social intellect physical labour becomes superfluous. The tendency of capital is to eliminate as much as possible human labour, in order to replace it through the technological use of science. But capital needs simultaneously to exploit human labour, as abstract value is only generated by it.

> "Nature builds no machines, no locomotives, railways, electric telegraphs, self-acting mules, etc. These are products of human industry; natural material transformed into the organs of the human will over nature, or of human participation in nature. They are organs of the human brain, created by the human hand; the power of knowledge, objectified. The development of fixed capital indicates to what degree social knowledge has become a direct force of production, and to what degree, hence, the conditions of the process of social life itself have come under the control of the general intellect and been transformed in accordance with it. To what degree powers of social production have been produced, not only in the form of knowledge, but also as immediate organs of social practice, of the real life process. (Ibid.)

The conceptual development of this tendency takes the productive system virtually outside the paradigmatic orbit of capitalism. By replacing work with machines that in turn have the ability to produce more machines replacing human work, capital reduces the time of labour that is needed for the social reproduction. The social need of labour time tends to zero. This is why Marx says that capitalism is actively working to its own dissolution. But in order to counteract its own dissolution, capital is also working against this tendency, producing scarcity and need, and destroying the products of work in many ways: war, overproduction crisis, financial collapse.

Thanks to the application of technology, productivity has increased many times. In one hour we can produce the same amount of goods that once upon a time requested the work of an entire day. However, the time captured and submitted to work—after a temporary decrease in the second part of the twentieth century, is now increasing again, absorbing most of the social life-time.

One may say that social civilization and human progress have been essentially about the emancipation of life-time from the obligation of work. When time of work decreases, people are allowed to dedicate their energies to mutual attention, self-care, education and pleasure. The production of useful things and useful services is not declining, but increasing, when we are free from the obligation of abstract work.

After some decades of decrease of work-time (which happened to coincide with the spread of progressive culture and social movement for self-determination), the neoliberal ideology launched a global campaign for the long lasting reduction of real wages in order to force people to work more.

The increase of work time and the intensification of productivity were not aimed to improve people's life, but to implement the economic growth, which means the accumulation of capital. Submitting social energies to the domination of money is the neoliberal way to reassess the primacy of accumulation on social wellbeing.

What Marx did underestimate in the visionary prediction contained in the *Fragment on machines* is the cultural force of the paradigm based on accumulation: the metaphysical greed that transforms the life of the world in a mere tool for the economic expansion.

Capital semiotizes the potentialities of the general intellect according to a monetary paradigm that is entangling and perverting the ability of intellectual labour to increase the production of useful things simultaneously reducing work time.

Here is a paradox that Marx has been able to sense, but not fully to enlighten.

"Capital has quite unintentionally reduced human labour, the expenditure of energy, to a minimum. This will be to the advantage of emancipated labour, and is the condition of its emancipation." (Ibid., 138)

> "As soon as labour, in its direct form, has ceased to be the direct form of wealth, then labour time ceases, and must cease, to be its standard of measurement, and thus exchange value must cease to be the measurement of use value. The surplus labour of the masses has ceased to be a condition for the development of wealth in general; in the same way that the non-labour of the few has ceased to be a condition for the development of the general powers of the human mind. Production based on exchange value therefore falls apart, and the immediate process of material production finds itself stripped of its impoverished, antagonistic form. Individuals are then in a position to develop freely. It is no longer a question of reducing the necessary labour time in order to create surplus labour, but of reducing the necessary labour of society to a minimum. The counterpart of this reduction is that all members of society can develop their education in the arts, sciences, etc., thanks to the free time and means available to all." (Ibid., 142)

The economic system of capital, acting as a general semiotic cage, forbids the possibility of emancipation from labour, while it is simultaneously expanding the capability of the general intellect to replace human work with technology.

> "Capital is itself contradiction in action, since it makes an effort to reduce labour time to the minimum, while at the same time establishing labour time as the sole measurement and source of wealth. Thus it diminishes labour time in its *necessary* form, in order to increase its *superfluous* form; therefore it increasingly establishes superfluous labour time as condition […] for necessary labour time. On the one hand it calls into life all the forces of science and nature […] in order to create wealth which is relatively independent of the labour time utilized. On the other hand it attempts to measure, in terms of labour time, the vast social forces thus created and imprisons them within the narrow limits that are required in order to retain the value already created *as* value." (Ibid.)

These pages are a conceptual map prefiguring the social and technological development of the twentieth century history, from the acceleration of the mechanical machinery to the digitalization of the global production in the last decades of the century.

When Marx talks of capital as a contradiction in process, he prefigures the astonishing history of the twentieth, when capital itself, led by an instinct to conserve its own social and economic model, destroyed the very potentialities created within the technical domain. When he speaks of the development of creative, artistic and scientific faculties, Marx foretells the intellectualization of labour which is clearly visible nowadays. After intensifying technological progress capital turns into a semiotic tangle.

Figures of the Modern intellectual

The word "intellectual" has today lost much of its meaning, but during the course of the twentieth this word was crucial in the field of ethics and politics. In the late modern time the nature of intellectual labour has dramatically changed, as it has been progressively absorbed within the economic production. When digital technologies made possible the connection of individual fragments of cognition and semiotic production, intellectual labour was captured and subsumed by the cycle of the production of value.

The Enlightenment did not define the intellectual by his social condition, but as the incarnation of ideology, as the source of the universal system of values. In the sphere of the Enlightenment the intellectual is the founder and

the guarantee of the realization of universal principles, the respect for the rights of man, and the universality of law.

In the context of Kantian thought the intellectual emerges as a transcendent figure, whose activity is independent from social experience, or in any case not socially determined in its cognitive or ethical decisions. The intellectual appears then as the bearer of a universal rationality, abstractly human, and in this sense we may consider the intellectual as the historical determination of the Kantian "I think" [*Ich denke*].

In this sense the intellectual is the guarantor of democracy. Democracy cannot descend from cultural origins, from some kind of belonging, but only from the unlimited horizon of choice, from the possibility of access and of citizenship for every person as semiotic agent, as a subject that exchanges signs in order to access universal rationality. The figure of the intellectual in this sense sets itself up against the romantic figure of the *Volk*, or rather withdraws itself from it. Universal thought, from which the modern adventure of democracy was born, evades the territoriality of culture. Democracy cannot carry the imprint of a culture, of a people, of a tradition, it must be a game without foundation, invention and convention, not the affirmation of belonging.

Significantly different is the point of view of the revolutionary intellectual that affirms itself with historical-dialectical thought. In the eleventh thesis on Feuerbach, Marx writes, referring to the role that knowledge must play in the historical process: "Philosophers have hitherto only interpreted the world in various ways; the point is to change it."

The marxist intellectual conceives of himself as an instrument of the historical process of achieving a classless society. According to Marx, thought is historically effective only when it recognizes in the working class the horizon of action. The communist project views theory as a material power, and knowledge as an instrument for changing the world. Only inasmuch as he participates in the struggle for the abolition of the exploitation of labour, does the intellectual become the bearer of a universal mission. The intellectual has nothing to do with the people (*Volk*), in this vision, because the people is the territorialized figure of belonging, the predominance of *Kultur* with respect to reason, the preeminence of the root with respect to finality. On the contrary the working class does not belong to any territory, to any culture, and its mental horizon is that of a universally exploited class, striving towards a universal task of freeing from exploitation.

The role of intellectuals is central in the framework of communist revolutionary thought, particularly in the Lenin's conception. *In What is to be Done?,* Lenin argues that intellectuals are not a social class, they have no specific social interests to uphold. They generally come from the upper classes or the petite bourgeoisie, and carry out "purely intellectual" choices, turning themselves into intermediaries and organizers of a revolutionary consciousness descending from philosophical thought. In this sense intellectuals are similar to the pure becoming of the spirit, to the Hegelian unfolding of self-consciousness. On the other hand workers, still bearers of social interests, can shift from a purely economic existence (the Hegelian "*an sich*" of the immediacy of social being) to the politically conscious activity ("*für sich*" of self-consciousness), only through the political form of the party, which incarnates and transmits philosophical legacy to the masses. In Leninist parlance it is possible to speak of the proletariat as heir to German classical philosophy: thanks to worker struggle a historical realization of the dialectical horizon, the arrival point of German philosophical development, becomes possible.

In Gramsci the reflection on intellectuals has the connotation of social analysis, and approaches a materialist formulation of the organic character of the relationship between intellectuals and the working class. The collective dimension of intellectual activity is nonetheless identified in the party, which is defined as the collective intellectual. The intellectual of the modernist tradition can access the collective and political dimension only by adhering to the party. In the second part of the twentieth, mass education and techno-scientific change have reframed the role of intellectuals. They are no longer independent from production, no longer free individualities that take upon themselves the task of a purely ethical and freely cognitive choice, but a massive social subjectivity, that tends to become an integral part of the general productive process. Paolo Virno uses the term "mass intellectuality" in this context. In his view, the emergence of the student movement in the sixties was the conscious expression of this new figure of mass intellectuality.

During the century of communist revolutions the Leninist tradition disregarded the notion of the general intellect, yet in the light of post-industrial transformation it emerges as a central force. As digital technologies and the creation of the global network redefine the overall social process around the "general intellect" at work, the Leninist conception of the party and even the Gramscian notion of organic intellectual lose consistency.

Cyber-Time and the Expansion of Capitalism

Rosa Luxemburg[1] argued that capitalism is intimately pushed towards a process of continual expansion. Imperialism is the political, economic and military expression of this need for continual expansion which brings capital to continually extend its domain.

But what happens when every space of the planetary territory has been subjected to the rule of the capitalist economy and every object of daily life has been transformed into a commodity? In late modernity capitalism seems to have exhausted every possibility for further expansion. For a certain period the conquest of extraterrestrial space seemed to be a new direction of development for capitalist expansion. Subsequently we saw that the direction of development is above all the conquest of internal space, the interior world, the space of the mind, of the soul, the space of time.

The colonization of time has been a fundamental objective of the development of capitalism during the modern era: the anthropological mutation which capitalism produced in the human mind and in daily life has been above all a transformation in the perception of time.

Yet with the spread of digital technologies, which allow absolute acceleration, something new occurs: time becomes the primary battlefield, as it is the space of the mind: mind-time, cybertime.

I have here introduced a distinction between the concept of cyberspace and the concept of cybertime. Cyberspace is the sphere of connection of innumerable human and machinic sources of enunciation, the sphere of connection between minds and machines in unlimited expansion. This sphere can grow indefinitely, because it is the point of intersection between the organic body and the inorganic body of the electronic machine.

But cyber-time is the organic side of the process, and its expansion is limited by organic factors. The human brain's capacity to elaborate can be expanded with drugs, with training and attention, but the organic brain has limits which are connected to the emotional, sensitive dimension of the conscious organism.

Cybertime is not a purely extensible dimension, because it is connected with the intensity of experience. The objective sphere of cyberspace

1 Luxemburg, Rosa. 1951. *The Accumulation of Capital*. London: Routledge. First published in German 1913.

expands at the speed of digital replication, but the subjective nucleus of cybertime evolves at a slower rhythm, the rhythm of corporeality, of pleasure and suffering.

The technical composition of the world changes, but the cognitive appropriation and psychic reactivity do not follow in a linear manner. The mutation of the technological environment is much more rapid than the changes in cultural habits and cognitive models.

The stratum of the infosphere is progressively thicker and denser, and the informational stimulus invades every atom of human attention.

Cyberspace grows without limits, yet mental time is not infinite. The subjective nucleus of cybertime follows the slow rhythm of organic matter. We can augment the time of exposure of the organism to information, but experience cannot be intensified beyond certain limits.

Beyond certain limits, the acceleration of experience provokes a reduced consciousness of stimulus, a loss of intensity which concerns the aesthetic sphere, that of sensibility, and also the sphere of ethics. The experience of the Other becomes awkward, even painful, as the Other becomes part of an uninterrupted and frenetic stimulus, and loses its singularity and intensity, its beauty. The consequence is a reduction of curiosity, and an increase in stress, aggressiveness, anxiety, fear.

Acceleration of the infosphere produces an impoverishment of experience, because we are exposed to a growing mass of stimuli which we cannot elaborate intensively and deeply know and perceive.

More information, less meaning. More stimuli, less pleasure. Sensibility is within time. Sensuality is in slowness, and the space of information is too extensive and fast to elaborate upon it intensively and deeply. At the point of intersection between electronic cyberspace and organic cybertime lies the fundamental matter of the contemporary mutation.

The social brain is subjected to the invasion of the video-electronic flux, and experiences the superimposition of digital code over the codes of recognition and of identification of reality that mould organic cultures.

The acceleration produced by network technologies, and the precarious condition of cognitive labour provoke a pathogenic effect of saturation of the time for attention. The pathology of cognitive labour is the new condition of alienation, prerequisite of cognitarian rebellion and possibly of recomposition of the body of the general intellect.

The Intellectual, the Merchant and the Warrior

> "There's a time when the operation of the machine becomes so odious, makes you so sick at heart, that you can't take part, you can't even tacitly take part. And you've got to put your bodies upon the gears and upon the wheels, upon the levers, upon all the apparatus, and you've got to make it stop. And you've got to indicate to the people who run it, to the people who own it, that unless you're free, the machine will be prevented from working at all." (Savio apud Draper 1965)

These words, pronounced by Mario Savio at Berkeley Sproul Hall, in the year 1964, can be considered the beginning of the movement that shook the world in the '60s peaking in 1968. The student movement was originally motivated by the understanding that knowledge is submitted to the military system, particularly to the criminal war that the United States were waging in Indochina.

For the students of the free speech movement the university was an instrument of the war politics of the American government and of the overall capitalist machine.

The area where the student's revolt began is the area where—years later—the new industry of electronics and computing thrived. In the book *From Counterculture to Cyberculture* Fred Turner writes:

> "Thirty years later, the same aspects of computing that threatened to dehumanize the students of the Free speech movement, promised to liberate the users of the Internet. On February 8th 1996 John Perry Barlow, an information technology journalist and pundit, and a former lyricist for the house band of the San Francisco LSD scene, the Grateful Dead, found himself at his laptop computer in Davos, Switzerland. While attending the World Economic Forum, an international summit of politicians and corporate executives, he had watched the American Congress pass the Telecommunications act, and with it a rider called the Communicative Decency Act, which aimed to restrict pornography on the Internet. Incensed by what he perceived to be the rider's threat to free speech, Barlow drafted the Declaration of the Independence of Cyberspace and posted it to the Internet. According to Barlow the governments of the Industrial World had become weary giants of flesh and steel." (Turner 2006, 13)

In the *Declaration of the Independence of Cyberspace* quoted by Turner, Barlow directly addressing the leaders of the world writes:

> "Your concepts of property expression identity movement and context do not apply to us. They are all based on matter, and there is no matter here. Our identities have no bodies, so unlike you we cannot obtain order by physical coercion. We believe that from ethics, enlightened self-interest, and the commonwealth our governance will emerge."[2]

In Mario Savio's speech and in Barlow's declaration, we find the basic concepts of the cyberculture as ideology of the general intellect, and also the essential misconceptions leading cyberculture into the traps of the Neoliberal dogma.

In his Declaration, in fact, Barlow is rightly reclaiming the radical novelty of immaterial production, and the incompatibility of the new technological world with the old legal system of property and privatization. But simultaneously he is deadly wrong when he writes that "our identities have no body", because actually the body can be denied, forgotten, but is always pulsating behind the screen, and the virtualization of language is changing the bodily conditions of life and of communication, but is not eliminating the bodily existence.

The denial of the bodily and psychic effects of virtualization is the fundamental fallacy of the cyber-ideology which flourished in the '90s. This fallacy led to the creation of the sweetish cyber-utopia which came together with the Neoliberal politics.

Fred Turner is retracing the pathway from the creation of the computing metaphor by Norbert Wiener, to the intellectual experience of the Whole Earth Catalogue and the Whole Earth Electronic Link directed by Steward Brand, and contemporary of the technical construction of the electronic networks in the '80, until the elaboration of a sort of Global mind Theology based on the idea of the networked economy's Invisible hand.

> "Wiener began to imagine duplicating the human brain with electrical circuits. By 1948 he had transformed the computational metaphor into the basis of a new

2 Available at <http://w2.eff.org/Censorship/Internet_censorship_bills/barlow_0296.declaration>.

> discipline. In his books he defined cybernetics as a field focused on the study of messages as a means of controlling machinery and society, with machinery seeming to include by analogy, biological organisms… Wiener believed that biological mechanical and information systems, including then emerging digital computers could be seen as analogues of one another. All controlled themselves by sending and receiving messages, and metaphorically at least, all were simply patterns of ordered information to a world otherwise tending to entropy and noise." (Turner 2006, 22)

Developing the implications of his own technical and theoretical realizations, Norbert Wiener pointed out that cybernetics might lead to a malevolent automation of human behaviour. As Wiener himself suggested, computers might step beyond the reaches of human control and begin to act on their own. Over the next fifteen years, interestingly, Wiener sought out union leaders in order to find out how workers might combat the threats posed by the advanced effects of computing. The history of high technological research and development is marked by this kind of paradoxical attitude of engineers and scientists.

Driven by the pleasure of knowledge they create the tools that enable the replacement of human work with machines, they unearth the intrinsic laws of life, but in a second time they understand that their own technical and theoretical realizations can become the tools for the creation of a new form of totalitarianism.

Since when a group of scientists was summoned by the American Army and invited to work in the framework of the Manhattan Project aimed to the production of the nuclear bomb, the terrible alternative contained in the scientific work became evident.

Modern history has been marked by the interaction, the conflict, the negotiation and the alliance between the Intellectual, the Merchant and the Warrior.

The intellectual is the heir of human labour, the bearer of the intelligence accumulated by the infinite succession of acts of labour and the infinite series of acts of refusal of labour. The refusal of labour induces the evolutionary motion of intelligence. Intelligence is refusal of work turned into socially useful form. Because of intelligence it becomes possible to replace human labour with machines. Because of refusal of work, science is pushed forward,

developed, put into practice. Since the outset, modern science has been aware of its function in this respect.

Knowledge multiplies the human capacity to produce useful things and enhances freedom for all human beings, by reducing the necessary labour time to produce what society needs. This means that knowledge is potency. The merchant and the warrior want to turn knowledge—this concrete useful potency—into an instrument of power, abstract power of money, destructive power of violence. And to this end they have to subdue the intellectual, the wiseman, the scientist. But this does not occur easily, because knowledge does not tolerate domination. Thus, the warrior and the merchant resort to traps and deceit, to submit the potency of thinking to the power of money and violence.

In a 1958 book entitled *Brighter than a thousand suns*,[3] Robert Jungk tells of how in the Second World War the warrior captured the sage, through the history of the Manhattan project that led to the realization of the nuclear bomb. A group of scientists faced a blackmail: Hitler might be preparing a nuclear bomb. We need to hurry, in order to anticipate him.

The US government managed to convince a group of scientists to surrender to the blackmail. The effect of the intellectual's surrender to the warrior was Hiroshima. Since then the struggle for the liberation of the intellectual from the warrior began, and it culminated in '68. 1968 represented first of all the intellectual's refusal to lend her/his knowledge to the warrior and the decision to put knowledge at the service of society. Then the merchant came along to seduce the intellectual and subdue her/his knowledge to the domination of technical-economic automatisms.

The evaluation of the truth in the field of knowledge is submitted to the criteria of competitiveness, economic efficiency and the pursuing of maximum profit. In the decades inaugurated by Thatcher-Reagan, knowledge has been put to work in conditions of absolute dependence on capital. Science has been incorporated into the automatisms of technology, deprived of the possibility of changing the finalities that guide its functional operation. The intensive application of knowledge to production leads to the creation of the digital techno-sphere, which emanates effects of extraordinary power. But this power is submitted to the technical automatisms in which power is

3 Jungk, R. 1958. *Brighter than a thousand suns*. California: Harcourt. First published in Bern, Switzerland, 1956.

embodied. Constrained within the categories of the profit economy, technology increases the productivity of labour, whilst simultaneously multiplying misery, subordination of human beings to wage labour, precariousness, unemployment, and a new sort of alienation that generates unhappiness.

Cognitarians

Since the times of the Seattle riots against the World Trade Organization Summit in the year 1999 a movement emerged aiming at the social, epistemic and technological re-composition of cognitive labour. This implied that scientific research must be autonomous from the merchants' interests.

The diffusion of practices of open source both in information technology and in biotechnology, free access to the products of intellectual innovation and media activism have been the manifestations of this fight for the autonomy and self-organization of cognitive work.

In those years marked by the mobilization against the institutions of global governance (WTO, FMI, and G8 among others), cognitive workers took the lead of a wide movement erroneously labelled "no-global" (actually it was the first global movement, and it was directed against capitalist globalization, not against globalization itself).

Thanks to the opening of the stock market and to mass net trading, in the 90's a wide participation to the profit of capital was possible and this resulted in the dotcom economy. Cognitive labourers invested their competence, knowledge and creativity and found the means to create an enterprise in the stock market. For a few years the creation of virtual enterprises was the point of encounter of financial capital and cognitive work. A new form of self-enterprise glorified at once the autonomy of labour and the dependency on the market. But after a decade of growth the alliance between cognitive labour and recombining capital broke down in Spring 2000. The stock market crash of April 2000 was the beginning of a political crisis of the relation of capital and cognitive labour. Many different factors provoked this rupture. First of all, the collapse of the psychic and social energies of cognitive labour: overexploitation, the acceleration of life rhythms, the 24h long working day of mobile precarious workers, depression, the excessive use of stimulant drugs to sustain the pace of hyper-labour provoked the financial crash of the

net economy, and consequently opened the way to the mass precarization of cognitive labour.

The process of self-organization of the general intellect which was implied in the dotcom experience and in the process of shared creation of the Internet, was sopped and overthrown by the coercive privatization of the products of collective knowledge and by a process of definancing and privatization of the public institutions of education. A sort of dismantling of the general intellect is underway since the beginning of the new century. The wars decided by Bush restored the primacy of the old military economy, submitting the new technology to the old military system. The effect has been submission of the general intellect.[4]

The dotcoms have been a laboratory for the formation of a new model of production and of a market, but in the end the market was suffocated by monopolies, and the army of self-entrepreneurs and venture micro-traders was dispersed and finally subjected to precarious forms of employment. The corporations gained the upper hand within the cycle of the net-economy and allied themselves with the dominant group from the old economy, blocking and perverting the project of globalization itself. Neoliberalism produced its own negation: monopoly domination and state-military dictatorship. Cognitive workers were marginalized and reduced into a precarious condition of salaried submission. The promise which was implicit in the ideology of the virtual new economy was a promise of high compensation and participation in the economic fortunes of the system. But after the 2000 virtual economy collapse, cognitive work has been subjected to precarization.

The intellectual becomes cognitarian, simultaneously cognitive worker and proletarian.

The artist, the engineer and the economist

The Intellectual, the Merchant, and the Warrior have been the dominant characters of the fable that we call Modernity. But the intellectual function is far from consistent and undifferentiated. On the contrary, the intellectual function is traversed by an internal conflict, whose dynamics I'll try here

4 The creation of the Internet as social and economic process, and the crisis of the dotcom economy is the subject of the critique of Geert Lovink. See particularly *My First Recession*, 2003.

to outline. In the sphere of cognitive work the Artist, the Engineer, and the Economist have been the main characters of the fable that we call General Intellect. Their game is the core of the intellectual dynamics of intellectual life of the past century. Who won?

The artist (by this word I mean both the poet and the scientist) is the excess of knowledge and of language, the excess that produces the rupture of the established frame of language and knowledge. The artist is the creator of new concepts and of new percepts, disclosing new possible horizons to the social experience. The artist speaks the language of Conjunction: in the artistic creation the relation between sign and meaning is not conventionally fixed but pragmatically displaced and constantly renegotiated.

The engineer is the master of technology, the intellectual who transforms concepts into projects, and projects into algorithms. The engineer speaks the language of connection. The relation between sign and meaning is conventionally inscribed in the engineering. The engineer is a producer of machines, technical combinations of concepts, algorithms and physical matter performing in accordance with concepts. Contemporary cognitive work is predominantly the work of engineers.

The third figure of the contemporary general intellect is the economist, who is the fake scientist and real technologist who is charged to reduce the combined force of the artist and the engineer into the established rule of capitalist accumulation.

Economists are more priests than scientists. Their discourse is aimed to submit the activity of others to the rule of economic expansion. They denounce the bad behaviour of society, urging people to repent for their debts, threatening inflation and misery for people's sins, worshipping the dogmas of growth and competition.

Scientific methodology is different from the methodology of the economist.

What is science after all? I would simply say that science is a form of knowledge free of dogma, aiming to extrapolate general laws from the observation of empirical phenomena, drawing from this extrapolation the ability to predict something about what will happen next. But science is also able to transcend any kind of causal determinism, and to understand the types of changes that Thomas Kuhn labeled paradigm shifts. That means that scientific innovation is essentially transgression of the established limits of knowledge.

As far as I know, economics does not correspond to this description. Economists are obsessed with dogmatic notions such as growth, competition, and gross national product. They profess social reality to be in crisis if it is does not conform to the dictates of these notions. Secondly, economists are incapable of inferring laws from the observation of reality, as they prefer instead that reality harmonize with their own presuppositions. As a consequence, they cannot predict anything—and experience has often shown economist's inability to predict change and contingencies. Finally, economists cannot recognize changes in the social paradigm, and they refuse to adjust their conceptual framework accordingly. They insist instead that reality must be changed to correspond to their outdated criteria.

Physics, chemistry, biology, astronomy conceptualize a specific field of reality, while in the schools of economics and in business schools the subject of teaching and learning is a technology, a set of tools, procedures, and pragmatic protocols intended to twist social reality to serve practical purposes: profits, growth, accumulation, power. Economic reality does not exist. It is the result of a process of technical modeling, of submission and exploitation.

The theoretical discourse that supports this economic technology can be defined as ideology, in the sense proposed by Marx—who was not an economist, but a critic of political economy. Ideology is in fact a theoretical technology aimed at advancing special political and social goals. And economic ideology, like all technologies, is not self-reflexive and therefore cannot develop a theoretical self-understanding. It cannot reframe itself in relation to a paradigm shift.

The Economist is the entangler of the engineer. Engineering as a technology can be linked to Art and Science, and transforms the conceptual creation into the technical *dispositives* for the organization of social life—but during the past century it has been finally submitted to Economics, through a reduction of the technical possibilities of the machines to the single-minded economic determination.

When the engineer is linked to the artist, he is producing machines for the liberation of time from work and for the maximum social usefulness. When the engineer is controlled by the economist, he is producing machines for the entanglement of human time and intelligence in the iteration of profit maximization, capital accumulation.

When the engineer is linked to the artist his horizon is the infinity of

nature and language—when he is controlled by the economist his horizon is economic growth, and for the sake of this dogma he destroys nature, and language has to be compatible with the code.

Nowadays capitalism is no longer able to semiotize and organize the social potency of cognitive productivity as the economic conceptualization is too narrow for the intellectual potency of society and intellectual potency demands a trans-economic dimension.

The shift from the industrial to the semiotic form of production has propelled capitalism out of itself, out of its ideological self-conception. Economists are dazzled by this transformation.

In the present crisis of capitalist globalization the problem is the following: is it possible to disentangle activity and knowledge from the grip of economic semiotic paradigm? Has the Economist totally subjugated the Engineer, who previously captured the Artist, or can the engineer get free from the economic limitations and reframe technology according to the intuitions of science and sensibility?

The Virtual utopia

Future is the imaginary space that utopia tries to colonize. This colonization never succeeds perfectly, but always leaves some traces in the body of the future.

The twentieth century has been colonized by the utopia of Futurism, based on the rhetorical celebration of acceleration and violence that actually pervaded the social and the aesthetic reality of the century, but exhausted the source of energy as well.

The Futurist colonization of the world has exhausted the future itself. Future, in fact is not merely a dimension of time-flow, but a cultural projection, the internalization of time as expansion. In this sense future comes to an end when expansion is over, when we become (physically, aesthetically and conceptually) aware of the exhaustibility (and the actual exhaustion) of Energy.

The trajectory of late-modernity starts from Futurism and finishes with Punk, when culture gets aware of the incipient exhaustion of modern energy.

We may put it in terms of frontier: future is the displacement of the frontier, the expansion of the mapped and colonized territory. When the process

of physical colonization of the planet reached its peak, the physical territory of the world was totally colonized, every form of activity was finally submitted to the rule of the market, and every form of language was submitted to the economic reason, then the word "frontier" became an empty word. A new dimension was needed for the unceasing process of deterritorialization which is the engine of capitalism.

Then—after the pulling down of the Berlin wall, in the decade of globalization, a new frontier surfaced, a new Future was imagined, and a new Utopia conceived and propagated: the Cyber-future, beyond the virtual frontier. The Cyber-Utopia of the '90s displaced the Frontier from the physical to the virtual dimension.

Since the '60s the utopian background of the Cyber-space was nurtured by freaks, libertarians and poets, and in fact the creation of the Internet in the '90s cannot be separated by the utopian flourishing of psychedelic imagination and of libertarian politics. The worldwide web carried a mystical utopian charge for many, since when Marshall McLuhan wrote: "Today we have extended our central nervous system itself in a global embrace, abolishing both space and time as far as our planet is concerned." (McLuhan 1962).

In the first issue of *Wired*, the magazine that since 1993 promoted the network as a force of total renovation, the editor-in-chief Louis Rossetto wrote the following words:

> "The digital revolution is whipping through our lives like a Bengali typhoon bringing with it social changes so profound their only parallel is probably the discovery of fire… Wired is about the most powerful people on the planet today—the digital generation. These are the people who not only foresaw how the merger of computers, telecommunications and the media is transforming life at the cusp of the new millennium, they are making it happen."

In the '90s the Cyber utopia turned into the promise of boundless economic expansion, and also a promise of peace and cooperation. Peter Schwartz and Peter Leyden wrote a text about the new economy, fostered by networking and titled it *The Long boom*. After Clinton's victory at the election of 1992, the Cyber-futurist utopia fueled expectations of a long age of economic expansion, and melt with the market theology which is the core of Neoliberal fundamentalism.

Esther Dyson, George Gilder, Alvin Toffler and George Keyworth wrote the Magna Charta for the Knowledge Age, whose preamble was declaring: "The central event of the twentieth century is the overthrow of matter… the powers of mind are everywhere ascendant over the brute force of things."

The emancipation of the mind from matter was the effect of the deployment of knowledge technology and simultaneously the comeback of the old psychedelic dream.

"After all what had LSD users hoped to accomplish if not the overthrow of matter by the powers of mind?" notes Fred Turner in *From Counterculture to Cyberculture*.

The convergence of cyber-utopia and Neoliberal thinking is made clear by Kevin Kelly, who writes in the book *Out of control*:

> "The Net is an emblem of multiples. Out of it comes swarm being, distributed being, spreading the self over the entire web so that no part can say: I am the I. It is irredeemably social, unabashedly of many minds. It conveys the logic both of Computer and Nature, which in turn convey a power beyond understanding. Hidden in the Net is the mystery of the Invisible Hand: control without authority." (Kelly 1995, 33)

Since the times of Adam Smith "invisible hand" is a crucial concept for the market oriented philosophy. This concept implies the assumption of a perfectly working hive-mind. Individual minds work homogeneously according to the same principle: the economic principle.

> "The tiny bees in my hive are more or less unaware of their colony. By definition their collective hive mind must transcend their small bee minds. As we wire ourselves up into a hivish network, many things will emerge that we, as mere neurons in the network, don't expect, don't understand, can't control, or don't even perceive." (Ibid., 36)

The Network has opened a new horizon both to human communication and to capitalist expansion—but the perfect imagination of the Net as Invisible Hand has been working up to a certain point.

In the year 2000, just a few years after the dawn of the Cyber-utopian world, celebration was over, and the dotcom crash provoked an economic

crisis and opened the gate to a dramatic change. At the turn of the century the virtual bubble burst unleashing the sudden awakening of ghosts of aggressiveness and war. Precarization of cognitive work and massive unemployment became the defining features of the labour market, while the euphoria of the '90s gave way to pervasive gloom.

Why so? I think that the crucial flaw of the Cyber-Utopia is the assumption that "matter has been overthrown", and that, as Barlow puts it, "our identities have no bodies".

This assumption is based on a double mistake: first of all electronics is not immaterial, it is simply pertaining to a different dimension of matter than the mechanical.

Secondly, and most interestingly, also mind is not to be identified as immaterial. By the anthropological, psychological and neurological point of view mind needs to be understood in terms of matter.

Conceptually, only the semiotic sphere can be opposed to matter, and actually the electronic transformation has made possible a transformation of social production in a semiotic sense. Semiocapital is the sphere in which economic exchange is predominantly an exchange of signs, but the forces which produce the semiotic immateriality are not immaterial.

The cyber utopia forgot and downplayed the effects of virtualization on the human psyche and social subjectivity, because in the technophile environment of cyber-utopianism the understanding of the psychological effects of virtualization was absolutely superficial.

The dotcomcrash of 2000 did not only expose the economic frailty of the new economy, but also the frailty of the networked nervous system. Cyber-utopians and neoliberals were not interested in the effects of the technology on social subjectivity, as they thought that psychological reality can be reduced to the enlightened surface of consciousness, and totally downplayed the complexity of the Unconscious. But this neglect marks the failure of cyber utopianism and neoliberal politics as well. But now we have to investigate the Unconscious of the swarm-mind, in order to understand the failure of the market theology generated by the cyber utopia of the '90s.

The Soul at Work

Semiocapitalism is based on the exploitation of the soul as a productive force and as a market place. But the soul is much more unpredictable than the muscular workforce which was at work in the assembly line. In the years of the Prozac economy the soul was happy to be exploited, but this could not last forever. Soul troubles first appeared in the last year of the dotcom decade, when the techno-apocalypse was announced under the name of millennium bug. The social imagination was so charged with apocalyptic expectations that the myth of the global techno-crash sent a thrilling wave all around the world. Nothing happened in the millennium night, but the global psyche teetered on the brink of an abyss.

As far as concerns the social transformations brought about by the digitalization of production, the essential point is not the loss of regularity of the labour relation, which, after all, has always been precarious notwithstanding the legal regulations, but the dissolution of the person as active productive agent, as labour force.

We have to look at the cyberspace of global production as an immense expanse of depersonalized human time. Info-labour, the provision of time for the elaboration and the recombination of segments of info-commodities, is the extreme point of arrival of the process of the abstraction from concrete activities that Marx analysed as a tendency inscribed in the capital-labour relation. The process of abstraction of labour has progressively stripped labour time of every concrete and individual particularity. The atom of time of which Marx speaks is the minimal unit of productive labour. But in industrial production, abstract labour time was impersonated by a physical and juridical bea rer, embodied in a worker in flesh and bone, with a certified and political identity. Naturally capital did not purchase a personal disposition, but abstract time of which the workers were bearers. The capitalist was obliged to hire a human being, and therefore to deal with his/her physical weaknesses, maladies, and human rights, and face trade unions and the political demands of which the human was a bearer.

When we move into the sphere of info-labour there is no longer a need to buy the availability of a person for eight hours a day indefinitely. Capital no longer recruits people, but buys packets of time, separated from their interchangeable and occasional bearers. In the net economy, flexibility has evolved into a form of fractalization of work.

Fractalization means the modular and recombinant fragmentation of the time of activity. The worker no longer exists as a person. He or she is only an interchangeable producer of micro-fragments of recombinant semiosis that enter into the continuous flux of the Net.

Capital no longer pays for the availability of a worker to be exploited for a long period of time; it no longer pays a salary that covers the entire range of economic needs of a person who works.

The worker (a machine endowed with a brain that can be used for fragments of time) is paid for his or her occasional, temporary services. Work time is fragmented and cellularized. Cells of time are for sale on the Net and businesses can buy as much as they want without being obligated in any way in the social protection of the worker. Depersonalized time has become the real agent of the process of valorization, and depersonalized time has no rights, and no needs. It can only be either available or unavailable.

The linguistic machine recombines and connects the time fragments necessary to produce info-goods. The human machine is there, pulsating and available, like a brain-sprawl in waiting. The extension of time is meticulously cellularized: cells of productive time can be mobilized in punctual, casual and fragmentary forms. The recombination of these fragments is automatically realized in the network. The mobile phone is the tool that makes possible the connection between the needs of semiocapital and the mobilization of the living labour of cyberspace. The ringtone of the mobile phone calls the workers to reconnect their abstract time to the reticular flux.

In this new dimension of labour, people do not have any right over the time of which they are formally the proprietors: that time does not really belong to them, because it is separated from the social existence of the people who make it available to the recombinative cyber-productive circuit. The time of work is fractalized, reduced to minimal fragments that can be reassembled, and the fractalization makes it possible for capital to constantly find the conditions of the minimal salary. Fractalized work can punctually rebel in some knot of the net, but this does not set into motion any wave of struggle.

For struggles to form a cycle, there must be a spatial proximity of the bodies of labour and an existential temporal continuity. Without this proximity and this continuity, the cellularized bodies lack the conditions to experience that kind of affectivity that enables social solidarity. Behaviour

can become a wave only when there is a continuous proximity in time that info-labour no longer allows.

Cognitive activity has always been the basis of all human production, even that of a more mechanical type. There is no process of human labour that does not imply an exercise of intelligence. But today cognitive capacity is the essential productive resource. In the sphere of industrial labour, mind was put to work as a repetitive automatism, the physiological support of muscular movement. Today the mind is at work in many varying ways, because language and relations are changing continuously. The subsumption of the mind in the process of capitalist valorization leads therefore to a true mutation. The conscious and sensitive organism is submitted to a competitive pressure, to an acceleration of stimuli, to a constant attentive stress. As a consequence the info-sphere in which the mind is formed and enters into relations with other minds, becomes a psychopathogenic atmosphere. To understand semiocapital's infinite game of mirrors we must outline a new disciplinary field, delimited by three aspects: the critique of political economy of connective intelligence; the semiology of linguistic-economic fluxes; the psychochemistry of the info-sphere.

CHAPTER 6

THE SWARM EFFECT

Absolute capitalism

How can we define the contemporary economic system? It's inaccurate in my opinion to define it as Neoliberal capitalism, as Neoliberalism is only the ideological justification of the transformation that happened in the last decades of the twentieth century. It's also inaccurate to define it as monetarism, because the role played by the variation in money supply is only a technical aspect.

I think that the contemporary transformation has to be appreciated by the point of view of long term human evolution as the turning point beyond the age of Humanism.

Modern bourgeois Capitalism was a product of the Humanist revolution, and the bourgeoisie was the class which embodied the values of humanist freedom from Theological Destiny. But the bourgeois characterization of the economic system has dissolved as an effect of the end of the industrial preponderance in capital accumulation, and as an effect of the deterritorialization of the production process.

Semiocapitalism has taken the place of Industrial capitalism—because the production and exchange of abstract signs have taken the predominant place in the overall process of accumulation. Financial abstraction is the extreme manifestation of this predominance.

Also the expression "cognitive capitalism" seems incorrect to me. Not capital but labour can be named "cognitive". The capitalist is not the subject of cognitive activity, only the exploiter. The bearer of knowledge, creativity and skills, is the worker.

Semiocapitalism, therefore, is for me a suitable definition of the present economic system at the global level.

However, if we want to grasp the political dimension of the transformation that Neoliberal deregulation has brought about, I think that we should speak of capitalist absolutism.

The bourgeoisie fought a battle against early modern Absolutism, after taking advantage from the effects of national unification and social regulation that absolutist monarchs did enforce on the traditional social life-forms. The bourgeois fight against Monarchic Absolutism was part of the battle for

the liberation of private owned enterprise from the control of the State, and also (most interestingly by my present point of view) a battle for the rule of law, for the constitutional limitation of the Monarch's action.

Descending from the Latin *ab-solutus*, that can be translated as: emancipated from any limitation, in this context the word "absolute" means: not limited by restrictions, unconditional, unconstrained by constitutional or other provisions.

The bourgeoisie reclaimed the rule of law in order to limit the power of the feudal aristocratic class and of the Monarchs, then accepted a limitation to its own economic expansion, because the bourgeois was concerned about the community of workers and consumers, about the territory of the city, and about the future of the common welfare which was obviously linked to the future of his own investments.

This is why the bourgeois class accepted the democratic deal, and the negotiation with the working class. The bourgeoisie could not be indifferent towards the destiny of the territory and towards the community of workers. Workers and bourgeoisie shared the same urban space, and the same future. If the economy crumbled, it was a disgrace also for the owner, albeit it was a much worse disgrace for the workers and his family.

Following the rise of financial capitalism, the deterritorialization of production and exchange, and finally the emergence of a virtual class which is not identifiable in territorial terms, a general process of deregulation ensued.

First of all the global feature and the global sphere of activity of corporations hindered and rendered impossible any legal control on their activity.

The sovereignty of the national states lost effectiveness and the global corporations gained absolute freedom, not responding to the local authority and shifting their immaterial assets from a location to another. Secondly, the globalization of the labour market destroyed the unionized force of workers, and opened the way to a general reduction of salaries, increase in exploitation, removal of any regulation concerning work conditions and work time: the plague of working children is back in many areas of the world, while retirement time is postponed and people are obliged to work until the age of 65, 67 and more.

Furthermore the limits to the exploitation of physical resources and to the pollution of the environment are systematically ignored by corporations whose only parameter is profit's growth.

I think that contemporary global reality should be defined as Absolute Capitalism: accumulation of value, profit increase and economic competition are the only effective regulation of this world, the all encompassing priority, and the almighty force. All other priorities or interests (including the planet's survival and the next generation's destiny) are not influential.

Compared to the past of bourgeois industrial capitalism, the relation between social welfare and financial profit is inverted. In the industrial economy, profits increased when citizens had enough money to buy goods produced in the factories. In the sphere of financial capitalism, stock market indexes go up when salaries fall down and social welfare crumbles.

Not surprisingly those few hundreds of billionaires listed in the Forbes magazine have hugely increased their capital during the recent years marked by raising unemployment, misery and public spending cuts.

Financial class is getting richer notwithstanding the general impoverishment? No, the financial class is getting hugely richer precisaly because of the general impoverishment of society, thanks to it.

This is why I think that Capitalist Absolutism is the best suited definition for the present system.

The Matrix and the cloud, again

Absolute capitalism is destroying the shelters built by the social civilization of the past Modernity, and we're going back to the original naked condition of human existence: precariousness. The truth about human existence—which Modernity has tried to rationalize and to protect from Nature is brutally revealed. The rules of law have been cancelled by decades of neoliberal globalization, and the welfare structures are currently destroyed by absolute capitalism.

Deterritorialized fragments of precarious time are scattered all over the space of the physical world: fragments of life unable to meet and conjoin but perfectly able to interact as they are recombined by the digital net. The metropolitan sprawl is traversed by people who meet for an instant then split and will never meet again. They connect, in the act of production, in the abstract process of syntactic exchange, then they disappear in the chaotic meltdown of precarious deterritorialization. The conditions of social solidarity have

been dissolved: togetherness, long lasting collaboration in the same place of work, urban proximity.

The old fashioned order of political Reason is lost, like the regular relation between time and value. Everything solid melts in the air[1], as Marx wrote in 1848, and no more regulated by shared conventions the social existence is turned into a cloud, water vapor ceaselessly moving, displacing, condensing and dissolving, changing form and density degree.

Drawing a map of the urban pathways, or a map of the labour market is therefore impossible, as it is impossible to foretell where the molecules of social life will migrate. How to decide in a rational way about the future? No way. This is precariousness: the unmappable cloud.

Simultaneously, however, the network of capitalist accumulation is traversing the cloud with the Matrix. Fragmented life is re-coded, fractalized and recombined by the rules of connection, embedded in the technical interfaces of social communication. The Matrix connects the neuronal pathways of scattered bodies, distant in time and in space, but connecting in the operational framework of the code. The Matrix therefore is submitting collective cognition to the regular patterns of the algorithm, and is turning the cloud into a swarm.

The European cult of governance

What happens to social solidarity, empathy when the social space is invaded by precariousness? What happens to political freedom, and democracy, in the systemic order of governance?

In order to answer these questions, let's go back to the present European crisis. The history of the European crisis, which is in full swing while I'm writing these pages, is evidence of the loss of effectiveness of voluntary action and of democratic decision. In fact the financial system, which has taken the upper hand in the political dynamics of the European Union, has inserted a chain of automatic implications in the social economy, depriving democracy of any content, at least in the social field.

1 The sentence "All that is solid melts in the air" appears in the *Communist Manifesto* published in 1848, and refers to the abstraction process that characterizes the industrial economy of the bourgeoisie. But the sentence is much better suited to characterize the post-industrial digital economy.

When the elected Premier of Greece, Georgios Papandreou declared the intention to call a referendum about the application of the European Central Bank's austerity measures he was obliged to resign overnight, and after his dismissal a former consultant of a global financial agency was summoned and installed in his place.

When Italians voted massively against the austerity politics at the elections of February 2013, the President of the European Central Bank, Mario Draghi reacted saying ironically that the outcome of the election should not be overstated because Italian economic policy is on autopilot. In other words, it is governed by the automatisms implied in the Fiscal Compact, that is a set of financial measures imperatively imposed to the National Parliaments of the continent.

The assumption that human beings have the possibility of governing their history has never been really well founded. Human will has always been a factor among many others in the determination of the historical process. But in the Modern age—since Machiavelli to be precise—that factor has gathered momentum thanks to scientific knowledge, and to the establishment of the political space of bourgeois civilization. Government, as rational project leading to the controlled and planned transformation of the social reality, has been possible as long as the bourgeoisie has been able to subdue the complexity of human passions to the interests of the economic growth, and the overall improvement of social life. Both in the authoritarian forms of Monarchic absolutism and in the liberal forms of democracy, the word "government" has meant ability of the brain to supervise the development of social forces: knowledge, anticipation, planning, and also violence have been the tools for governing society, and reducing it to the common goal, as long as this reduction has been possible.

When the economic power has expanded and the acceleration of information exchange has grown too fast, government has turned into an empty word, and human will has given way to the automatic self-replication of information and power.

The illusion of democracy has continued, and the rhetoric of democracy has been promoted as universal myth of the political discourse—but democracy is just a ritual, when it comes to the formation of power in the sphere of the economy, and the European Union, which has been built on the promise of enhancing the space of democracy, has recently exposed the emptiness of the democratic discourse in the digital age.

"Governance" is the keyword of the European construction, but it is also the keyword of financial capitalism worldwide. Governance is the replacement of human will and democratic government with automatic systems of logical and technological implications.

Pure functionality without meaning. Automation of thought and will.

In the concept of governance abstract connections between living organisms are embedded in language and in the interactions of social life. The concatenation of choices, decisions, priorities is identified with logical rationality and objectified into technical protocols.

Since its beginning the European entity has been conceived as possibility of overcoming passions: nationalist, ideological, cultural passion, dangerous marks of belonging. Even the aesthetics of Europe is marked by an intentional frigidity which may be read as an attempt in distancing from the Romantic imprinting of European modernity which has led to the catastrophic wars of the twentieth century.

By this point of view EU is a perfectly postmodern construction in which power is embodied by techno-linguistic devices of interconnection.

As an attempt of fusion and overcoming of strong national identities (French and German identities before all) the European Union has no cultural identity. Having no cultural identity, Europe has founded its identity in prosperity. For some decades prosperity has been the unifying mark of the heterogeneous Union. The European entity has not identified with political passions or great ideological visions, or charismatic leaders, but with the cool image of bankers.

Until the end of the first decade of the new century this identification has worked. As long as financial capitalism guaranteed a growing level of prosperity, as long as the monetarist rule helped economy to grow, Europe has thrived.

What next? What if Europe is to lose its status of prosperity and growth?

While I'm writing these lines, in the year 2013 a question is anxiously asked: will Europe survive the financial collapse and the upheaval that follows, as the financial architecture has been its only support?

EU is not a democracy: it is ruled by an autocratic organism, the European Central Bank, and by a financial class which does not respond to citizens or Parliament.

On behalf of the Maastricht Treatise turned into a system of absolute

dogmas, the living society of European countries is being subjected to a strict Neoliberal rule: cutting of labour cost and downsizing of the public sphere.

Governance has replaced political will with a system of automatic technicalities forcing reality into an unquestionable logical framework. Financial stability, competitiveness, labour cost reduction, increase of productivity: the systemic architecture of the E.U. is based on these dogmatic foundations that cannot be challenged or discussed, because they are embedded in the technical functioning of technical sub-systems of management. No enunciation or action is operational if it is not complying with the embedded rules of neoliberal governance.

Governance is the management of a system which is too complex to be governed. The concept of government in fact implies the possibility of understanding social processes and cultural expectations, and the ability of human will (despotic, democratic, whatever) to control information flows so that a relevant part of the social whole can be controlled and managed. Government is possible as far as the degree of complexity of social information is low. But information complexity has been growing all along the late modern age, and has finally exploded in the age of the digital networks.

Because of the proliferation of information exchange, the intensity and speed of circulation of social information has grown too fast for centralized knowledge and political control. Rational government is therefore impossible, as a critical discrimination and determination of the sequence of events and information is impossible. Here comes the governance mode: the abstract concatenation of technical functions replaces conscious elaboration, social negotiation and democratic decision.

The automatic connection of a-signifying segments replaces the dialogic elaboration of an Order, and adaptation replaces consensus.

In the sphere of governance, the agencies who enter the social game have to be formatted and made compatible before they start to exchange. Conflicting interests and projects have to bend to the unquestionable rationale of the algorithms which define the governance pattern. The rhetoric of system Complexity replaces the rhetoric of historical Dialectics.

Disruptions have to be managed according to a shared pattern of compatibility.

Complexity, Chaos and Meaning

In *Out of control* Kevin Kelly writes: "the world of our own making has become so complicated that we must turn to the world of the born to understand how to manage it…"

From an epistemological point of view the notion of complexity is nothing but a truism.

In a text published in 1985, Edgar Morin himself says that "Complexity appears as difficulty and uncertainty, not as precise answer." (1985)

The notion of complexity acquires a meaningful relevance only if one thinks in terms of information. If we consider the environment as a source of info-stimuli, and the mind as receiver-decoder, complexity can be defined as a function of the relation between intensity of the information flow and the pace of mental elaboration of the input.

Chaos surfaces in the concatenation between mind and environment, when the information flow is too fast for conscious elaboration.

Therefore the word "chaos" stands for an environment which is too complex to be decoded by the explanatory grills available to us, an environment in which fluxes are too quick for conscious elaboration and rational decision. The word "chaos" denotes a degree of complexity which is too dense, too intense, to speedy for our brain to decipher. From this point of view complexity is considered as a measure of the speed of the receiver (the mind) in relation to the transmitter's speed (the surrounding info-sphere).

Sometimes in science and in life a sequence of events can reach such a level of complexity that a small perturbation will have huge unpredictable effects. We speak of chaos when this kind of indetermination is spreading all over.

The process of mathematization of the world, which is the core of the modern scientific methodology, is an act of reduction of the environment to measure (proportioning and reduction to measurement). The Latin root of the word Reason, in fact, refers to measure (*ratio*). Measurement cannot be accomplished without a reduction which cuts the extension of what is relevant out of the infinite flow of signs of the world. The problem of relevance is crucial in the passage from chaos to order, and therefore in the process of civilization. One has to discriminate relevant events in order to measure.

Science cannot be productive of knowledge without establishing the limits of investigation. What is inside the established limit is called relevant,

what is outside those limits is irrelevant. Similarly the political mind cannot decide without posing limits. Only what is relevant by the point of view of knowledge is actually elaborated by the rational mind: rational government presupposes the extrapolation of relevant information from the infinite flow. What is relevant, what is not? That's a problem of epistemic rationalization of the available flow of information.

Modern scientific culture could keep reality under rational control only thanks to the limitation and the exclusion of irrational mythologies and other forms of similar craziness from the space of decision.

Machiavelli distinguishes the sphere of Fortune from the sphere of Will.[2] The prince is the (male) person who subdues the Fortune (Female) to the political rational will.

Fortune is Chaos hiding in the folds of human experience.

If the Prince wants to govern, he has to previously cut out a narrow string of events in the infinity of Fortune. The dark infinity of un-reducible Chaos lies at the border of the established Order. Chaos is noise, Order is rhythm.

The ordering rhythm makes possible the synchronization between Fortune and Will, reality and reason. But only a tiny part of the sphere of reality can be synchronized with reason, and only a tiny part of Fortune can be synchronized with the political will. This tiny part is named "relevant" by the ruling intellect of Order. The pretence of total government is always an illusion, because the entire multiplicity of the events of the world is ungovernable. But this illusion can work and can produce effects when the Infosphere is so thin and the Info-flow is so slow that political consciousness cuts out a small space of relevant social events, and tries to protect this space (the civilized space) from the surrounding ocean of non governable matter.

This is why the kingdom of civilization is in crisis, today. The acceleration of media flows stimulating the collective brain is breaking the frame of the Rhythm that we have inherited from the Modern Age.

Chaos is resurfacing when the stream of digital information is flowing too fast for the rhythm of Mechanic theory and of Political will. As the electronic flow invades the screen of our attention the protecting fence of relevance is broken, because we can no more discriminate what is relevant and what is not.

2 "La fortuna è donna, ed è necessario, volendola tenere sotto, batterla e urtarla" (Machiavelli, *Il Principe*, cap. XXV) "Fortune is a female, and if we want to submit her we must beat and hurt her."

Now I want to focus on the production of meaning in the frame of the relation between mind and its environment. Meaning can be defined as a reduction of reality to a finite concatenation of enunciations.

When the Infosphere is slow enough to be screened and scanned by mind, then we can extract meaning, and find a common rhythm: Guattari calls this rhythm *retournelle*. Retournelle is the synchronization of the mental activity and the environment.

When the Infosphere is saturating our attention time, and the semiotic flow is going too fast for our mind to process information in a rational way, we speak of complexity.

Within certain conditions of speed—when the info-flow is slow—a rational model of government can control the environment and can decide between alternative possibilities. But when the intensity of information and the speed of the Infosphere overrun mind's pace of elaboration, then mind can no more extract meaning from the experience and the psychosphere is affected by a sense of confusion. Meaning can no longer be grasped as we cannot extract from the infinite flow a finite explication as a workable tool for social interaction and understanding. At that point social order can be produced only by syntactic selectors of meaning and automatic deciders. The semantic interpretation is no more possible because time is too short. Decision must be made by default by purely syntactic machines.

Governance is the combination of the automatic decisions made by syntactic machines.

Swarm/connectivity

Multitude is a plurality of conscious and sensitive beings sharing no common intentionality, and showing no common pattern of behaviour. The crowd shuffling in the city is going to countless different directions with countless different motivations. Everybody goes his/her way, and the intersecting of those displacements makes a crowd. Sometime the crowd is apparently moving in coordination: people run together towards the station because the train is soon expected to leave, people stop together at the traffic lights. Everybody moves following his/her will, within the constraints of social interdependency. This crowd is a multitude, as it escapes any common intentionality, and common direction.

Network is a plurality of (organic and artificial) beings, of humans and machines who perform common actions thanks to procedures that make possible their interconnection and interoperation.

If you do not adapt to these procedures, if you don't follow the technical rules of the game, you are not playing the game. If you don't react to certain stimuli in a way that complies with the protocol, you don't make part of the network. The behaviour of persons who are part of a network is not random like the movements of a crowd, because the network implies and prearranges pathways for the networker.

Swarm is a plurality of living beings whose behaviour follows (or seems to follow) rules embedded in their neural system. Biologists call swarm a multitude of animals of similar size and body orientation, moving together in the same direction, performing actions in a coordinated way, like bees building a hive or moving towards a plant where they can find what they need in order to make honey.

In conditions of hyper-complexity human beings tend to act as a swarm. When the Infosphere is too dense and too fast for a conscious elaboration of the information, people tend to resort to common automatic attribution of meaning, and tend to share conformed behaviour. In such situations power is the function that generates meaning and models behaviour.

In a message to John Seabrook Bill Gates wrote "the digital revolution is all about facilitation-creating tools to make things easy."[3]

In an environment whose complexity is beyond the understanding ability of the individual mind, people will use interfaces for reducing complexity and follow uniformed pathways. This is why nowadays social behaviour seems to be trapped into regular and inescapable patterns of interaction.

Techno-linguistic machines, financial obligations, all the capillary machinery of Semiocapitalist power is framing the field of possible, and incorporates common cognitive patterns in social actors' behaviour.

Therefore we can argue that in the sphere of Semiocapital social life is becoming swarm.

In a swarm it is not impossible to say "no." It's irrelevant. You can express your refusal, your disagreement and your non alignement, but this is not going to change the direction of the swarm, nor is it going to affect the way the swarm brain processes information.

3 Seabrook, J. 1994. "E-mail from Bill", *The New Yorker*, LXIX, 45, January 10: 54.

Morton Wheeler calls the swarm a super-organism which emerges from the mass of ordinary insects organisms.

"The hive possesses much that none of its parts possesses. One speck of a honeybee brain operates with a memory of six days; the hive as a whole operates with a memory of three months, twice as long as the average bee lives." Writes Kelly in *Out of control*.

From his point of view Kevin Kelly comes to the following conclusion:

> "The global mind is the union of computer and nature, of telephones and human brains and more. It is a very large complexity of indeterminate shape governed by an invisible hand of its own. We humans will be unconscious of what the global mind ponders. This is not because we are not smart enough, but because the design of a mind does not allow the parts to understand the whole. The particular thoughts of the global mind, and its subsequent actions will be out of our control and beyond our understanding." (Kelly 1994, 260)

This is a description of the process that has developed during the last decades, as social systems, incorporating info-machines and bio-machines have become too complex for human intelligence to understand them, and for human will to govern them. The troubling side of this process is that humans can no more stop the machinery they have created, and can no more correct the embedded choices.

Inside a network human language can be operational only when it obeys the embedded rules of syntactic order and of semantic compatibility. Linguistic acts who do not obey the rules of code-compliance are simply discarded: the bio-informational super-organism reads the human language and discards it as noise.

In a text titled *Networks, swarms, multitudes* Eugene Thacker studies the analogies and differences between collectivity and connectivity, and underlines that collectivity implies a certain degree of connection, while the contrary is not true: connectivity does not imply the existence of a collective.

Speaking about swarm, Thacker writes:

> "A swarm is an organization of multiple, individuated units with some relation to one another. That is, a swarm is a particular kind of collectivity or group phenomenon that may be dependent upon a condition of connectivity. A swarm is

> a collectivity that is defined by relationality. This pertains as much to the level of the individual unit as it does to the overall organization of the swarm. Relation is the rule in swarms. A swarm is a dynamic phenomenon (following from its relationality). This differentiates it from the concept of a 'network,' which has its roots in graph theory and spatial modes of mathematically understanding 'things' (or nodes) and 'relations' (or edges). A swarm always exists in time and, as such, is always acting, interacting, interrelating, and self-transforming. At some level 'living networks' and 'swarms' overlap."[4]

Studies in network science, swarm intelligence, and biocomplexity all define self-organization as the emergence of a global pattern from localized interactions. This paradoxical definition makes swarms interesting—politically, technologically, and biologically, for it imputes an intentionality-without-intention, an act-without-actor, and a heterogeneous whole. In swarms there is no central command, no unit or agent which is able to survey, oversee and control the entire swarm. Yet the actions of the swarm are directed, the movement motivated, and the pattern has a purpose. This is the paradox of swarms.

In fact, the tension within swarms, as both political and biological entities, is a tension between *pattern* and *purpose*. Organization does not necessarily imply a reason for its own existence, unless organization itself is the reason. At one pole is a highly directed, purposeful collectivity, such as a crowd of demonstrators (whose purpose may be to block city streets or obtain visibility), or, on purely biological terms, a swarm of army ants (whose purpose is to look for a food resource). Such collectivities may be called swarms, in that they fulfil two basic components of swarms: they exhibit global patterns from local interactions, and they exhibit a directional force with intention that is without centralized control. At another pole these regroupings are also highly ordered and dynamically organized, but which do not display any overt "purpose" or goal, other than to maintain themselves as such. Examples may include a large crowd at a festival or concert, or on a biological level, flocks of birds and schools of fish. While researchers interpret such examples as driven by an evolutionary necessity (and therefore dictated by the purpose of survival), the kind of teleology this exhibits is remote, indirect, and ultimately relies on the explanatory capacity of evolutionary theory.

4 Available at <http://www.ctheory.net/articles.aspx?id=423>.

> "There are, then, two axes, two different types of tension, and two sets of concepts. On one axis is the tension between *collectivity* and *connectivity*. While connectivity may be a prerequisite for collectivity, collectivity is not necessarily a prerequisite for connectivity as such. Complications arise when a combination of technological euphoria and new social practices lead to an over-optimistic view of connectivity as immediately implying a collectivity. At the extreme point of technological determinism, political forms such as democracy are rendered inherent in both nature and technology." (Thacker 2004)

Connectivity does not imply collectivity: collectivity in fact is a relation of bodies who share a common analogical understanding, who negotiate continuously about the semantic relevance of their linguistic exchange, about the meaning of the interaction, in a condition of affective inclusion.

Collectivity happens in condition of conjunction, whilst swarm is a connective body with no conjunction, with no conscious affective collectivity. Conjunction emerges from an unmotivated, logically unnecessary attraction whose purpose is not implied in its pattern. Conjunction is a random concatenation, whose only rule is desire.

Furthermore conjunction has nothing to do with belonging. Whilst belonging entails a necessary implication and presupposes the fixing of an identity, on the contrary the conjunction is not referring to something embedded and natural: conjunctive acts do not presuppose any meaning, as meaning is created by the acts of conjunction.

In conjunction, knowledge is creation, not recognition.

On the contrary within connective systems there is no knowledge, but merely syntactic recognition. Connection entails an effect of machine functionality, not of meaningful fusion. In connection communication is interfacing and inter-operability. Only segments previously made linguistically compatible can interact. Network penetrates the social body inserting connective segments and converting the body into Swarm.

While conjunction entails a semantic criterion of interpretation, connection requires a purely syntactic criterion of interpretation. The connective agent (or machine) is required to recognize a sequence and to carry out the operation foreseen by the 'general syntax' (or operating system). No margins for ambiguity are allowed in the exchange of messages.

The translation of semantic possibilities into syntactic binary alternatives

is the process that leads to the construction of a digital web.

Collectivity takes shape in the sphere of conjunction, when conscious and sensitive organisms enter in a reciprocal relation of mutual transformation and continuous interrogation and ambiguity.

Connectivity, instead, is a logical implication embedded in the bio-info interfaces of the techno-language.

Collapse and subjectivation

In the modern political landscape the collapse of a system was considered as an opportunity for radical change. Revolution is the word that refers to the subversion and the conscious change of the existing social structures. This concept, crucial in Modernity's lexicon, does not properly describe the process of change, as it is based on the illusion of a total control of social reality by rational will and by linear projects of transformation. However, although theoretically inaccurate, the concept of Revolution has been practically useful in order to describe those radical processes of conscious and voluntary transformation which marked the history of Modern times.

Revolution was often doomed to give birth to violent and totalitarian systems, and generally revolutions did not fulfil their utopian projects, but they turned social collapses into radical changes, and they paved the way to the shift of political power from a dominant group to another.

Neoliberal deregulation can be seen as the last effective Revolution in human history. Joining the technical revolution of the digital network, neoliberal capitalism has turned into a system that is simultaneously flexible and resilient.

Thanks to flexibility neoliberal capitalism has succeeded in submitting the social turbulence of the '70s and has captured the technical evolution of the '80s. Although celebrating Democracy as universal political value, financial deregulation has actually destroyed the very conditions of Modern bourgeois democracy, and replaced political decision with a system of financial automatisms.

Far from stable, networked capitalism is a system that continuously borders collapse. But the final collapse is never coming, thanks to the resiliency of the self-regulation that capitalism borrows from the networked system of semiotic exchange.

The more a system grows complex the more it gets inclined to disruption.

At the same time the more a system grows complex, the less it is susceptible to voluntary control, and therefore to conscious and intentional change.

In 1917, when the Russian political and military system was on the brink of a collapse, Lenin called for the transformation of the imperialist war into revolution. As we know, his call was effective, Soviet Revolution followed, and social morphogenesis took the form of communist dictatorship.

The history of the two centuries of Modernity is full of examples of this kind: disruptions culminate into collapses, and collapses give way to revolutions. Nowadays the collapse takes the form of disruption, but it is no more giving way to Revolution, rather to power consolidation. Morphostasis follows disruption, so that a process of revolutionary morphogenesis seems to be out of reach.

As I argued before, complexity is a relation between time and information. A system is complex when the density of the Infosphere saturates the receptivity of the Psychosphere, and the speed of Info circulation overcomes the human ability to elaborate signs in time. When Infosphere is saturated and becomes too dense and fast for conscious elaboration, automatic reducers of complexity start to operate. A disruption is the effect produced by the irruption of an unpredictable event that interrupts a chain or a flow. In the sphere of connectivity, disruptions tend to proliferate because the Infosphere overload makes human actors unable to govern the systemic complexity of social and technological structures.

Disruptions can happen because of the unpredictable interference of Nature in the Techno-sphere (like the Icelandic volcano's cloud that blocked the European air traffic in March 2010). Disruptions can happen because of the limits in technological control, like Chernobyl in 1986 and the massive oil-spill in the Mexico Gulf in late spring 2010. Disruptions can happen because of the interference of social psyche in the field of automatic information flow, like the effects of panic in the financial circuit.

In the past age of Modernity slow circulation of information, and the consequential effectiveness of political will and rational government, disruptions were considered triggers of social morphogenesis. In a disruption political power was expected to weaken, social forces were mobilized and this situation was an opportunity for revolution. In conditions of low complexity Political Reason was able to change the social organization in such a way that a new pattern could emerge.

But in the present conditions, when the density and the speed of information are too high for conscious elaboration, disruptions tend to be morphostatic, and to reinforce the pattern which has produced the disruption itself.

Why so? Why systems become more resilient when their complexity grows?

Why society seems unable to create forms of conscious solidarity up to the point of break the system and start process of collective autonomy?

Systems become more resilient when complexity grows because the more complex a system, the more knowledge has to be concentrated so that it becomes inaccessible.

Commenting the many disruptions of the year 2010 (Greek financial collapse, Icelandic cloud in the European skies, and the gigantic oil spill in the Gulf of Mexico) Ross Douthat writes, in an article titled *Consolidation*:

> "The economic crisis is producing consolidation rather that revolution, the entrenchment of authority rather than its diffusion, and the concentration of power in the hands of the same elite that presided over the disaster in the first place… The panic of 2008 happened, in part, because the public interest had become too intertwined with private interests for the latter to be allowed to fail.. But everything we did to halt the panic, and all the legislation we've passed, has only strengthened the symbiosis… Eighteen months after the financial crisis, the interests of America's financiers, chief executives, bureaucrats and politicians are yoked together as never before…
>
> This is the perverse logic of meritocracy. Once a system grows sufficiently complex, it doesn't matter how badly our best and brightest foul things up. Every crisis increases their authority, because they seem to be the only ones who understand the system well enough to fix it. But their fixes tend to make the system even more complex and centralized, and more vulnerable to the next national-security surprise, the next natural disaster, the next economic crisis."[5]

These considerations point essentially on the resiliency of the system, but do not answer the second question: Why society seems unable to create forms of conscious solidarity up to the point of breaking the system and starting process of collective autonomy?

5 Douthat, R. 2010. "Consolidation", *International Herald Tribune*, may.

In a situation of high complexity the social body gets disconnected from the social brain, and sensibility gets disconnected from the intellect: social consciousness is jeopardized, fragmented, so rage against exploitation turns into frustration and self-despise. The process of subjectivation does not find the way to social autonomy. Subjectivation comes now under scrutiny, and the third part of this text will be dedicated to this problem.

PART III

SUBJECTIVATION

Time is out of joint, wrote Gregory Bateson quoting Hamlet on 1979's *Mind and Nature, a Nececessary Unity*. Out of joint—disjoint. The increasing connectivity and the submission of the cognitive activity to the digital linguistic machines is cause of a disjunction between the mutated pace of the connected mind and the pace of the bodily mind. This is why we can say that the general intellect is disjoined from its body.

The problem, here, is not the Subject, as a given, as a static reality, the problem is subjectivation: the process of emergence of consciousness and self-reflexivity of the mind, as long as mind is not considered in isolation, but in the context of the technological environment, in the context of social conflict.

Furthermore, subjectivation is to be understood as morphogenesis, as creation of forms.

CHAPTER 7

SOCIAL MORPHOGENESIS AND NEURO-PLASTICITY

Out of Joint

In the previous part I have outlined a history of the general intellect, based on the relation between the linguistic machine and the living brains which cooperate in the process of scientific knowledge and technical production of the world. Now I want to investigate the concept of neuropathology and neuroplasticity, in order to envision the mutation that is underway in the social brain, and in order to appreciate the possibilities that the present composition of the general intellect brings about.

Since the final years of the past century the symptoms of a sort of dissonance and of temporal unbalance are multiplying in the sphere of aesthetic sensibility. The rhythm of life is haunted by a sense of acceleration that fragments living experience and sensory perception itself.

Time is out of joint—disjoint. The increasing connectivity and the submission of the cognitive activity to the digital linguistic machines is cause of a disjunction between the mutated pace of the connected mind and the pace of the bodily mind. This is why we can say that the general intellect is disjoined from its body.

But we know that the brain is provided by an incredibly high level of plasticity, so we can ask the question: will the plastic brain succeed in finding the way out from the labyrinth, will the plastic neuro-system find the way for a new possible conjunction between the world and the mind?

How so?

Warren Neidich is an American artist and neuroscientist whose art-works can be viewed as attempts to describe the disturbing effect that physical decay and deterioration is producing in the sphere of mental activity.

One of the art-works of Neidich is a video showing the destruction of the wooden and metal body of a loudspeaker: an axe and a hammer are battering and murdering and dismembering the physical body of that object that transforms electric stimulation into signs, into sound, into words, into meaning. The noise of the destruction is recorded, and transmitted so that you can hear the sound again and again.

At the end the loudspeaker's body is no more able to transmit sound, to transmit meaningful words. Where is meaning, now? What happens to meaning when the body is destroyed and is no more able to transform electric stimulation into meaningful words?

The link between the infinity of meaning and the finite translation of meaning into understandable marks is broken, in the works of Warren Neidich. Forever. Dismembered, tortured, maimed, the poor body of the living loudspeaker is there. Dead.

Another work of Neidich is a music sheet, with signs marked on it: images, ideograms, unreadable graphics which take the place of musical notes on the musical score. Musicians, violinists and singers read the score and suddenly start finding a new rhythm, a new syntony, and non existing refrains are floating in the space.

These works of the neuroscientist and visual artist Neidich (*Cacophony of Memory*, *A score that is not a score*) are hinting at the problem of neuroplasticiy, the ability of brain to reframe the relation between the rhythm of the receiving mind and the transmitter's rhythm: the chaotic universe is sending signs which are no more filtered by the grids of a shared semiotic order.

Neuroplasticity: cognitive mutation and the brain

Migraine is a well known (although not exhaustively explained nor efficiently treated) disease, which is generated by physical processes localizable in the brain, and which can produce psychological effects like depression.

In his book on migraine Oliver Sacks underlines the "inseparable unity of psycho-physiological reactions" and refers to chaos theory as a frame of explanation of the phenomenon of migraine. The complexity of the brain makes impossible a full description of the processes that migraine involves, but according to Sacks

> "migraine starts as instability, disturbance, a far-from-equilibrium, unstable state, which sooner or later gravitates into either of two relatively stable positions, that of health or that of illness… McKenzie once called Parkinsonism an organized chaos, and this is equally true of migraine. First there is chaos, then organization, a sick order: it is difficult to know which is worse. The nastiness of the first lies in its

> uncertainty, its flux: the nastiness of the second in its sense of immutable heavy permanence. Typically treatment is only possible early, before migraine has solidified into immovable fixed forms. The term chaos indeed may be more than a figure of speech here, for the sort of instability, of fluctuation, of sudden change, one sees here is strongly reminiscent of what one may see in other complex systems (chaos theory). It may be important, here, to consider migraine in this way, as a complex, dynamical disorder of neural behaviour and regulation. The exquisite control of what we call health may paradoxically be based on chaos." (Sacks 1999, 34)

In *The New Wounded: From Neurosis to Brain Damage*, Catherine Malabou redraws the relation between brain, mind and soul, starting from the realization that Parkinson's disease, Alzheimer's disease, and post-traumatic stress are now the prevailing forms of mental suffering, and therefore we should be ready to link the neurological to the cognitive sphere and the cognitive to the psychological sphere.

> "Cerebral activity goes well beyond the mere work of cognition, and even of consciousness, to encompass the affective, sensory and erotic fabric without which neither cognition nor consciousness would exist." (Malabou 2012, 4)

The theoretical foundation of Freud's psychoanalysis was essentially an act of separation of psychology from neurology, and this act results in the interpretation of the psychic processes in terms of language. But "the unconscious is structured like a language" says Malabou "only to the extent that the brain does not speak." (Ibid., 35)

The Freudian interpretation of sexuality is based on a sort of suspension of any consideration of the physical brain, but this suspension is questioned by Malabou, who notes that:

> "it does not take much—a few vascular ruptures, minimal in terms of their size and scope—to alter identity sometimes irreversibly… Contrary to what Freud affirms, sexuality is always exposed to a more radical regime of events: the shock and the contingency of the ruptures that sever neuronal connections….. From now on, people with brain lesions will form an integral part of the psychopathological landscape."

Trauma, physical decay of the cerebral functionality, stress provoked by external aggressions—these conditions are causing transformations that have

psychic implications. Therefore Malabou suggests a neuro-psychoanalytical approach in order to describe the psychological effects of the neurological traumas and transformations.

According to Malabou we need an integration of the neurological approach with the psychoanalytic approach if we want to understand organic diseases like Parkinson's and Alzheimer's.

The same can be said about the cognitive mutation produced by the techno transformation and the intensification of nervous stimuli proceeding from the accelerated Infosphere. The hyper-stimulation of attention, the dramatic change of the mental environment can be considered as a mutagenic factor which belongs to the sphere of traumas, and therefore demands an integration of psychological and neurological approaches.

The concept of neuroplasticity is crucial from two points of view: it is the condition for understanding the adaptation of the neural substratum to the cognitive mutation underway. But it also inaugurates the possibility of envisaging a conscious action of transformation of the social mind.

According to Papadopoulos:

> "plasticity starts where the gene stops: the specificity of the individual organism. Plasticity appears when epigenetics is at work: the worldly making and remaking of the totality of an organism in the process of its development. Rather than the relative malleability of brain matter, plasticity now refers to the possibility of recombining brain-body matter. Not as an abstract and general process of neuronal regeneration but as a process that takes place epigenetically, that is according to the specific and contingent realities of each particular organism." (Papadopoulos 2011, 433)

The emergence of the body is not mere deployment of the information that is contained in DNA, but interaction between the genetic information and the environmental conditions in which the genes become the organism.

According to Papadopoulos the emergent body exists in the realm of its own developmental trajectory and actuality, but it is emergent because the creation of new forms is always limited by the contingent conditions of existence. The emergent and embodied brain-body is unthinkable, indeed impossible to exist, outside of the formative chronotope of ontogenesis. Papadopoulos' description of epigenesis, and his description of the emergent

body remind of the concept of body without organs that Deleuze and Guattari are speaking about in *Mille Plateaux*. The neuroplastic description goes beyond the computationalist model.

> "mental representations in cognitivism are the result of innate neurophysiological processes that are context independent and universal in the human brain. Thinking has universal algorithmic structure and resides in fixed neuronal architectures. What is crucial in connectionism is that the weighting of the nodes is not given but emerges through learning. While computationalism presupposes innate neuronal structures, connectionism presupposes semi-open, non linear architectures that unfold during the very process of ontogenetic development. Brain matter is simultaneously the actor and the result of its own activity." (Ibid., 439-440)

More important, however, are the political implications of the neuroplastic model as Malabou argues in her book *What should we do with our brain?*

According to Malabou plasticity is the relation that an individual entertains with what, on the one hand attaches him originally to himself, to his proper forms, and with what, on the other hand, allows him to launch himself into the void of all identity, to abandon all rigid and fixed determination. (Malabou 2008, 80)

The mental activity's adherence to the neural substratum is not explaining all of the emergence of the conscious body, and the shift from neurology to consciousness can only be explained by the reference to the interaction with the environment and by the intentionality that is inscribed in consciousness.

In the words of the neurologist António Damásio consciousness is "how the owner of the movie-in-the-brain emerges within the movie." (Damásio 1999, 313)

Affection and language

The imbalance between the organic potentiality of the brain and the effects of environmental neural stimulation is affecting the cognitive process as well as sensibility.

Memory, language, attention and the very ability of critical discrimination are involved in the process of mutation that invests the organic features

of nervous activity and interferes with the established forms of cognition.

A mutation is investing the cognitive process at many levels, as mental activity is involved in the networked digital Infosphere.

Language is taken in a process of fragilization, as a new generation of humans is learning more words from a machine than from the mother.

In the book *L'ordine simbolico della madre* (2003) the Italian feminist philosopher Luisa Muraro suggests that the access to language is made possible by the affective relation to the body of the mother. The very relation between the signifier and the signifier is based on trust in the nomination suggested by the mother. Words mean something because they have been performed and exchanged in the affective pragmatics of the bodily discovery of the environment.

One believes that this liquid is "water" because her mother told so. The origin of the link between the signifier and the signified is not operational, but essentially affective. The voice, the pragmatic context, the bodily implications are establishing the link of signification. The world is significant because it has been permeated by the affective creation of meaning.

Now two different and converging processes of change are happening at this level. The first is the separation of children from the body of the mother in the years of linguistic formation. The woman's emancipation has been turned into the capitalist subjugation of women's time and attention. More and more women are captured by the global labour market. Armies of women are migrating from the poor cities of the global South to the busy metropolis of the affluent North. Millions of children of Manhattan, Milano and London are looked after by nannies that come from Manila, Nairobi and Jakarta, and they spend more and more of their time interacting with screens. Language learning is therefore transferred from the affective environment of the bodily contact to the operational environment of the universal linguistic machine.

Words are affectively associated with meaning. As language learning is separated from the body, as it is reduced to the function of operational signification, the link between words and reality is weakened, and becomes frail, precarious. The meaning of words is reduced to an operational convention, devoided of bodily roots.

The singularity of language is rooted in the voice, the point of conjunction between meaning and flesh. If words are separated from the voice, their effectiveness and their signification is only based on the convention of

operational effectiveness. The singularity of linguistic performance is lost, as language learning has happened in condition of conventional conformity.

Sociologists and economists use the word precariousness in order to refer to the juridical transformation of labour relations. Workers become precarious when they are no more protected by contracts and laws, and every day have to look for a job and to negotiate work conditions and salary. But I think that the core transformation that underlies the process of social precarization, paving the way for the destruction of the links of solidarity between workers has to be found in the psychological and cognitive sphere.

The fragilization of language, the reduction of language to operational mode is the cognitive and emotional condition of the current process of precarization of life in the social space.

The acceleration of the infosphere is affecting every facet of the cognitive activity. Attention, in the networked environment attention is continuously stimulated and mobilized, and the ability to focus on a singular flow of information is weakened, as exposed by the Attention deficit disorders syndrome, a symptom of the fragilization of the mind's ability to elaborate experience.

As a consequence the process of memorization is transformed too. Humans tend to transfer their memory to machines, and to memorize essentially technical protocols for accessing the uniformed memory. The uniformation of memory, in turn, affects the imagination. Imagination in fact is the recombination of memorized materials.

The singularity of the imaginative recombination is linked to the singularity of the stored engrams, mnestic traces, or memes.

In the book *Meme Wars* (2013) published by *Adbusters*, Kalle Lasn speaks of the automation of the collective memory and therefore the uniformity of imagination.

I want to do one last remark concerning the cognitive faculty of discrimination, the basis of the cultural attitude that we call "critique". The ability to distinguish true and false in the enunciations, emphasized by modern philosophy and political thought, has been made possible by the prevailing of the written text in the Infosphere.

When exposed to sequential information, the singular mind can sequentially interpret the meaning of the enunciation, so that it is possible to discriminate about the reliability of the content.

As the electronic flow of information fastens, time for elaboration shortens:

the critical interpretation of the info-flow becomes more and more difficult as the mind is obliged to go faster and faster in the process of interpretation.

This is why the critical faculty tends to be replaced by the comeback of mythology, as McLuhan predicted in *Understanding media*: mythology becomes the prevailing mode of mental elaboration taking the place of the critical mode, since the simultaneity of configurational media replaces the sequentiality of the written text.

The mind's we

On November 2012 I took part in the conference *Psychopathologies of Cognitive Capitalism*.[1]

The subject, the location, and the intellectual mixture evidenced by the list of speakers suggest that this conference was a meaningful step in the creation of a philosophical and political awareness of the present crisis of the mental ecology of capitalist civilization, and of its possible evolution. For the first time, in my knowledge, the European methodology, particularly focused on the problems of social subjectivation, confronted the Californian experience and the particular composition of labour that is peculiar to the land of Disney, Apple and Google.

In this conference the theoretical field of social recomposition was approached by the conceptual point of view of neuro-plasticity which encompasses neurology, ecology of mind and psychopathology.

Since the '60s in the Californian context psychedelic experience and meditation on the altered states of mind encountered the mind-changing potencies of the high tech industry. The Institute for Mental Research of Palo Alto, the works of Gregory Bateson and of Paul Watzklawick, the literary imagination of Philip K. Dick and the psychedelic politics of Timothy Leary marked a mentalist re-framing of the legacy of European philosophy and opened the way to a re-conceptualization of social becoming.

1 The Conference Psychopathologies of Cognitive Capitalism, organized by the California Institute of the Arts' took place at the West Hollywood Library in Los Angeles. Speakers included Jonathan Beller (professor of Humanities at Pratt Institute), Jodi Dean (professor of Political Science at Smith College), Tiziana Terranova (professor at the University of Naples), Patricia Pisters (professor of Film Studies at the University of Amsterdam), and Bruce Wexler (professor of Psychiatry and Neuroscience at Yale University). Warren Neidich (artist and neuroscientist), Arne De Boever (professor at the Cal Arts), and Jason Smith (professor at the Art Center College of Design), organized, introduced, and moderated the event.

In the last thirty years both the new economy's ideology and the reality of the new technologies have found their cradle in California, nurturing a techno-mentalist culture, and giving rise to a special brand of social Darwinism which is expressed in cultural experiences like the magazine WIRED and in books like Kevin Kelly's *Out of Control*.

The technical transformation implied in the process of globalization is changing the socio-cultural prospects so deeply that conceptual tools inherited from European critical theory no longer suffice for imagining the future of human evolution. This is why I think that the Los Angeles conference on *Psychopathologies of Cognitive Capitalism* has marked the first attempt to displace the object of socio-anthropological reflection, and to link the conceptual sphere of social recomposition and psycho-subjectivation with the conceptual sphere of techno-mental evolution.

Sub-Individual and Super-collective: the mind's we

As Bruce Wexler recalled in his lecture at the Los Angeles conference, man is the animal who shapes the environment that shapes his brain. I will point out that Infosphere is the environment where this mind-shaping occurs, and in the contemporary technosphere politics (as activity aimed to change institutions and collective behaviour) is replaced more and more by brain changing devices. The problem of neuro-plasticity comes to the fore of the analysis of social change: this concept belongs first of all to the bio-genetic domain, and is particularly referring to the epigenesis, the process that leads from DNA genetic information to the development of the organism. Contrary to the deterministic interpretation of biogenesis, we assume that the epigenetic process is not inscribed and pre-formed in the DNA, and we claim that the epigenetic deployment of the organism is influenced by the environment. We speak therefore of neuroplasticity in order to assert the ability of the neural system to adapt to the environmental conditions in which the organism evolves. (See particularly: Papadopoulos 2011).

My focus here is on the evolution of the social neural system, the ability to adapt to the external changes of the environment, particularly to the changes of the technical sphere.

In the present digital Infosphere, the conscious activity is involved in

super-individual connective concatenations. The connective concatenation shapes the Cognitive activity, and the Unconscious according to a discrete—*versus* continuous—modality of perception. Syntactic rules of semiotic exchange replace those semantic rules that were working in the dimension of conjunctive relation and analogical communication. Those who dwell in the digital global sphere cannot escape the implications of the connective concatenation if they want to interact in the collective sphere. So the individual has to comply with the rules of interaction of the collective, if he/she wants to produce effects in the collective dimension. This is why the art of politics is broken down: because one cannot interact efficiently in the collective dimension if one has not previously accepted the rules of compliance that shape language, action and interpretation of signs. Social composition is reframed by the establishment of a connective format of interaction between humans. Dissident thought is possible, and also dissident enunciation is possible. But those who utter dissident enunciations are renouncing communication, because the format that makes communication possible is inapt to convey messages that are not compatible with the code.

In the industrial world the social brain was modelled by standardized acts of physical production, but the mental sphere was only partially involved in the process of standardization. The metal worker of the classical industrial factory was obliged to move his muscles according to the rhythm of the assembly line, but his mind was relatively free. Cognitive capitalism is all about the standardization of the cognitive processes, and mental activity cannot be detached or diverted from the flow of information, as this flow is exactly the cognitive machine. Cognitive processes are directly shaped by the connective format, and the Unconscious activity itself is influenced by the overall transformation of the mental environment.

In *The Mind's I*, a book edited by Daniel Dennett and Douglas Hofstadter, and published in 1981, philosophers, psychologists, computer programmers and novelists were invited to investigate the interdependency between hardware and software of cognitive processes. The main question of the book may be expressed like this: what is the relation between neuro-physical composition of the brain and conscious self-perception of the thinking organism? What is the mind of my "self", what is the "I" of my mind"?

In that book, Dennett and Hofstadter are investigating the effects of interaction processes on the individual brain. I think that we should now

reformulate this basic question at a different level: we have to investigate the effects of the connective Infosphere on the social mind, and simultaneously on the sub-individual dimension, in order to finally understand how sub-individual flows are reshaping the collective space of sensibility. At the end of the day we must study the formation of the social mind from the point of view of the relation between sensibility and culture: the Mind's *we*.

Such an investigation is going to question the limits and range of the neural system's plasticity.

Structure and Machine

Neo-marxist Italian thinkers labeled as "*operaisti*" and post-structuralist French philosophers like Deleuze, Guattari, Lyotard and Foucault—notwithstanding the difference of their intellectual trajectories—have investigated a similar question: how the process of subjectivation develops, starting from the material layers of social existence: technology, language, affection. Thanks to the formulation of the concept of "composition" (class composition, social composition), Italian neo-marxism in the '60s directly questioned the structuralist methodology: while Structuralism is based on the notion that the subject's evolution is governed by internal patterns, in a post-structuralist approach, social composition evolves due to the interference of external factors that enter the space of subjectivation. Not internal structures, but external machines shape molecular sub-individual flows, funneling them into the provisional ever-changing forms of sensibility.

In the article *Machine et structure*, published in the magazine Change in the year 1971, Felix Guattari explains his break with Lacan and his will to go beyond the Freudian conception of psychoanalysis meant as a system of structures (linguistic, mythological, symbolical).

We can say that the structure is positing its elements in a system of references connecting every element to other elements, in such a way that the structure itself can be referred to other structures as an element of a larger structure. The structural thought of totalization and de-totalization is clasping the subject, because it does not accept the idea of losing grip on it as far as it is not able to get it back within a new structure.

The same does not apply to the machine that is always excentric in relation

to the subject. The subject is always elsewhere. Temporality gets into the machine in many ways and plays as an event. The emergence of the machine marks a break that is not homogeneous with the structural representation. (Guattari 1971, 50)

A structure is a system of inner relations, of interactions governing the subject from inside. A machine, on the other hand, is an excentric actor: it comes from outside and changes the framework in which the subject is located so that the subject itself is changing its form. Therefore the machine jeopardizes the structural pattern, and provokes a displacement of the subject. While the structure is essentially morphostatic and territorializing, the machine is the factor of deterritorialization that leads to the generation of new forms.

So the concept of machine (that simply means: whatever agent is working and producing effects) gives Guattari the possibility of replacing the structured subject with the vision of a process of subjectivation that belongs to the sphere of the event, not to the sphere of replication or repetition, because it is the effect of the action of machines.

Composition, Consciousness and Subjectivation

The common ground of investigation of the aforementioned French and Italian authors can be found in these questions: what is the subjective side of the social becoming? How does it happen that social forces develop different forms of consciousness and conflicting intentions? The answer can be found in the word *composition*. The subjective side of the social becoming is perpetually changing as it is the result of the never-ending transformation of the psycho-cultural composition of the collective mind, of the collective soul, of the collective Unconscious.

One can view the becoming of social subjectivity as a solution and mixture of various chemical substances melting together. Consciousness is the surface of the perpetual process of de-composition and recomposition that occurs at the level of social subconscious, and interacts with the cultural limits of imagination and thought and also with the neurological limits of the brain. Consciousness is the ability to locate oneself in the map of compositional flows of information, desire, conflict… This is why I propose the word

"compositionism" in order to encompass the two philosophical movements that flourished in Italy and in France in the '68 age and have produced long lasting effects in contemporary philosophy. Those philosophers retrace the process of subjectivation through a recognition of the perpetually changing composition of social life: cultural, economic, psychological and mythological streams enter in the process of subjectivation.

In his last book, *Chaosmosis*, Guattari writes that "among the fogs and miasmas which obscure our *fin de millenaire*, the question of subjectivity is now returning as a *leitmotiv*. All the disciplines will have to combine their creativity to ward off the ordeals of barbarism, the mental implosion and chaosmic spasms looming on the horizon."

What is the meaning of the expression "chaosmic spasm"?

Chaosmic Spasm

In the medical lexicon a spasm is a sudden involuntary contraction of a muscle, which is generally painful. In the context of analysis of social subjectivation I would say that the spasm is an excessive compulsive acceleration of the rhythm of the social organism, a sort of forced vibration of the rhythm of social communication.

A spasm is a painful vibration that forces the organism to an extreme mobilization of nerves and muscles. We should understand this acceleration and this painful vibration in the context of an environment that is the contemporary sphere of cognitive work and nervous exploitation. I call this environment semiocapitalism, as the means for valorization are essentially semiotic tools. When cognitive energy becomes the main force of production, as capital valorization demands ever increasing productivity, the nervous system of the organism is subjected to accelerated exploitation.

Guattari always saw technology in general as a factor of enrichment, of mind enhancement and social liberation. But machines interweave and connect with capitalist exploitation, and this is producing an effect of subjection aimed to the continuous increase of productivity and exploitation.

Here comes the spasm, the effect of the violent penetration of capitalist exploitation into the field of info-technologies which act on the sphere of cognition sensibility, and of the Unconscious itself. Sensibility is invested by

info-acceleration, and the vibration induced by the acceleration of nervous exploitation induces the spasm, the spasmic effect.

What should we do when we are in a situation of spasm?

Guattari is not using the word "spasm" in isolation. He says precisely: "chaosmic spasm," Chaosmosis is the overcoming of the spasm, the relaxing of the spasmodic vibration. In the interaction between individual and collective sphere, in the link between individual neuro-activity and connective concatenation, the "mind's we" is evolving. The neuro-plasticity of the individual organism interacts with the rhythms of the collective automatisms of the swarm.

Why does Guattari use the expression: chaosmic spasm? Why can the spasm be seen as chaosmic? And before all, what is chaosmosis?

Chaosmosis is the creation of a new (more complex) order (syntony, and sympathy) out of the present chaos, which is an effect of the spasmodic acceleration of the surrounding semio-universe. Chaosmosis is the osmotic passage from a state of chaos to a new order. But here the word "order" does not have a normative meaning, nor an ontological meaning. Order is here to be intended as harmonic relation between mind and the semio-environment, and also as sharing of the same mindset. Sym-pathy, common perception. Chaos is an excess of speed of the Infosphere in relation to the ability of elaboration of the brain.

In *What is Philosophy?*, a book about philosophy and also about growing old, Deleuze and Guattari speak of the relation between chaos and the brain. *From Chaos to the Brain* is the title of the Conclusion of the book, and it begins with the following words:

> We require just a little order to protect us from chaos. Nothing is more distressing than a thought that escapes itself, than ideas that fly off, that disappear hardly formed, already eroded by forgetfulness or precipitated into others that we no longer master. These are infinite variabilities the appearing and disappearing of which coincide. They are infinite speeds that blend into the immobility of the colorless and silent nothingness they traverse, without nature or thought. This is the instant of which we do not know whether it is too long or too short for time. We receive sudden jolts that beat like arteries. We constantly lose our ideas. (Deleuze and Guatttari 1994, 201)

The stream of consciousness is too slow to process the information that comes from the world in acceleration (info-technology multiplied by Semio-capitalist exploitation), so the world cannot be translated into Cosmos, mental order, syntony and sympathy. Here we are talking of something that has very little to do with politics, and history, and much more with neuro-plasticity in the evolution of brain.

The chaosmosis can be viewed as a reframing of the relation between infosphere and mind, a process of re-syntonization and re-focalization that cannot be pre-arranged by political will, but only prepared by a modeling of sensibility.

Chaosmosis is the shift from a rhythm of conscious elaboration to a new one that is apt to elaborate what the previous rhythm could no more consciously process.

In order to define the shift from one rhythm to a different rhythm, from one refrain to another refrain, Guattari proposed the concept of "chaoide." Chaoide, in Guattari's parlance, is a sort of de-multiplier, an agent of re-syntonization: a linguistic agent able to act as a refrain different from the spasmic refrain, and able to de-multiply the spasmodic rhythm.

The ecosophical cartography, writes Guattari, "will not have the finality of communicating, but of producing enunciation concatenations able to capture the points of singularity of a situation." (Guattari 1995, 58)

The philosophical, political and schizoanalytical project of Guattari was aimed to re-focalization and singularization, not adaptation. The prevailing techniques of psycho-therapy are aimed to adapt the suffering organism to the social and technical environment. Psychopharmacology and psychiatric therapy aim to soften psychic suffering in order to normalize behaviour and to reduce the existing subjectivity to the tasks of cognitive exploitation. Reprogramming is a technique aimed to normalize singularity, and to restore the neurotic subjection in the process of neural exploitation and capital accumulation.

Guattari's schizo-analysis is based on the idea that healing is a process of singularization, not of conformation. But this process of singularization implies a complex dynamics of mutual transformation of social environment and individual minds.

In the sphere of financial capitalism the prevailing linguistic concatenations are producing a spasmogenic rhythm. The spasm is not only exploiting the work of men and women, not only submitting cognitive labour to the

abstract acceleration of the info-machine, it is also destroying the organism's sensibility by submitting this sensibility to the stress of competition and acceleration. In Guattari's parlance "chaoide" is a semiotic device that makes possible the disconnection from the pathogenic rhythm and the creation of a new concatenation between consciousness and Infosphere. Chaosmosis is the evolutionary process of recomposition that leads to the emergence of a new concatenation, and therefore to the possibility of a new sympathetic syntony of the molecules composing the social body and the flows circulating in the Infosphere.

The first step of this chaosmosis will be the disentanglement from the present stressing concatenation, the second will be the neural reframing of the relation with the infosphere. This is not a political project, as politics has broken down and is unable to deal with the process of meta-subjectivation that are implied in the chaosmosis. Guattari suggests that we must create chaoids for disentanglement, for prefiguration and re-syntonization. Chaoides have nothing to do with the sphere of will and political decision, they belong to the sphere of art, education, and therapy, where sensibility is shaped.

Paradigm shift and cultural transition

During the transition from industrial capitalism to semiocapitalism the process of subjectivation is invested by the cognitive transformation of production into immateriality. The precarization and fractalization of labour are provoking a deep mutation of the psychosphere which resonates with the technological and cultural becoming. This mutation is not a linear process, as the different levels of human activity (cultural, psychological and neural) do not change in unison, but follow different times and rhythms of transformation.

During the past decades, while the transition to semiocapitalism was underway, many authors, from many different points of view, have spoken of a paradigm shift, showing how the paradigm is changing at the epistemological, technological and economic levels of social life.

A short reminder about the most important theorizations on this point may be useful.

In his most celebrated book, *The Structure of Scientific Revolutions*, the epistemologist Thomas Kuhn defines the transition from an epistemological framework to a new one in terms of paradigm shift.[2] This concept is essential in the analysis of the transformation that has invested every sphere of theory and social practice itself in the age of transition from the sequential to the simultaneous techno-sphere.

In the book *Understanding media*, published in 1964, Marshall McLuhan already spoke of electric light as a medium which redefines the whole space of contents.

> "The instance of the electric light may prove illuminating in this connection. The electric light is pure information. It is a medium without a message… For the 'message' of any medium or technology is the change of scale or pace or pattern that it introduces into human affairs… As electrically contracted, the globe is no more than a village. Electric speed in bringing all social and political functions together in a sudden implosion has heightened human awareness of responsibility to an intense degree." (McLuhan 1964)

Electricity, then electronics: this is the technological background of the late modern transition that gives way to the general transformation of economy, social communication, and of culture.

L'informatisation de la societé, a report commissioned by the President of the French Republic Valéry Giscard d'Estaing, was published in Paris in 1977. In this book the sociologist Alain Minc and the engineer Simon Nora anticipated telematics, a major technological innovation proceeding from the intersection of telephone and computing, and predicted the coming crisis and deterioration of national sovereignty, as an effect of the globalization of political and economic information.

And Alvin Toffler, in *Third Wave*, first published in '80, forecast the overall transformation of the social sphere, as an effect of the spread of the electronic technologies in daily life and the economy.

2 "The transition from a paradigm in crisis to a new one from which a new tradition of normal science can emerge is far from a cumulative process, one achieved by an articulation or extension of the old paradigm. Rather it is a reconstruction of the field from new fundamentals, a reconstruction that changes some of the field's most elementary theoretical generalizations as well as many of its paradigm methods and applications. During the transition period there will be a large but never complete overlap between the problems that can be solved by the old and by the new paradigm." (Kuhn 1970, 85-6)

> "The Third Wave brings with it a genuinely new way of life based on diversified, renewable energy sources: on methods of production that make most factors assembly lines obsolete; on new not nuclear families; on a novel institution that may be called the electronic cottage; and on radically changed schools and corporations of the future. The emergent civilization writes a new code of behaviour for us and carries us beyond standardization, synchronization and centralization, beyond the concentration of energy, money and power." (Toffler 1980)

The paradigm shift is also crossing the scientific and epistemological space. In *The Postmodern Condition. A Report on Knowledge*, Jean-François Lyotard writes that "the status of knowledge is altered as societies enter what is known as the postindustrial age and cultures enter what is known as the postmodern age." And in the field of science and epistemology, in fact, the mechanical paradigm that has prevailed in the centuries following the Newtonian revolution is now giving way to the paradigm of uncertainty outlined by Werner Heisenberg in 1959.[3]

But the paradigm shift has to be conceived as a tendency and a possibility, not as a necessary consequence determined by the change of social and technological environment. Actually the tendency and the possibility implied in the environmental transformation are obstructed and hindered by the persistent force of the past. This is why the process of reconfiguring human subjectivity and the reconfiguration of the neuro-plastic social brain are actually asymmetrical and asynchronous. Capitalism, as the general form of the Economy, entangles and obstructs the potential developments of the social brain. If we want to understand this entanglement we have to retrace the history of the present subjectivity, and we have to analyse the various layers of its becoming, the psychic, the cultural and the aesthetic.

The concept of neuro-plasticity is an ambiguous concept, it can result into a mere re-adaptation of the neural activity to the needs of the techno-sphere and of semiocapitalism, biopolitical formatting and submission of the mind to the economic goals of cognitive labour captured and subsumed by semiocapital. But we can also think of neuro-plasticity as the chaosmotic reframing of the neural activity that makes possible the emergence of a post-capitalist paradigm that we are unable to express in conscious and rational terms, but is emerging by the chaos. From this point of view

3 Heisenberg, W. 2007. *Physics and Philosophy: The Revolution in Modern Science*. New York: HarperCollins.

neuro-plasticity means re-tuning (new syntonization) of the neuro-plastic brain with the environment that the present brain perceives and detects only as chaos.

Modern culture has conceived change in terms of history and action in terms of politics. I think we should focus on neuro-evolution and develop forms of action aimed to consciously shape it. The main task we are facing now is to find ways to consciously interact with neural evolution, and de-activate those techno-linguistic automatisms which entangle the mind's activity in the established frame of connective capitalism. We have to think in terms of meta-connectivity.

Social morphogenesis after the end of democracy

Morphogenesis is the process of becoming-form: it can be the effect of conscious and voluntary action of a subjective morpho-generator, or can be the self-organization of chaotic matter that cannot be governed by will or consciousness, the spontaneous emergence of a form that finds a way towards a new order.

Do new social forms come into existence spontaneously, as an effect of a natural process that human beings are obliged to accept and to deal with? Or do they come into existence because of a conscious act of will, as effect of a project, of a conflict, a political decision and action?

Obviously this dilemma is too simplistic: things happen in different ways, spontaneity and will are confused, chance and intentions intermingle in the historical process. But I want to know if the process of change can be managed by deliberate human action in the present conditions of crisis. My question is: can the present agony of modern capitalism, the paradoxical other face of the present triumph of capitalism, be consciously managed by political action, and turned into a new form of social existence?

Obviously political power has never been able to actually control the whole of social relationships, and Reason has never been able to reduce the infinite complexity of reality to knowledge, but in the Modern age it was possible to know and to control a relevant part of the social complexity, and Modernity can be seen in retrospect as an age of relative reducibility and governability of the social world: politics was the technique based on the

ability to know what is relevant in the overall flow of information, and the art of predicting its becoming so to govern the main events and trends.

The shift to the hyper-complex reality of the networked world has made impossible to understand and to control the relevant flows of information circulating in the Infosphere and continuously stimulating the social brain. Therefore the old art of politics is showing itself more and more impotent to predict, govern and turn collective action towards a common goal. Consequently power is less and less reliant on the possibility of government, and attempts to submit the information flows and the bodies to the model of governance.

Governance is the effect of the embedding of techno-linguistic automated devices in the continuum of social behaviour and communication. Thanks to the automation of interconnected relations, organization and order are expected to emerge from the chaotic matter of social life: biology, media, technology, economic interests, affection, and the unconscious. Life, language, production are penetrated and interconnected by a dissemination of devices (*dispositifs*) aiming to submit the linguistic behaviour to pre-conceived procedures and finalities, whose task is to make actions and enunciations predictable and manageable, and finally reducible to the overarching goal of capitalist accumulation and expansion.

In 1972 the German philosopher Jürgen Habermas and the sociologist Niklas Luhmann debated on the predictable effects of the evolution of media and of the expansion of social information.[4]

Over-simplifying their complex arguments I roughly summarize: while the optimist rationalist Habermas believes that the enhancement of human communication is destined to consolidate democracy and improve daily life, Luhmann was expressing doubts on the positive effects of the expansion of the Infosphere, and conjectured that this expansion could lead to shift the emphasis from rational political decision towards administrative processes of differentiation. Democracy therefore is not reinforced, but endangered by the expansion of the Infosphere.

In the current situation, marked by the infinite expansion of the Infosphere—particularly of economic and financial information—rational elaboration and political decision are no more within the reach of individual or social organizations. Democracy, as a result, has been replaced by automatic

4 Habermas, J. and Luhmann, N. 1971. *Theorie der Gesellschaft oder Sozialtechnologie*. Frankfurt: Suhrkamp.

procedures, by algorithms and devices for automatic selection and recombination—whose general rationale is the replication of the capitalist form.

The efficiency of the rational will and political action depends on the possibility of processing the information flows and choosing the best options. When info-flows are too fast, too dense, too compressed for rational elaboration and decision on time, then what was called politics in the Modern age becomes unable to choose and consciously generate new forms.

Neither democracy nor authoritarian power seem able to process the infinite and hyper-accelerated flow of information, so morphogenesis can no more be a process of conscious decision and elaboration, and turns into a self-regulating effect of blind emergence. The info-networked Super-organism is evolving outside the sphere of human decision and knowledge, although its evolution is affecting the human environment—sometimes in a catastrophic way.

Capitalism as Double Bind

Slavoj Žižek says that the financial collapse is not the end of the world, just the end of capitalism that we can hardly imagine. He's possibly right, but the problem is this: what if the semiotic model of capitalism –and particularly of financial capitalism—has become our only grid of perception and interaction? What if the biopolitical model of capitalism has pervaded the very fabric of social reproduction?

"The organism which destroys its environment destroys itself," Gregory Bateson said in a speech delivered at the Korzybski Memorial in the year 1970. And he also said:

> "If I am right, the whole of our thinking about what we are and what other people are has got to be restructured. This is not funny, and I do not know how long we have to do it in. If we continue to operate on the premises that were fashionable in the pre-cybernetic era, and which were especially underlined and strengthened during the Industrial Revolution, which seemed to validate the Darwinian unit of survival, we may have twenty or thirty years before the logical reduction ad absurdum of our old positions destroys us." (Bateson 1972, 451-462)

Thirty years have gone, and we have not stopped thinking in Darwinian terms of competition and survival of the fittest. Capitalism has triumphed, society is agonizing, and the planet is dragged into the agony as well. Monetarism as autonomization of the monetary function can be considered as the capitalist attempt to escape or at least defer the final collapse. In order to prolong its survival, capitalism submits social energy and particularly the general intellect to the obsession of financial stability and infinite growth of the accumulation. The relation between capital and general intellect (the living force of knowledge and the technological potency of labour) can be interpreted in terms of relation between the Form and the Content.

Just try to imagine this scenario, which is not so unlikely: the financial system of Europe totally crashes, national states stop paying wages to public workers, and all of a sudden money loses its grip on the social mind. Would our skills, our knowledge, our competences be cancelled by this sudden apocalyptic event? Not at all, of course. We would be the same as we are now. Engineers would be able to build bridges, doctors would be able to heal sick people, and poets would be able to create their imaginary worlds. Exactly like now, and possibly better.

The crumbling of the form would not affect the content.

But the agony of the capitalist form, if protracted in time will slowly but steadily dismantle the social content, and it is already doing this. The de-financing and privatization of the public school, for instance, is going in this direction. The majority of the population is marginalized and mass de-schooling results. Private schools are reducing knowledge to the idolatry of the economic dogma, technical skills are separated from social understanding and science is separated from the humanities. This is the school reform that started in 1999 with the signing of the Bologna Chart—actually it is the destruction of the legacy of the autonomy of knowledge, and of trans-disciplinary research.

The form is destroying the content. The relation between the form and content sometimes becomes pathogenic, and starts producing what Gregory Bateson named double binds.

Bateson has described this process in his studies on the genesis of schizophrenia: the context is affecting the understanding of the message, in such a way that communication itself is jeopardized at the end, because the form of interaction (medium) changes the content, or perverts the understanding of the content (meaning).

> "The more serious and conspicuous degree of symptomatology is what is conventionally called schizophrenia… The literal is confused with the metaphoric. Internal messages are confused with external. The trivial is confused with the vital. The originator of the message is confused with the recipient and the perceiver with the thing perceived." (Ibid., 261)

In situations like these the content has to be disentangled from the form, and a new form has to arise from the self-organization of the content.

If we do not manage to disentangle the potency of the new technology from the old paradigmatic framework, the effect will be catastrophic because the potency of the new technology will explode against society.

Entanglement is a concept that has nothing to do with the Hegelian contradiction. It's not a problem of opposing forces, of struggle and overpowering and overcoming (*Aufhebung*, as Hegel says). It's rather a problem of possibility contained inside a form and hindered and perverted by this form. Entanglement is not only impeaching the deployment of the contents, but also transforming, perverting the contents of knowledge.

I use the word "entanglement" in order to refer to the capture of the social process of production and knowledge and communication by the semiotic code of growth and accumulation: Marx calls this "real subsumption."

So disentanglement would be the emancipation of the content from the form which is containing it, and the full deployment of the potencies belonging to the social knowledge.

The problem of disentanglement of the content from the form can be described as a problem of schizotherapy, in the words of Felix Guattari. Schizotherapy in fact is the ability to disentangle mental contents and psychic activity from the obsessive refrains that are entangling the activity of the mind.

Generation by Schism

What is Form (*morphè*)?

For the Gestalt theorists (see: Wertheimer, Koffka) the brain perceives objects thanks to the existence of forms which are embedded in the perceptual constitution of the mind. As *Gestalt*, the Form is the condition for the differentiation of objects from the surrounding environment, and for the

interpretation of their meaning. But we can also say that Form is the semiotic pattern that our mind projects onto the world and the model for the generation of external objects. In this sense Form can also be defined as a prototype, the original in-formation which shapes matter. By this point of view we can say that Form is a general semiotizer: the paradigm that makes possible the attribution of consistent meaning to phenomena that we experience as signs.

There is a remarkable relation between the concept of "form" as semiotic generator, and Guattari's concept of "refrain". I would say that the refrain is the sensibilization of a form, the translation of a formal prototype into the sensible subjectivity.

When Guattari speaks of chaosmic spasm he is saying that the general semiotizer is no longer able to semiotize, and the social mind is deprived of the ability to process information in a consistent way. The refrain is no longer able to resonate with the surrounding info-environment, as the semiotic generator (form) is mutating, and shifting. Consequently the sensible subjectivity is unable to grasp meaning, to interact semiotically, to concatenate, and suffers of this dystonia. This is the spasm. The organism has lost the syntonic relation with the environment, the organic vibration is no more harmonically interweaving with the surrounding vibration, so the vibration gets frantic and painful.

Then a process of re-syntonization begins, and Guattari names this process chaosmosis. In the chaosmotic process forms emerge from chaos by vibratory approximation to an order which is functional and aesthetic. Functional order makes possible the manipulation of objects, while aesthetic order enables the conjunction of objects in the sensibility and sensitivity of the living organism.

In certain cases, the form, as semiotizer, can become a tangle, a generator of double binds. In these cases the Form (the *Gestalt*) is not helping to interpret and to deploy the contents of the collective mind, but it is limiting the possibility of development of the matter-content and jeopardizing the concatenation of mind and Infosphere.

When the Form destroys the contents (knowledge, skills, technology, social emotionality), the only alternative to devastation and death is disentangling the contents from the Form.

In our society Capital is the general *Gestalt* of our experience of production and circulation of things, and it is the general semiotizer. It is the source of meaning and the operational measure of those things that humans

need, and produce and exchange. Capital, as Form has become a tangle for the development of the potencies implied in the general intellect. Only the removal of this form, only the replacement of accumulation and growth by different paradigms of production and exchange can allow the general intellect to fully deploy its potencies.

From this point of view the neo-marxist emphasis on the potency of the general intellect and the incompatibility of the full deployment of the general intellect with the persisting prevailing of the capitalist form, matches the theory of paradigm shift. But the authors who have been speaking of paradigm shifts have generally forgotten to say that this shift is neither necessary nor linear. The paradigm shift is a tendency and a possibility, but in the process of social becoming this tendency and this possibility may be obstructed and hindered by the overwhelming force of the automatisms implied in the past form of subjectivity. We have to be aware of this contradiction if we want to understand the real process of social morphogenesis, in the present time, and in the present conditions.

Capitalism, as general form of the Economy is entangling the potential developments of the social brain, impeding and diverting the paradigm shift. If we want to understand this entanglement we have to retrace the history of the present subjectivity, analyzing the various layers of its becoming: the psychic, the cultural and the aesthetic layer as well.

Bateson uses the word "schismogenesis" to describe the process of differentiation internal to human groups and the generation of new levels of anthropological integration. I want to use the same word—schismogenesis—in order to describe the separation that leads to the generation of new forms.

The generation of a Form which is more likely to foster the development of the potencies of the Content can only happen by dissociation, and disentanglement of the potentiality of the content from the entangling Form. Schismogenesis means therefore, in my intention, self-organization of the contents after their dissociation from the entangling Form, and proliferation by contagion (affective, informational, aesthetic contagion) of the new Form that is generated by the schism.

In our present condition a question arises: is disentanglement still possible, when the mind of the social organism has been deeply infected by the viral proliferation of double binds? And also: what is the origin of the proliferation of double binds in the social mind?

The paradigm shift is a general tendency inscribed in the evolution of contents of knowledge, technology and social production, but this tendency is hindered by entangling forms, which act as repetitive semiotizers and generate double binds in the social mind.

In order to understand why the social mind is unable to free itself from these entangling forms of semiotization we have to analyze the cultural and psychological becoming of sensibility, and the infection of the social organism that is investing the sphere of sensibility.

CHAPTER 8

TRANSHUMAN

Humanism, Technique and Language

In *The Postmodern Condition* (1979) Jean-François Lyotard announced the decline of what he called "grand narratives", the ideological tales which played a crucial role in motivating historical action all along the modern times. I don't believe that the Lyotardian narrative on the end of narratives is true. New narratives—not less grand than the old narratives—have taken hold of the contemporary imagination. Artificial intelligence is certainly one of them. But in the same book Lyotard writes things that in my opinion are more interesting. For instance, he says that a new status and structure of knowledge appear when the technological system for production and transmission of knowledge is changed. This new status of human knowledge is questioning the distinction between human and intelligent machines.

In a collection of essays published in 1991 with the title *The Inhuman* Lyotard reflects on the blurring of the lines between humans and machines. In order to assess that the gap between human thought and artificial intelligence is unbridgeable he resorts to the metaphor of cloud: while artificial intelligence is based on rigorous consequentiality, the nature of thought, in his words, has the same indeterminability of the process of cloud formation.

Computers do not know what an event is.

"What is a place, a moment, not anchored in the immediate passion of what happens? Is a computer in any way here and now? Can anything happen with it? Can anything happen to it?" (Lyotard 1991, 118).

Using the word "inhuman" Lyotard puts on the table a much debated question: is humanism in danger in the age of intelligent machines?

"Man is the measure of all things" this sentence, attributed to the Greek philosopher Parmenides, reminds of the words of Confucius who believes that: "It is man that makes truth great, not truth that makes man great."

The meaning of Parmenides' sentence (and also of the Confucius's) can be better appreciated if we refer to what Heidegger writes in the first page of his *Letter on Humanism*: "Language is the house of being. In this home human beings dwell. Those who think and those who create with words are the guardians of this home. Their guardianship accomplishes the manifestation

of being insofar as they bring this manifestation to language and preserve it in language through their saying…"

And further in the same text: "Ek-sistence can be said only of the essence of the human being, that is, only of the human way 'to be.'"

As far as our experience shows, only the human being is admitted to the destiny of ek-sistence. "As ek-sisting, the human being sustains Da-sein in that he takes the Da, the clearing of being, into "care." But Da-sein itself occurs essentially as 'thrown.' It unfolds essentially in the throw of being as a destinal sending". (Heidegger 1949)

The relation between language and technique is a good viewpoint for questioning humanism today, according to Heidegger. In his opinion, in fact, technique has become the true subject of language, the concatenation that utters enunciations. The technological dependence of language, and the incorporation of technical machines into the very generation of language are changing the nature of human-ness as never before.

The Heideggerian word "Da-sein" can be translated as "being there", and means being in a situation of singularity: being as an event. Existence is incidental (unnecessary and non compatibilized) condition of eventuality, and the language of existence is the language of conjunction, the un-repeatable meeting between singularities.

The submission of language to technical rules of compatibility has transformed the linguistic performance into connection. In this transition from the conjunctive to the connective mode of language humanism is at stake.

Humanism as indetermination

The impassive point of view of Nature, the emotionless flowing of an-historical time is the point of view of the Old Testament. The impassive God who has created man without feeling his suffering is playing a game that has nothing to do with the earthly game of the women and men. God and Satan feel no empathy at all for the pawns of their chess game—as poor Job learns at his own expenses.

The essential innovation of the New Testament is here: God becomes a Man, and comes on Earth to feel and suffer the same passions and pains that human beings are accustomed to feel.

The passionless Time of God is interrupted, broken, and interweaves with the time of Man. This is why the Modern Humanist revolution happens in the space of Christianity: because Christianity and Humanism are both conceiving History in a temporal sphere which is not the sphere of the Eternal Truth, of the impassible Nature. The suffering of man, not the point of view of impassive Nature, is the foundation of truth, as Confucius said too.

It is not truth that makes man great, but man who makes great the truth.

The foundations of Modern civilization are to be found right here: in the untwisting of a separated sphere—the sphere of human history and of human sociality—which is not compliant with the eternal rules of the Universe. Just because, thanks to the Scientific Revolution, we know the mechanical laws that govern the planets, the sky, and the stones, we can disentangle a different law for the human existence, based on love and compassion. The etymology of the word "compassion" is *cum-patiri*, i.e., suffering together.

In the humanist sphere of Modernity, after the separation of the Natural time ruled by the unchangeable laws of Physics, and the Historical time ruled by the will of the Prince or by democratic will, the establishment of the political law is based on the understanding of human interests and passions. The modern civilization is based on the idea that the social world has not to be compliant with the laws of the Universe, but with the laws of compassion: mutual understanding, solidarity.

In *Oratio de dignitate homini*, Pico della Mirandola is explicit on this point: God has created Man in a way that is different from the rest of the Universe. Universe is built according to precise rules, Man has no rules built in.

> "We have given to thee, Adam, no fixed seat, no form of thy very own, no gift peculiarly thine, that thou mayest feel as thine own, have as thine own, possess as thine own the seat, the form, the gifts which thou thyself shalt desire. A limited nature in other creatures is confined within the laws written down by Us. In conformity with thy free judgment, in whose hands I have placed thee, thou art confined by no bounds; and thou wilt fix limits of nature for thyself. I have placed thee at the center of the world, that from there thou mayest more conveniently look around and see whatsoever is in the world. Neither heavenly nor earthly, neither mortal nor immortal have We made thee. Thou, like a judge appointed for being honorable, art the molder and maker of thyself; thou mayest sculpt thyself into whatever shape thou dost prefer. Thou canst grow downward into the lower

> natures which are brutes. Thou canst again grow upward from thy soul's reason into the higher natures which are divine."

Modern History takes place in this space of indetermination, and therefore of freedom: this freedom is not lawless, but human laws are a human construction, not the reflection of natural rules imposed by God.

Pico's vision reflects the humanist approach to the problem of freedom and here lies the thread that links Humanism and Enlightenment. In the humanist space of indetermination human reason creates its own rules, and the Universality of moral and political laws is based on human Reason, not on Natural law.

Dismantlement of social civilization

Socialism, the final point of arrival of the Modern construction of a Humanist civilization, can too be considered as a logical development of the humanist thread. Humanists affirmed the autonomy of human space from the impassible laws of Nature, then Enlightenment acted as rational regulator of this autonomous human space. Socialist thought of the nineteenth century has been the affirmation of a possibility of justice and equality, which is not based on nature, but on human reason, and also on compassion, the ability to share the same feelings, the same suffering and the same goals.

As a result of these progressive developments, Modernity culminated in the creation of a form of Social Civilization, a civilization in which the common needs prevailed on the affirmation of individual interests. The Social Civilization was aimed to prevent (though not always successfully) a war of everybody against everybody thanks to the establishment of a non-natural law.

But this construction that I name Social Civilization, is crumbling today under the attack of techno-financial capitalism, which comes undercover of social-Darwinism. The crisis of the social civilization is leading to the crisis of Humanism itself, as it is cancelling the humanist distinction between the kingdom of Nature and the republic of men, and consequently the distinction between History and Evolution.

Social-Darwinists say that benevolent principles cannot stop the affirmative strength of the evolution, in the social as in the natural sphere. If Natural

evolution is marked by the survival of the fittest in the dangerous environment of the planet, Historical evolution is not exception. Therefore it is useless to resist the prevailing force of the fittest for the sake of the socially weak people.

Implicitly reclaiming the cancellation of any distinction between social life and nature, the philosopher and economist Friedrich Hayer asserts that Adam Smith's Invisible Hand is regulating the market as a natural force.[1]

According to the idea that the fittest survives, and the unfit are doomed to fail, the Neoliberal ideology obliterates the Humanist distinction between the sphere of Natural laws and the sphere of moral reason. Human relations—namely economic relations—follow natural laws of self-regulation, so there is no need for any special regulatory intervention by the National State or any other political organization.

No special privilege is assigned to the human kind, as the animal spirits of the economic agents are the only effective regulator of economic life, and therefore of social life as a whole.

The unleashing of the animal spirits of capitalism and the resulting dismantlement of Social civilization' institutions, two processes that have been underway in the last thirty years on a global scale, prove that Reason and Law are a frail protection against the unbridled violence of capital.

It's time to acknowledge that social morality and the universal ethical law of the Enlightenment will never be efficaciously reinstated against the overwhelming force of corporate interests, as the process of globalization has actually swept away almost all of the regulations intended to protect human dignity and natural environment.

The worker movement and the democratic forces have been too confident in the effectiveness of reason and lawfulness. From a materialistic point of view we must finally understand that only the organized force of society can resist to the organized corporate force of individual greed. Problem is that it is not easy to find out what force means in the social field.

Worker's movement has tried to fight against capitalism with armed revolutions, but this has not been worked well on the long run, as we know. The Socialist State and the Red Army have taken the place of oppressors, and in the end the majority of people have preferred corporate exploitation to the dictatorship of the communist state.

1 Hayek, F. 1949. *Individualism and economic Order*. London: Routledge.

The crisis of humanism starts when the indetermination that Pico is talking about in his *Oratio* comes to an end because of the establishment of a determinist rule inside the generation of language itself. If human liberation from the natural domination started with the establishment of the technique, and with the opening of the historical space of self-rule, the technical development itself is creating the conditions for a comeback of determinism in language and social exchange. God gave humans the freedom of defining themselves, Language has been the space of this self-definition, and technology has been the instrumentation for making that freedom effective.

But now we are witnessing a paradoxical reversal, as Technology is taking the place that the Humanistic God did decide to leave empty. Technology is taking the place of the determinist God that God decided not to be, as technology is transforming language into a chain of automatism, and is therefore cancelling the indetermination which was the condition of possibility of self-definition, of freedom.

Heidegger wrote that Language is the house of being, but he also wrote that language belongs more and more to the Technique. When Language is reshaped by the connective technology, then the linguistic creation of being comes to be regulated by the mathematical chain of algorithms: event and being diverge, and singularity is cancelled.

In this de-singularization and dis-eventualization of being Heidegger sees the advent of Nihilism, as the final essence of modernity

> "humanity sets in motion, with respect to everything, the unlimited process of calculation, planning, and breeding. Science as research is the indispensable form taken by this self-establishment in the world; it is one of the pathways along which, with a speed unrecognized by those who are involved, modernity races towards the fulfilment of its essence." (Heidegger 2002, 71)

Humans have started the process of mathematization of language and this process is going to cancel the possibility of getting free from the automatic chain of computational language. The space of Being, that God decided to deliver to men as an empty space, is now filled by the generative power of the technosphere, so that digital convention becomes the "nature" of language, and the digital nature of language halts the history of humanist history, which means the History itself.

Evolution is back, and it takes all the place of the no more humanist human becoming.

History and Evolution

How can we distinguish the concept of evolution from the concept of history? Let's say that it's all about scale: space scale, and time scale. We do not speak of history when we think of the Solar system, and the inter-galactic spaces, because the spatial scale is out of the human reach. We don't speak of history when we refer to the atoms and the sub-atomic particles, because these are out of the reach of political action. Obviously extraterrestrial events can interfere with history. A meteorite destroying the city of London would certainly have historical effects, but it would not be an historical event in itself.

The same can be said about the temporal scale of events. We are accustomed to think in terms of historical time when the rhythm of events can be scrutinized by the rational mind, and therefore can be influenced by the political will.

Long term transformations of the Earthly surface are out of historical reach, although we can act historically and politically on the carbon emissions, and in the long run we are influencing the global temperature. Micro-temporal events are out of the sphere of human knowledge and control.

Only events and bodies that are not too large or too small, not too fast or too slow to escape to human grasp can be object of historical action and political will. What is too large or too small, too fast or too slow for being visible and perceivable and manageable belongs to the sphere of evolution, not of history.

Scientific thought and technological change gave humans the ability to deal with those spatial and temporal dimensions that cannot be scrutinized by the naked eye, and cannot be checked and subjected to rational discussion and critical decision. This is why we are exiting the dimension of history and our actions have to face more and more an evolutionary appreciation.

Think about the relation between political decision and financial capitalism. Thanks to the electronic transfer of digital data in the global networks, markets have been hijacked by trading robots, many so self-directed that humans can't predict what they'll do next. High-speed traders have overtaken

the stock market because they can trade in and out of stocks thousands of times per second. According to Scott Patterson[2] the new financial players moving into artificial intelligence are on the verge of tipping the entire system toward a global meltdown that could happen in minutes—maybe even seconds. Fiber-optic cables circle the Earth, linking all financial markets at ever-higher speeds in the global Algorithm race. Making political decisions take days, sometimes months, and implementing political decisions in the dense fabric of social life takes years. Social change happens in a dilated time, where actions are necessarily slow as they have to take into account cultural resistance and so on. The political resistance of the movements is based on the slow time of discussion, persuasion and social organization. Financial transfers, that can overnight jeopardize social life and change the political landscape, happen in the time space of nano-seconds. This is why the synergy of financial capitalism and digital technology has broken the political defenses against trans-human factors of change, and has propelled social life in a time dimension that is out of control.

In the meantime finance, no more consigned in the margins of economic life, is the core of the creation (and destruction) of wealth. According to Christian Marazzi:

> "There is a tradition, both in orthodox Marxism and Keynesianism that considers finance as a deviation from real productive capital. I don't think that we can talk about finance in this way anymore. This doesn't mean that finance has become sexier. Now it is as painful and awful as it's always been. This is not the point: the point is that there is a transformation of the categories used in the 20th century. For instance it is difficult today to make a distinction between profit and rent, there is a becoming rent of profit, the dividing line between them is falling apart, but this is not because capital is not accumulating or growing anymore and so everything is just speculation, but because this is a new mode of production in which the relation between capital and labour has changed." (Marazzi 2007)

Inserting nano-temporal events in the very texture of the process of social reproduction, financial capitalism is transforming our perception of time, and is forcing us to abandon the historical temporality in favour of an evolutionary

2 Patterson, S. 2012. *Dark Pools: High-Speed Traders, A.I. Bandits and the Threat to the Global Financial System*. New York: Random House.

way of perceiving and expecting—and simultaneously is forcing us to abandon the political attitude and the expectation that human will can change something. The perception of time is shifting from the historical to the evolutionary mode. Obviously someone could object that technical devices and financial procedures are the product of human will and of social interests, which is true. Nevertheless, once the effects of voluntary action condense into automatisms, they take the form of a necessary concatenation that conscious will is no more able to change, contrast, or undo. The process of capitalist abstraction has progressively eroded the potency of concrete activity: digital financialization is the final point of this disempowerment and the economic framework of a biopolitical transformation that is mutating the cognitive activity and is going to notch the neural substratum itself. This transition from the sphere of historical humanism to the sphere of evolutionary automatism can be described as the building of a sort of neuro-totalitarianism. The cognitive mutation induced by the digital technology is the pathway in that direction.

Transhuman utopia

At the end of the nineteenth century the Russian evolutionist Nikolay Fedorov anticipated many of the themes that will be developed in the first decades of the twentieth century particularly in Russia and Italy, the two most backward countries of the Continent, where the cult of Future not surprisingly excited the artistic imagination. The utopia of Fedorov is based on the assumption of a boundless perfectibility of the human race, and is aimed to open the doors of the future to space colonization, revival of the dead and immortality.

Persuaded that the evolutionary process is directed towards an increasing intelligence, and that human intelligence can progress with no limitations, Fedorov set the goal of death abolition as the common cause of the future mankind.

Human beings, in Fedorov's view, are dying because so far they have been unable to regulate the psychophysiological processes of their organisms. The rationalization of nature and the medical regulation of viruses and epidemics will give humans the ability to get free from the "error" of death.

The energy of the Cosmos—in Fedorov's utopia—is to become the inexhaustible source of human life and historical progress.

The Cosmist philosophy of Fedorov is only the first of many transhumanist utopias which have punctuated the twentieth century, and often have turned into dystopian nightmares.

Scientists often expressed their concern about the ambiguous feature of techno utopianism. Norbert Wiener, who coined the word cybernetics and can be considered the father of computational technology, was conscious of the danger intrinsic in the thinking machine, as he knew that computers might step beyond the reaches of human control, or become the tools of greedy capitalists. Therefore he tried to create the conditions for independent institutions of scientists.[3]

Utopia and dystopia grow together, in the field of technological innovation, particularly when the faculty of cognition is challenged by the possible developments of the computing machine.

When, at the turn of the century the synergy of biotechnology and Artificial intelligence opened the way to unprecedented opportunities of replacement of the organic body with the synthetic organism—when miniaturization of digital devices opened the way to nano-technology and therefore to the insertion of technical automatisms in the very fabric of life—utopia and dystopia came closer, and almost melt in the transhuman imagination of the future. Two names exemplify the discussion about two diverging directions and opposing possibilities implicit in the transhuman technological imagination: the name of Ray Kurzweil and the name of Bill Joy.

Computer scientist and co-founder of Sun Microsystems, Bill Joy is the author of an important article that was published by the magazine WIRED in the year 2000. The article, titled *Why the future doesn't need us* raises critical questions about the unintended consequences of genetic engineering and nano-technology, whose imminent deployment can pervade the natural environment, and the human brain itself.

Bill Joy begins talking about his ethical concerns:

> "From the moment I became involved in the creation of new technologies, their ethical dimensions have concerned me, but it was only in the autumn of 1998

3 "We had dreamed for years of an institution of independent scientists, working together in one of these backwoods of science, not as subordinates of some great executive officer, but joined by the desire, indeed by the spiritual necessity to understand the region as a whole, and to lend one another the strength of that understanding." (Wiener 1948, 9)

that I became anxiously aware of how great are the dangers facing us in the twenty-first century. I can date the onset of my unease to the day I met Ray Kurzweil, the deservedly famous inventor of the first reading machine for the blind and many other amazing things…

Ray and I were both speakers at George Gilder's Telecosm conference, and I encountered him by chance in the bar of the hotel after both our sessions were over. I was sitting with John Searle, a Berkeley philosopher who studies consciousness. While we were talking, Ray approached and a conversation began, the subject of which haunts me to this day…

I had missed Ray's talk and the subsequent panel that Ray and John had been on, and they now picked right up where they'd left off, with Ray saying that the rate of improvement of technology was going to accelerate and that we were going to become robots or fuse with robots or something like that, and John countering that this couldn't happen, because the robots couldn't be conscious…

While I had heard such talk before, I had always felt sentient robots were in the realm of science fiction. But now, from someone I respected, I was hearing a strong argument that they were a near-term possibility. I was taken aback, especially given Ray's proven ability to imagine and create the future. I already knew that new technologies like genetic engineering and nanotechnology were giving us the power to remake the world, but a realistic and imminent scenario for intelligent robots surprised me."

Then he comes to the crucial point: the complexification of technology will lead to a situation where humans can no more control the product of their own invention:

"Eventually a stage may be reached at which the decisions necessary to keep the system running will be so complex that human beings will be incapable of making them intelligently. At that stage the machines will be in effective control. People won't be able to just turn the machines off, because they will be so dependent on them that turning them off would amount to suicide.

On the other hand it is possible that human control over the machines may be retained. In that case the average man may have control over certain private machines of his own, such as his car or his personal computer, but control over large systems of machines will be in the hands of a tiny elite."

After reading the Joy's article I decided to know also the opinion of Kurzweil, the celebrator of transhuman technologies, so I read his book *The Singularity is near*. The book is full of interesting information about techno-scientific projects, but it's hard to take it seriously from a philosophical point of view. Starting from the ascertainment that technological productivity is going faster and faster, and the consequential consideration that the process of miniaturization is going to accelerate in the next decades, Kurzweil comes to the conclusion of an exponential nature of the process of creation of the devices needed for the replacement of the perishable organic tissues of the human body and of the human brain with more perdurable stuff.

> "The computational power to emulate the human brain approaches—we are almost there with supercomputers—the efforts to scan and sense the human brain and to build working models and simulations of it are accelerating. […] Once the nanobot era arrives in the 2020s we will be able to observe all of the relevant features of neural performance with very high resolution from inside the brain itself. Sending billion of nanobots throught its capillaries will enable us to non invasively scan an entire working brain in real time. […] Nanotechnology promises the tools to rebuild the physical world our bodies and brains included, molecular fragment by molecular fragment, potentially atom by atom. We are shrinking the key feature size of technology in accordance with the law of accelerating returns, at the exponential rate of approximately a factor of four per linear dimension per decade." (Kurzweil 2005, passim)

Science fiction literature has displayed already the possibility of such scenario, and I take science fiction quite seriously because I think that SF writers have been many times the best detectors of tendencies and possibilities. But science fiction writers are not unanimously enthusiastic or optimist about the artificial reproduction of the human brain. Downloading human brains can lead to very horrific scenarios, as is shown in the books of cyberpunk writers.

Beyond that a few details are not perfectly clear in the Kurzweil promise of eternal happy life. Yes, we agree that the upgrading and enhancement of technical bio-genetic devices are exponentially accelerating, and we also agree that the miniaturization is exponentially accelerating too. So in a few decades we'll be able to replace human bodies with non perishable parts. We agree that this is going to be (and already is) a formidable improvement for

medical science. Nobody can underrate this prospect, but the philosophical implications of this hypothesis are not obvious.

The transhuman ideology is essentially trying to convey the technical enhancement into a unified project, which is explicitly declared by Kurzweil: upload the structure of a person's mind and download it in a trans-biological body. Once non biological human intelligence will be implemented, the nature of human life will be radically altered.

> "Understanding the methods of the human brain will help us to design similar biologically inspired machines. Another important application will be to actually interface our brains with computer, which I believe will become an increasingly intimate merger in the decades ahead…
> Uploading a human brain means scanning all of its salient details and then reinstating those details into a suitably powerful computational substrate. This process would capture a person's entire personality, memory, skills, and history. If we are truly capturing a particular person's mental processes, then the reinstantiated mind will need a body, since so much of our thinking is directed toward physical needs and desires." (Ibid.)

This project is not so attractive from an existential point of view (just imagine the infinite sadness of those decrepit minds contained by young-looking nimble bodies), but in addition Kurzweil's theory is downplaying some philosophical implications concerning the concept of "self".

In the book *The Ego Tunnel* Thomas Metzinger asks a question: "Who is the feeler of your feelings and the dreamer of your dreams? Who is the agent doing the doing, and what is the entity thinking your thoughts? Why is your conscious reality your conscious reality?" (Metzinger 2009, 5).

These are questions that cannot be dismissed. Before we can download the self we have to know what the self is. According to Metzinger self is a false definition, a sort of illusory projection of consciousness.

> "Conscious experience is like a tunnel. Modern neuroscience has demonstrated that the content of our conscious experience is not only an internal construct but also an extremely selective way of representing information. This is why it is a tunnel: what we see and hear, or what we feel and smell and taste, is only a small fraction of what actually exists out there. Our conscious model of reality is a low

> dimensional projection of the inconceivably richer physical reality surrounding and sustaining us. Our sensory organs are limited: they evolved for reasons of survival, not for depicting the enormous wealth and richness of reality in all its unfathomable depth." (Ibid.)

Here we find again the problem of individuation that Simondon has examined in depth. Kurzweil is ignoring the problem, and this makes his proposal quite weak from the philosophical point of view regardless of the reliability of his technological predictions.

The self as access to the register of time

The crucial prediction of Kurzweil is named "Singularity", a word that he borrows from John von Neumann, who in the '50s spoke of "ever accelerating process of technology and changes in the mode of human life, which gives the appearance of approaching some essential singularity in history of the race beyond which human affairs, as we know them, could not continue."

The choice of the word "Singularity" (with capital S) by Ray Kurzweil is quite controversial, in my view. Actually the philosophical meaning of the word "singularity" (with lower s) refers to the uniqueness and unrepeatability of an event. This is the way Guattari uses the word "singularity" inscribing this word in a philosophical thread that remounts to Henry Bergson.

In *Creative evolution*, a book published in Paris in the year 1907, Henry Bergson deals with the philosophical matter that Kurzweil is evading, particularly the problems of mechanicism and finalism in the evolution of nature and in the emergence of consciousness. Everything in Kurzweil's predictions and theories may be right, but his post-biological transhuman construct is forgetting something important about consciousness, which is duration, existence in time. Once more we resort to the concept of ek-sistence. In Heidegger ek-sistence implies the "Da", that means presence in space, but also presence in time: being here, now. Bergson quotes Laplanche in order to define a mechanical vision that is similar to the vision of Kurzweil.

> "An intellect which at a given instant knew all the forces with which nature is animated, and the respective situations of the beings that compose nature—supposing

> the said intellect were vast enough to subject these data to analysis—would embrace in the same formula the motions of the greatest bodies in the universe and those of the slightest atom: nothing would be uncertain for it, and the future, like the past, would be present to its eyes." (Laplanche apud Bergson)

Problem is that the perfection of such a mechanist reduction does not grasp the situationality of existence, and therefore does not grasp consciousness and existence as singularity (with lower "s").

> "The essence of mechanical explanation, in fact, is to regard the future and the past as calculable functions of the present, and thus to claim that all is given. On this hypothesis, past, present and future would be open at a glance to a superhuman intellect capable of making the calculation. Indeed, the scientists who have believed in the universality and perfect objectivity of mechanical explanations have, consciously or unconsciously, acted on a hypothesis of this kind." (Bergson 1911, chapter 1)

Computation can enable the perfect reproduction of a body, and also (who knows?) the perfect reproduction of a brain. But computation is missing the relation between the construct and the environment, and is missing the process that Deleuze and Guattari name "becoming other", and Heidegger names "being towards death" (*Sein-zum-Tode*) of existence. Computation is missing duration, and the living perception of time.

According to Bergson, "The universe endures. The more we study the nature of time, the more we shall comprehend that duration means invention, the creation of forms, the continual elaboration of the absolutely new." (Ibid., p. 7)

And also:

> "Repetition is therefore possible only in the abstract: what is repeated is some aspect that our senses, and especially our intellect, have singled out from reality, just because our action, upon which all the effort of our intellect is directed, can move only among repetitions. Thus, concentrated on that which repeats, solely preoccupied in welding the same to the same, intellect turns away from the vision of time. It dislikes what is fluid, and solidifies everything it touches. We do not think real time. But we live it, because life transcends intellect… Wherever anything lives, there is, open somewhere, a register in which time is being inscribed." (Ibid., 11)

Bergson is speaking of a register where life is recorded, where time is inscribed. How can we be in touch with the register of time, how can we feel the flowing of living matter? Memory is our access to the register of time, and as everybody knows memory is not a regular, fixed, repeatable, computable re-enactement of an event, of a series of event. Memory is the re-creation, the re-imagination of a past that is continuously changing as long as we distance ourselves and our viewpoint changes. Memories can be simulated, technically produced and tehnically inserted into a human brain, like happens to the replicant Rachel in *Blade Runner*. But living memory, the changing memory that perceives the duration of time as marker of the self as becoming can hardly be technically reproduced.

Discrete continuum sensibility

Techno-trans-humanism is based on the assumption that the miniaturization and extreme improvement of the digital circuits of the intelligent automaton will make possible the final replacement of the frail human body with a more enduring android whose physical and mental feature will be undistinguishable from the human itself.

May be. My question is not about the technical feasibility of a perfect simulacrum, but about the emergence of the "self", I mean the self-perception of a conscious singularity.

The sense of duration is the essential mark of the conscious self, and the irreducibility of existence to algorithmic recombination is based on this. The sense of duration cannot be simulated in an artificial construct perfectly reproducing the features of the human body, because the sense of duration is not behaviour, but suffering, consciousness of the decomposition of the organism, consciousness of death.

Here we are confronted with one of the fundamental questions of philosophy, the infinite divisibility of matter and the human impossibility to think infinity. Zeno's Paradoxes, particularly the so called Dichotomy paradox (*That which is in locomotion must arrive at the half-way stage before it arrives at the goal*) are essentially dealing with this problem that during the centuries philosophers, physicists and mathematicians have repeatedly tried to solve without really dissolving it.

The mathematical concepts of "discrete" and "continuum" are a modern reformulation of the same paradox. If matter is infinitely divisible, how happens that we experience material things as continuum?

There is not really an answer to this question, because existential experience and logical thinking do not belong to the same kingdom of being. While logical thinking is timeless, experience happens in time.

In *Godel Escher Bach* (New York: Basic Books, 1979) Douglas Hofstadter argues about Artificial Intelligence and the relation discrete-continuum starting from some mental constructions that are logically impossible, but nevertheless exist, like Escher's drawings.

In the *Introduction* of the book Hofstadter posits the problem of the relation between computers consciousness and unconsciousness, and declares that the main goal of his book is questioning the unbreachable gulf between the formal and the informal.

> "Computers by their very nature are the most inflexible, desireless, rule-following of beasts. Fast though they may be, they are nonetheless the epitome of unconsciousness. How, then, can intelligent behaviour be programmed? Isn't this the most blatant of contradictions in terms?… It is not a contradiction at all. One of the major purposes of this book is to urge each reader to confront the apparent contradiction head on, to savour it, to turn it over, to take it apart, to wallow in it, so that in the end the reader might emerge with new insights into the seemingly unbreachable gulf between the formal and the informal, the animate and the inanimate, the flexible and the inflexible." (Hofstadter 1979, 26)

The problem that Kurzweil has not elaborated is here on the table. How can we build the animate starting from the inanimate, how can we build the flexible starting from the inflexible? According to Zeno it is impossible, although in our daily experience we are walking, and moving. That means that the jump from the discrete to the continuum is possible, although unthinkable. What is the quantum leap making possible the transformation of an assemblage of nano-devices into a sentient organism? I would say that this quantum leap, this transfer from a dimension to the other dimension is sensibility, the faculty to sense own sensing. Can an artificial construct sense its own sensing?

> "This is what Artificial Intelligence research is all about. And the strange flavor of AI work is that people try to put together long sets of rules in strict formalisms which tell inflexible machines how to be flexible… The flexibility of intelligent machines comes from the enormous number of different rules, and levels of rules. The reason that so many rules on so many levels must exist is that in life a creature is faced with millions of situations of completely different types." (Ibid.)

Hofstadter's answer to the previous question (can an artificial construct sense its own sensing?) is obviously: yes and not. Yes in theory, as the logical impossibility can be overcome by the quantum leap of sensibility. Not in practice, because in life a creature is faced with millions of situations of completely different types, and sensibility is in context, in every possible context it is differently sensing. Therefore the building of an artifact which can be as flexible as a living and sentient organism—is an infinite task. And infinite tasks cannot be accomplished.

The jump from discrete to continuum is unthinkable, but we, albeit composed of discrete matter (atoms of non living matter) nonetheless live and think and feel in a continuum way.[4] Why so? Just because the dimension of existential experience and the dimension of logical thought are placed on different levels and cannot be fully translated, or made compatible. Therefore, as Hofstadter writes: "The nervous system is certainly not a discrete state machine… One cannot expect to be able to mimic the behaviour of the nervous system with a discrete state system." (Ibid., 598).

One may describe the nervous system in terms of particules, of discrete building blocks (neurons) giving birth to cognitive processes via concatenation, but this description would be less accurate than a description in terms of waves, interactions and context related reconfigurations. The synapsis may

4 "We read about DNA and genetic engineering and sip our coffee. We seem to have reconciled these two inconceivably different pictures of ourselves simply by disconnecting them from each other. We have almost no way to relate a microscopic description of ourselves to that which we feel ourselves in quite separate compartments of our minds. Seldom do we have to flip back and forth between these two concepts of ourselves, wondering how can these two totally different things be the same me? Or take a sequence of images on a television screen which shows Shirley McLaine laughing. When we watch that sequence, we know that we are actually looking not at a woman, but at sets of flickering dots on a flat surface. We know it, but it is the furthest thing from our mind. We have these two wildly opposing representations of what is on the screen, but that does not confuse us. We can just shut one out, and pay attention to the other—this is what all of us do. Which one is more real? It depends on whether you're a human. A dog, a computer, or a television set. One of the major problems of Artificial Intelligence research is to figure out how to bridge the gap between these two descriptions." (Hofstadter 1979, 285)

be described as a connection, but this would not be perfectly accurate, as synapses are vibratory processes of approximation to a never achieved stability. Therefore cognitive activity should not be defined in terms of connectivity, but in terms of vibrating conjunction. This is possibly the meaning of the expression "inner touch" that Heller-Roazen defines consciousness in his book (2007).

Diane Ackerman, in *The Natural history of the senses* (New York: Vintage, 1991) says that awareness is essentially proprioception (perception of ourselves, in a physical, bodily sense), and I comment that consciousness is vibratory because it is the perception of an ever changing conjunctive concatenation: the conjunction of brain and the body, but also the conjunction of the body-brain and the matter that is entering the physical composition of the brain, and, on the other side, the conjunction of the body-brain and of the environment in infinite variation.

> "Consciousness is a very special phenomenon, because it is part of the world and contains it at the same time. All our data indicate that consciousness is part of the physical universe and is an evolving biological phenomenon. Conscious experience, however, is much more than physics plus biology—more than a fantastically complex, dancing pattern of neural firing in your brain. What sets human consciousness apart from other biologically evolved phenomena is that it makes a reality appear within itself. It creates inwardness; the life process has become aware of itself." (Metzinger 2009, 15)

Essential to inwardness is time, perception of the ongoing irreversible dissolution of the self. Heidegger calls it "being towards death" (*Sein-Zum-Tode*), and speaks of the *angst* that comes with it. This angst that has no object is not the perception of a danger, but the constant consciousness of a process of self-consumption. In this *angst* (which is a condition of joy not less than a condition of pain) resides the source of the aesthetic desire. The aesthetic desire is not an absence, is not the lack of, but the vibrational emergence of a syntony, of a conjunction.

CHAPTER 9

IN THE HORIZON OF THE MUTATION

> "The history of Western civilization is a history of creeping abstraction. Financial capitalism means essentially submission of social life to the firm regulation of abstract calculation.
> Everyday, fifty times the amount of total GDP is traded on financial markets around the world. If there is one thing we can learn from the current global economic mania, it is that capitalism cannot help itself. It operates by its own logic. It has to think short term. And so we now live in a short-term civilization.
> A decade ago, Athens was the centre of a global celebration of Olympic triumph. Look at it today. Heroin, the drug of depression, has taken over the streets. Cocaine, the drug of success, is moving south and east...
> What can be said of a civilization where oil spills can yield a profit and freestanding forests become a detriment to economic growth? What can be said of a world where the response to dwindling fish stocks is bigger nets and bigger boats? In a time of unprecedented human wealth, we now face the unprecedented threat of global ecological collapse.
> We need to ask ourselves how our understanding of household management got so abstracted from reality."[1]

The thread that I have been unrolling all along this text is the mutation of sensibility in an age of creeping abstraction, and the dissonance and pain that this mutation is bringing about. However, I would also like to offer some keys for the imagination of a line of escape, starting from the investigation of the relation between aesthetic and political strategy.

Aesthetics and politics are not to be linked with an act of decision and will, like the philosophy of "engagement" proposed in the late Modern age. They are linked because the techno-cultural mutation is affecting cognition, affection, sensibility, and because art is involved in the Mediascape, and consequently involved in the research of forms of autonomy from the (colonized) mediascape.

1 *Adbusters Magazine*, Vancouver, Summer 2013.

The history of the twentieth century art has been expressly dealing with abstraction: sometimes artists have flanked the abstraction process, sometimes they have tried to withdraw, sometimes they have fiercely reacted, and have reclaimed the body, the eroticism, the irregularity and the dream as possible antidote to the cold poison of abstraction.

Semiocapitalism has captured and exploited the energy coming from sensibility and from rebellious art, but simultaneously it has transferred this energy into the abstract dimension of market, design and virtual technology.

In the last chapter of this text I want to envisage what the next game will be. Many signs are suggesting that the game of progressive humanism is over, and connective abstraction has recoded language, and frustrated any resistance ad any expectation of a possible reversal of the present trend.

A mutation is underway, as I have tried to argument in the previous parts of this text, and the mutation cannot be resisted, cannot be reversed. Resisting a mutation, refusing to acknowledge the effects of a mutation implies self-marginalization and inability to understand the ongoing transformation and to interact with those who are affected by it.

> "No age lets itself be done away with by a negating decree. Negation merely throws the negator off the track. Modernity requires, however, in order, in the future, for it to be resisted in its essence and on the strength of that essence, an originality and breadth of reflection for which, perhaps, we moderns can prepare somewhat, but over which we can certainly never gain mastery." (Heidegger 2002, 73)

The mutation has to be interpreted, so that the conscious and sensible organism may find new ways toward autonomy and self-deployment—in the field of aesthetics, of ethics and politics.

Revive the intensity of bodily sensibility, and disentangle the potency of the general intellect from the techno-economic apparatus—these are the cultural and political tasks of the future, and they are narrowly linked.

How can we successfully accomplish this task? How can we come up to this prospect?

In the last page of the issue of *Adbusters* Summer 2013 there is a beautiful image, and a text by Oscar Niemeyer that reads: "I am not attracted to the right angles or to the straight line, hard and inflexible, created by man. I am attracted to free-flowing, sensual curves. The curves that I find in the

mountains of my country, in the sinuousness of its rivers, in the waves of the ocean and on the body of the beloved woman."

The error, the dissonance, the excess: this is the starting point. But we need to understand what will be the landscape of the next game, we need to imagine what will be the horizon of the next evolutionary step. Therefore I'll try to define the present form of capitalism, then I'll try to describe the mutation that capitalism is producing in the global Mindscape, and finally I'll try to outline a methodology for disentanglement.

We are stupid then we'll die

During the last fifteen years a wide social movement has questioned capitalism absolutism: protests, demonstrations, political actions have tried to stop the trend towards the devastation of the social civilization that we have inherited from the past.

Since November 1999, when the World Trade Organization Summit was disrupted by hundred thousand activists and workers, a worldwide movement of protest has spread, notwithstanding the violent reaction of the armed forces of the national states (the national state, in fact, has lost any function and sovereignty, except the repression of social unrest). After the financial collapse of 2008, a new wave of movement against capitalist absolutism has spread in Europe, United States and elsewhere.

Regardless their dimension, social extension, and moral prestige, these movements have been totally ineffective. Not one of the devastating corporate projects has been stopped, not one of the cuts in the social welfare has been prevented.

Why so?

I see two reasons of the present impotence of social movement.

The movement is strong in the streets but unable to attack the economic interests of corporations, because the precarization of labour has destroyed solidarity at the level of production, and solidarity is the only material force that can oppose the material force of corporate interest.

Secondly, the abstract feature of financial capitalism is unattainable by the concrete forms of social action.

What, then?

The effects of capitalist absolutism are already showing in the form of a multiple catastrophe: in the field of the environment, social welfare, education, unimaginable havoc and unspeakable suffering are already underway.

"We are stupid, then we'll die." says Priss, one of the four androids who in *Blade Runner* have escaped from the extra-terrestrial colony and come to the Earth in order to meet the only person who could extend their life, the God of Biomechanics, the CEO of the Tyrell Corporation who has created the body and the brain of the Nexus generation.

"We are stupid then we'll die."

In the *incipit* of his article *Accelerationist Aesthetics: Necessary Inefficiency in Times of Real Subsumption*, Steven Shaviro quotes Mallarmé:

> "Tout se resume dans L'Estétique et l'Economie politique. Everything is summarized in Aesthetics and Political Economy. Mallarme's aphorism is my starting point for considering accelerationist aesthetics. I think that aesthetics exists in a special relationship to political economy, precisely because aesthetics is the one thing that cannot be reduced to political economy."

This is an interesting point, and I want to go deep into it.

Aesthetics and the Economy converge and collide: as long as the social body will be unable to get rid of the process of ever expanding abstraction, aesthetic research will border with psychopathology, and will be concerned with stress, acceleration and suffering.

In a previous chapter I spoke of the aesthetic genealogy of the economy.

In the final pages of this text I'll try to scrutinize the other side of the problem: the incompatibility between economy and aesthetics. While the contemporary economy is all about abstraction, aesthetics refers to the sensitive knowledge. While Economics is all about abstraction, Aesthetics is all about the concrete experience of the sensitive mind. This is why it's here that a line of escape (not of resistance) is to be found.

Experience in technomaya

> "A famous ascetic man named Narada, having obtained grace of Vishnu by his numberless austerities, the god appears to him and promises to do for him anything he may wish. 'Show me the magical power of thy maya,' Narada requests of him. Vishnu consents, and gives the sign to follow him. Presently, they find themselves upon a desert road in hot sunshine, and Vishnu, feeling thirsty, asks Narada to go on a few hundred yards farther, where there is a little village, and fetch him some water. Narada hastens forward and knocks at the door of the first house he comes to. A very beautiful girl opens the door; the ascetic gazes upon her at length and forget why he has come. He enters the house, and the parents of the girl receive him with the respect due to a saint. Time passes, Narada marries the girl, and learns to know the joys of marriage and

the hardships of a peasant life. Twelve years go by; Narada now has three children and after his father-in-law's death, becomes the owner of the farm. But in the course of the twelfth year, torrential rains inundate the region. In one night the cattle are drowned and the house collapses. Supporting his wife with one hand, holding two of his children with the other and carrying the smallest on his shoulder, Narada struggles through the waters. But the burden is too great for him; he slips, the little one falls into the water; Narada lets the other two children to recover him, but too late; the torrent has carried him away. Whilst he is loking for the little one, the waters engulf the two others, and, shortly afterwards, his wife. Narada himself falls, and the flood bears him away unconscious, like a log of wood. When, stranded upon a rock, he comes to himself and remembers his misfortunes, he burst into tears. But suddenly he hears a familiar voice: 'My child! Where is the water you were going to bring me? I have been waiting for you more than half an hour!'

Narada turns his head and looks: instead of the all-destroying flood, he sees the desert landscape, dazzling in the sunlight. And the god asks him: Now do you understand the secret of my maya?" (Sri Ramakrishna apud Eliade 1952, 70-71)

We live in the multilayered dimension of technomaya. Digital technology has given to the media a power that is directly acting on the mind, so the Mediasphere casts a spell that wraps the Psychosphere.

Technomaya captures flows that proceed from the mind-activity, and sends them back to the mental receptors as a mirror, as a template for future imagination, as a cage for future action, and for future forms of life.

In the digital sphere people are spending more and more time with electronic ghosts, although techno-media spell (the technomaya) breaks down time by time because barred windows all of a sudden are opened by the wind of joy, or by the storm of despair, so the dazzling light of uncanny dimensions bursts on the scene of the social imagination and forgotten fragments of the Unconscious surface.

Here I want to describe the spell of semiocapitalism (financial abstraction, specters of the mediascape) that captures the social body and delivers it to the economic code, where experience is subjected to the power of simulation and of standardization.

But I also want to search (to imagine) possible lines of escape. And lines of escape can be found only in those places of the Unconscious where the

multi-layered spell of Semiocapital is ripped apart, so that a multi-layered Unconscious resurfaces.

Reality is the point of intersection of countless projections proceeding from the in-tentionality of living and sentient beings.

Experience is the access to reality but it is also the act of projecting reality on the screen of shared perception. It is attention, but also intention.

Experience means opening the eyes and seeing the existing world, but also means maya: projection of a world.

The etymology of the word experience has something to do with the act of going through: per-ire, which also means: to die. We also can say that *experire* means to try out.

Only if you go through the proofs and the places that life is presenting to you, you will be expert. Experience is the process of living through something that you did not know before, so that you can find the singular meaning of this. Singularity is an essential feature of experience, as experience is the act of personalization and singularization of a place that you have known going through it.

> "Experience is not a matter of having actually swum the Hellespont, or danced with the dervishes, or slept in a doss-house. It is a matter of sensibility and intuition, of seeing and hearing the significant things, of paying attention at the right moments, of understanding and coordinating. Experience is not what happens to a man; it is what a man does with what happens to him." (Huxley 1932)

Experience is not only the act of exposing skin and mind to the flow of stimulations coming from environment. It is also the adaptation of mind and skin to the environment and the active projection of the expectations of the experimenter. In this sense experience is singularization of the environment, singular shaping of the world.

Experience implies not only attentive perception but also intentionality.

Merleau Ponty speaks of intentionality as an act of identification that comes from the living world of the subject and projects on the world, the object that is thrown there in the outside

> "'All consciousness is consciousness of something'; there is nothing new in that. Kant showed, in the Refutation of Idealism, that inner perception is impossible

> without outer perception, that the world, as a collection of connected phenomena, is anticipated in the consciousness of my unity, and is the means whereby I come into being as a consciousness. What distinguishes intentionality from the Kantian relation to a possible object is that the unity of the world, before being posited by knowledge in a specific act of identification, is 'lived' as ready-made or already there." (Merleau Ponty 1961, XIX)

And also:

"The world is not what I think, but what I live through." (Ibid., XVIII)

And Husserl, in *(Experience and Judgment)* writes: "The reference to the world of experience is a reference to the world of life (*Lebenswelt*), i.e. the world in which we are always already living, the world which supplies the field for every cognitive operation and for every scientific determination." (Husserl 1948, § 10)

And also: "The experience is mainly defined as direct reference to the individuality." (Ibid., § 6)

The very concept of experience has to be re-examined in the light of the techno-mutation that is underway in our time.

First of all the digital format of the experience, with its increasing speed and intensity, affects the psycho reaction to info-stimula, affects the empathic relation between conscious and sensitive organisms, and affects also cognition: memory, imagination and language. Experience, as attention and as intention is subjected to an intense stress that results into a mutation of the cognitive organism.

Capturing Attention

The fundamental contradiction of Semiocapitalism is the incompatibility of cyberspace with cybertime: being the product of countless sources of virtual projection the expansion of cyberspace is boundless.

Cybertime, on the contrary, is not infinitely stretchable. It is composed of time of attention, which cannot be intensified beyond a certain point because of its physical emotional and cultural limitations.

In economic terms the output of semio-production is infinitely outpacing the market of attention, which means that the phenomenon of cyclical crisis

that Marx described as an effect of overproduction in the sphere of industrial capitalism, is no more cyclical, but permanent.

According to Jonathan Crary, author of *24/7 Late Capitalism and the Ends of Sleep* (2013), the capitalist need for expanding the market results in a restless stimulation of social attention aimed to the widening of alert time.

"the relentless capture and control of time and experience are the form of contemporary progress." (Crary 2013, 40).

The unceasing assault on the attention is causing a contraction of the time available for the emotional elaboration of the info-stimulation and for the rational decision which was the condition of politics.

This is why many times the political choices seem devoid of rationality and social relations become brutal, aggressive: because the time for rational and emotional elaboration is cut up to the point that society seem to act in a whirl, as happens to those who sleep too little, and take drugs to keep awake.

The book of Crary is focusing mostly on the reduction of sleep time as effect of the economic assault on attention time.

> "It should be no surprise that there is an erosion of sleep now everywhere. Over the course of the XX there were steady inroads made against the time of sleep—the average North American adult now sleeps approximately six and a half hours a night, an erosion from eight hours a generation ago, and (hard as it is to believe) from ten hours in the early XX."(Ibid., 11)

Sleep, in fact, can be considered as an "uncompromising interruption of the theft of time from us by capitalism." A society of insomniac people is not at all a comforting place, and the increase in productivity is paid in terms of loss of rationality and of respect for life. The irrational exuberance of financial agents who take drugs in order to trade day and night on their computers has already brought the world on the brink of an abyss, and it's going to do it again and again.

As a conclusion Crary suggests that "Sleep is the only remaining barrier, the only enduring natural condition that capitalism cannot eliminate." (Ibid., 74)

But I have to rectify. There is another enduring natural condition that capitalism cannot eliminate, another enduring natural barrier to the financial intrusive hubris: death. And suicide is spreading all over, as an effect of the social stress, of the emotional impoverishment, of the constant aggression on attention.

According to the World Health Organization in the last 45 years suicide rates have increased by 60% worldwide.[2] These are the years of the full implementation of the capitalist model worldwide, these are the years of thorough submission of attention time to the rhythm of the economic machine.

These figures concerning suicide do not include suicide attempts which are up to 20 times more frequent than successful suicide.

An epidemic of unhappiness is spreading on the planet while Capitalist absolutism is asserting its right to the unfettered control of our lives.

Semiocapitalism is infiltrating the nervous cells of the conscious organisms, inoculating in them a tanatho-political rationale, a morbid sentiment which permeates the collective Unconscious, culture and sensibility: an obvious effect of sleep deprivation, an obvious consequence of attention stress.

The Google Empire has been essentially built on the capture of the user's experience in order to increase value and productivity. During the creation of the attention draining machine, the personal computer has been bypassed by the release of the last generation of cellular phones labeled as smart-phones, so the access to the network has gone mobile, pervading every moment of the day and of the night. The mobilization of the access to the net has obviously expanded the captured time of attention and submitted new dimensions of personal life to the all pervading search for semio-profits.

"[…] ubiquitous computing in the era of the first smartphones focused on seamless integration, that is, naturalization of socio-technical factors in workplace settings that transcended geography and time, heralding 'unprecedented levels' of productivity as well as the inevitable 'interaction overload'" (Genosko 2013, 149)

In the place where connectivity rate is the highest in the world, the city of Seoul, I was impressed by the amount of street walkers who gazed at the screen of the smart-phone all the time, apparently driven by trans-mental signals. I also noticed a sort of inattention to the surrounding physical landscape. Then I discovered that Korea is number one in the world as far as concerns suicide rate.

2 Data on this subject can be found in the website of World Health Organization, particularly in the page World Suicide prevention Day (September 2007) Available at <http://www.who.int/mediacentre/news/statements/2007/s16/en/>.

The map captures the territory: orientation Code

According to Jean Piaget the process of familiarization with the environment and the interiorization of the surrounding space is a sort of discovery which starts in the first days of life and determines the construction of an internal space which becomes the map of orientation and the condition of further acquisitions. (see: Jean Piaget and Bärbel Inhelder: *The Child's Conception of Space A Study of the Development of Imaginal Representation)*.

Orientation is the cognitive ability to recognize the physical features of the surrounding environment and to build an inner map making possible finalized displacements in the world. The process of internal mapping that precedes orientation implies a highly singular relation with the environment: visual elaboration and emotional selection of places, signs, and also lights, flares, and scents. Orientation can be seen as the singularization of the landscape, the process that makes the world my own world.

Orientation is the intimate mapping of the space that one navigates and in which one inhabits. The territory in which we walk stimulates emotional effects in our mind: the memory of the places that we went across is the emotional marking and therefore the singularization of the external space. Once we have recorded the marking points of the territory, this becomes our intimate map, the condition for further orientation, for new discoveries, new recordings, and for a never ending re-mapping of the world.

The map of the city turns into the representation of the person who has been dwelling in it, as Borges suggests in a poem where he speaks of his becoming blind, and remembers the city as the intimate map of his life.

> "I live among vague, luminous shapes that are not darkness yet. Buenos Aires, whose edges disintegrated into the endless plain, has gone back to being the Recoleta, the Retiro, the nondescript streets of the Once, and the rickety old houses we still call the South […] Those paths were echoes and footsteps, women, men, death-throes, resurrections, days and nights, dreams and half-wakeful dreams, every inmost moment of yesterday and all the yesterdays of the world." (Borges 1974)

According to the Italian architect and anthropologist Franco La Cecla:

> "The word 'orientation' has a double meaning, one is essentially active, as ability to organize one's surrounding environment, to create a general frame of references in which knowledge can be tied. The second is the passive ability to follow indications, reading a map, using a compass, adapting to a system of pre-existing coordinates in order to find a place or reaching a destination." (La Cecla 1988, 43)

What I said about experience in general can be said about orientation: it is both the ability to follow cartographic instructions and also the ability to draw a map.

The experience of orientation consists in getting lost in the territory, and in getting one's bearing again, creating the singular perception of the space.

In his book about getting lost (*perdersi*) Franco La Cecla examines also the effects of disorientation that the Modern standardization of the urban space is inducing in city dwellers.

> "Modern functionalism is based on the assumption that the city dwellers should not waste time in a complicated relation with the environment. The environment must be functional, so that the city dweller can displace himself from a suburban area to an other in order to do his job. This functionalist reduction implies the anonymity of the suburbs: any emotional transfer is considered as useless. The environment has not to be felt, but to used. This transformation demands the standardization of orientation." (Ibid., 91)

The creation of those functional places that Marc Augé has labeled "non-places" leads to the obliteration of the singular relation between the individual mind-eye-body and the space. Little by little the Modern reshaping of the territory, aimed to increasing the productivity of the urban territory and to facilitate car transportation in metropolitan areas, has erased the marks of the historical past, and generally the signs that may ingrain emotional memories. In a text written at the beginning of the twentieth century Rainer Maria Rilke identified the standardization of places with the American influence.

"For our fathers and the fathers of our fathers a house, a fountain, a tower meant infinitely more. Now from America are pressing on us empty emotionless things." (Rilke 1987, 192-26)

Modern architecture and urban design have helped the standardization of the territory, but the digital transformation has opened the way to a

further shift towards the ultimate de-singularization of orientation. The map is capturing the territory and orientation is turned into mere functional navigation, as more and more people use tools for guided navigation, based on the technology of Global Positioning System (GPS). Smart mobile phones are used for accessing the georeferential cartography and for devolving the sense of orientation to the digital interactive map.

Since 1973 the American military have pursued the creation of a Defense Navigation Satellite System (DNSS). A GPS receiver calculates its position by precisely timing the signals sent by GPS satellites high above the Earth. Each satellite continually transmits messages that include the time the message was transmitted and the satellite position at time of message transmission. The device computes the distance to each satellite using the speed of light. Each of these distances and satellites' locations define a sphere. The receiver is on the surface of each of these spheres when the distances and the satellites' locations are correct. These distances and satellites' locations are used to compute the location of the receiver using navigation equations. This location is then displayed, perhaps with a moving map display.

It's easy to predict a rapid atrophy of the sense of orientation as it is replaced by the technology of positioning. Within the next generation the mental process consisting in the internal mapping of the territory might be devolved to the GPS machine and the ability to identify one's place in the world, and to singularize the surrounding landscape will fade and almost disappear from the connective mind.

Together with the experience of getting lost, also the experience of recognizing a place will fade or at least be quite dulled, and the fading of the faculty of orientation can be viewed as a step in the process of connective reshaping of the experience as a whole.

Swarm experience

In the meantime a new device is ready, a new gadget and wearable interface between the mind and the world, which is representing a new step in the cognitive mutation underway. Google, the most revolutionary corporation of all times, (the most perfect colonizer of all times) has opened the way towards the ultimate obliteration of experience singularity, and therefore

to the cancellation of singularization of the process of living in the world [*Lebenswelt*].

During the first decade of the century Google has acted as the universal draining pump of meaning. Capturing and collecting billions and billions of individual acts of meaning-attribution from countless users worldwide, Google has created the most flexible machine of de-singularization ever conceived.

Google's answers, in fact, are influenced from the previous questions and from the previous answers of the user. Google knows what you need, and you know that Google knows what you know, and Google knows that you know that Google knows what you know. So the answers to your questions will be exactly the answers you need because your questions are more and more tailored by Google, as Google has been tailored by your questions, and your world is tailored by the system of questions and answers between Google and you.

In the year 2013 (while I'm writing these pages) the most flexible and most free—and most totalitarian—corporation ever is launching GoogleGlass, a product that promises to be the ultimate Coder (and Decoder) of the human experience. Wearing GoogleGlass, in the not distant future, you'll receive information about the object that you are looking at, directly on the screen which is placed just in front of your eyes, in the space between you and your vision. In other words GG is a wearable computer with an optical interface that displays information about the object that you are seeing.

Let's suppose you are in Rome, just in front of the Coliseum. You click on your GG and you can receive information about the Coliseum. As the information that Google makes available is the average information that the Google users have uploaded, the experience of the GoogleGlass user will be more and more uniformed.

Let's suppose you meet a person you don't know yet: GoogleGlass will tell you who this person is, so you may interact according to the suggestions and the implications that you'll be led to draw from the GG information.

Little by little the entire world—which is already entirely mapped by Google maps—will be re-coded by GoogleGlass, so you can access the already experienced experience that GG makes available for you.

That means that you will no more experience the world, you will just use (or receive, or access) already experienced data about an object that is no more the object of your experience, but purely a reference to a pre-packaged world.

Consequently, as reality is the point of intersection of our projections, and experience is singular access to the world of life and creation of meaning to share with others, the techno-mutation is affecting reality itself.

The world, as experience and projection, is finally evacuated, and replaced by the access to the uniformed simulated experience, the experience of the swarm.

Neuro-totalitarianism in the making

According to Giovanni Gentile, the theorist of Italian Fascism, totalitarianism is a political regime in which everything—from the economy to the educational system to the ethical behaviour—is subjected to the action of the State. The process of connective creation of the swarm has nothing to do with the Fascist form of totalitarianism, but it can be described as a process of uniformation of cognition, perception and behaviour based on the inscription of techno-linguistic automatisms in human communication and therefore in the connective mind. This is a form of techno-totalitarianism that results from three consecutive steps.

The first step is the permanent connective wiring (or cabling) of the interaction between conscious organisms.

The process of cellularization has been the perfect carrier of the socio-cognitive mutation. More pervasive than the computer, the cell phone has finally created the infrastructure of the global interconnection and opened the way to the ultimate deterritorialization and ubiquity of information.

The social effect of this deterritorialization and connection is simultaneously the globalization of the labour market and the precarization of work—but also, paradoxically, the utter individualization and the inescapable collectivization of personal lives. Neoliberal ideology emphasizes individualism, but the competitive consumerist individual is extremely standardized in his/her goals, and tastes and desires. Individualism and singularity have little in common. Contrary to individualism, singularity is not competing, is not exchangeable, is not standardized.

Cellularization has accomplished a process that Habermas described as "the uncoupling of system and life-world" (Habermas 1984, 153), perfecting the technolinguistic system of permanent exchange between speakers who

are less and less actors of their inter-action, more and more acted by the techno-linguistic inter-action.

Cellularization is the full implementation of what Heidegger calls "the language of Technique," implying that Technique is the subject of language, and language is spoken by the technical system.

Cellularization—i.e. the connection of every enunciation agent in the Network—is the general framework of the subsumption (or capture) of social communication into electronic swarm.

The second step in the process of instauration of neuro-totalitarianism is the current replacement of living experience and its simulation with recorded standardized stimulations, a process that I have analysed before, referring to the automation of the sense of orientation.

The first and second steps are concerning cognitive activity and its psychological implications—the software of the mind.

A third step in the direction of the implementation of the swarm is directly aimed at modifying the neural hardware itself: insertion of techno-devices for neural programming, nano-prosthesis, enhancers, transformers of the neurological system. The neural system manipulation is not a new phenomenon; psychopharmacology is already acting on the neurological matter, particularly on the neuro-transmitters which regulate mood, attention and psycho-reactivity. But we should expect more neuro manipulation in the future. In April 2013 the President of the US has declared that the most important American investment in the field of scientific research will be Brain Activity Mapping, also known as Brain Research through Advancing Innovative Neurotechnologies, which is intended to map the activity and functions of every neuron in the human brain.

This project is based on the assumption of neuro-plasticity, i.e. the possibility of intervening on the neuro-system, of redirecting the neuron's activity and of reshaping the synaptic pathways.

Neuro-plasticity, however, is an ambiguous and dilemmatic condition, which opens the window to an alternative. In fact the possibility of transforming the procedures and material structures of cognitive activity, of reshaping the synaptic pathways opens the way to the neuro-totalitarian domination of the semio-corporations (the media) and of the psycho-corporations (psychopharmacology), but opens also the way to a process of sabotage and of subversion of the dominant process of mental wiring, and opens the way

to the experimentation of forms of free neuro-psychic concatenation, corresponding to a social process of self-organization of cognitive work.

Resisting mutation?

Should we plan a resistance to the mutation underway?

That should be a reactionary and technophobic choice, and an impossible task. I don't think that resisting mutation is possible.

Technological innovation generates tools that reshape the social environment, empower individuals who adhere to it and cut off those who resist to it. This is why resistance would be futile. When change happens in the field of communication devices, individuals cannot resist the capture. The diffusion of the network technologies hastens the pace of integration.

Accepting the challenge is therefore unavoidable, and only accepting this challenge we can find out the alternative of tomorrow.

The alternative that we are going to face in the next future is now apparent: it is the alternative between totalitarian submission of the nervous system to the semio-financial governance of capitalism—and the disentanglement of nervous energy (and of the activity of the general intellect which is the organized expression of nervous energy) from those semio-financial rules embedded in the governance of the system.

This will be the big game of the next decades.

All other power games have been played, all of them have been lost.

But the neuro-plasticity game aiming to disentangle the autonomy of the general intellect from the neuro-totalitarian jail that corresponds to the needs of absolute capitalism is only beginning. Better, we are only now glimpsing the possibility of a process of disentanglement of mental activity from the spell of Technomaya.

Either the general intellect will be coded by the semiotic matrix of the semio-economy, and social activity will be turned into a swarm connected at the techno-neural level,—or the general intellect will rejoin with its sensible body, and will create the conditions for the independence of knowledge from the matrix, and the singularity of experience.

Morphogenetic vibration in Neuromagma

How happens that a new form emerges from the magma of matter and information? This question is crucial if we want to imagine a possibility of disentanglement of the social potency and of the general intellect from the double bind of capitalism.

The emergence of a new semiotic form happens in the space between Neuromagma and vibratory morphogenesis.

Capitalism is essentially a semiotic framework, it is the form that semiotizes (codifies) the contents according to certain interests, according to the paradigm of accumulation.

The entangling form (capital) is the semiotic codifier which bends the contents (social skills, collective intelligence) and perverts their potential into the repetition of the economic model of accumulation.

The continuous process of transformation of the global mind can be described as a magma, a chaotic ebullience of inter-individual synaptic pathways: conjunctions, sudden proliferation of neurons escaping the existing connective pattern.

Neuromagma contains infinite possibilities of evolution, but the existing form of mind wiring is forcing the neuronal pathways into the pre-packaged connective circuits. How can we disentangle diverging possibilities of conjunction for the neural activity of the global mind?

Morphogenesis (the creation and emergence of new forms) comes from the vibration of the Neuromagma. The vibration exceeds the wired connectivity up to the point of breaking (disconnecting) the existing circuit.

Forms emerge from the inter-action between the internal structure of connectivity and the external environment of the Neuromagma. Neuromagmatic machine can disrupt the connective structure, and arouse a vibratory dynamics in search of new semiotization, of new forms.

The vibrant inter-action of a system with its environment is the beginning of a new form. In the work *On the origin and nature of Neurogeometry* (2013) Alessandro Sarti and Giovanna Citti try to understand the problem of individuation by the point of view of neurogeometry, and particularly by the point of view of the neurophysiology of the vision process. Visual cells activated by the stimulus-image enter in communication through horizontal connectivity.

Sarti and Citti write:

> "The plasticity of the brain, i.e. its ability to reorganize neural pathways based on new experiences through learning procedures, guarantees a strong connection between the design of our perceptual systems and the properties of the physical environment in which we live. In conditions of extended criticality, of large complexity (billions of cells propagating and colliding, or billions of human beings following different projects, conflicting, and struggling for life) the morphostatic topology explodes. Therefore we say that inert (quiescent, motionless) geometry enters in a vibratory dynamics." (Sarti and Citti, 2013)

Chaosmose is the process that follows the explosion of the morphostatic topology, and the resulting emergence of a new form.

How happens that a collective territory (a crowd, a society, a network) enters into vibration? It happens by resonation (resonance). We may try to understand resonance in terms of relation between rhythm and refrain. Rhythm is the relation of a subjective flow of signs (musical, poetic, gesture signs) with the cosmic environment, earthly environment, social environment. Rhythm is singular and collective. It is singularizing the sound of the world in a special modeling of the environmental sound. But it is able to trigger a process of agglutination, of sensitive and sensible communality. Sometime people start to sing the same song, and to dance the same dance. It can be dangerous, when the sense of community is based on the arbitrary presumption of natural belonging. In fact fascist subjectivation is based on this kind of mandatory homogeneity. But it can also happen in ironic and nomadic ways. People start to create a new song, and they do it together. They don't do that because they share a common identity, they don't do that because they think to belong to the same territory or destiny. They do that because they like the sound of their voices, when voices vibrate at the unison. This is what I call a movement. What is a movement? It is an event that opens a new landscape. When a movement happens (in the field of art, in the field of social politics) the effect is this: thanks to the movement (literally, a displacement) we become able to see things that you did not see before.

The refrain is an obsessive ritual that allows the singularity—the conscious organism in continuous variation—to find points of self-identification, and to territorialize itself and to perceive itself in relation to the surrounding world. The refrain is the mode of semiotization that allows a singularity (a group, a people, a nation, a sub-culture, a movement) to receive and project

the world according to inter-individual (reproducible and communicable) formats. In order for the cosmic, social and molecular universe to be filtered through individual perception, the individual mind activates filters or models of semiotization, and these filters I call refrains. The perception of time by a society, a culture or a person is also the model of a truly temporal refrain, that is, of particular rhythmic modulations that act as ways for accessing cosmic temporal becoming and tuning in it.

> "From this perspective, universal time appears to be no more than a hypothetical projection, a time of generalized equivalence, a flattened capitalistic time: what is important are these partial modules of temporalization, operating in diverse domains (biological, ethological, socio-cultural, machinic, cosmic…) and out of which complex refrains constitute highly relative existential synchronies." (Guattari 1995, 16)

The stuff that composes a refrain is essentially rhythm. Singular refrains can create a common space of resonance, and the new form emerges as a new rhythm, and the new rhythm makes possible to see a new landscape.

Art sensibility and neuroplasticity

The process of transformation, that in the modern age was the object of political imagination, is shifting to the conceptual and practical sphere of neuroplasticity.

The mutation of the mind is underway: it is the consequence of a spasmodic attempt of individual minds to cope with the chaotic global Infosphere and to reframe the relation between the Psychosphere and the Infosphere, cognition and stress, brain and chaos.

Traumatic phenomena of adaptation are traversing the space of the social brain. Not only the psycho dimension of the Unconscious is disturbed, but the fabric of the neural system itself is subjected to trauma, overload, disconnection. The adaptation of the brain to the new environmental conditions is involving enormous suffering, a tempest of violence and of madness.

A wide range of contemporary pathologies are escaping the psychoanalytical framework, and are questioning cerebrality rather than sexuality—as Catherine Malabou puts it in *The New Wounded. From Neurosis to Brain Damage*.

Alzheimer and Post-traumatic stress disorder, panic, and Attention deficit disorders, autism and anorexia—are symptoms of a disturbance which is affecting the neurological hardware not only the linguistic and psychical software.

Problem is: does consciousness play a role in this process of mutation? Does imagination consciously act on the neuro-plastic process? Can the conscious organism do something when it is taken in a situation of spasm?

In Guattari's parlance, chaosmosis is the overcoming of the spasm, the relaxing of the spasmodic vibration. Chaosmosis is the creation of a new (more complex) order (syntony, and sympathy) out of the present chaos, which is an effect of the spasmodic acceleration of the surrounding semio-universe. Chaosmosis is the osmotic passage from a state of chaos to a new order. But here the word "order" does not imply any normative intention, and has no ontological meaning. Order is here to be intended as harmonic relation between the mind and the semio-environment, and also as sympathy, common perception.

> "[…] people are constantly putting up an umbrella that shelters them and on the underside of which they draw a firmament and write their conventions and opinions. But poets and artists make a slit in the umbrella, they tear open the firmament itself, to let in a bit of free and windy chaos and to frame in a sudden light a vision that appears through the rent—Woodsworth's spring or Cezanne's apple, […] Art is not chaos but a composition of chaos that yields the vision or sensation, so that it constitutes, as Joyce says, a chaosmos, a composed chaos—neither foreseen nor preconceived." (Deleuze and Guattari 1994)

Poetry is the linguistic chaoide which is reopening the space of indetermination, and re-establishing the autonomy of enunciation from the functioning of the techno-linguistic interfaces.

Poetry is the ironic act of exceeding the established meaning of words.

In every sphere of human action there is a grammar establishing limits that define a space of communication.

In our times the economy is the universal grammar traversing every level of human activity. Also language is defined and limited by its economic exchangeability.

The reduction of language to information and the incorporation of

techno-linguistic automatisms in the social circulation of language, are securing the subjection of language to financial economy. Nevertheless, whereas social communication is a limited process, language is boundless: its potentiality goes beyond the limits of the signified. Poetry is the excess of language, the signifier disentangled from the limits of the signified. And irony, the ethical form of the exceeding power of language, is the infinite game that words are playing to skip established signification, to shuffle meanings, and to create new semantic concatenations.

Social movements, at the end of the day, can be viewed as ironic acts of language, as semiotic insolvency, refusal of paying the debt of signification, and finally as the disentanglement of language, behaviour, and action from the limits of symbolic debt.

In the interaction between individual and collective sphere, in the link between individual neuro-activity and connective concatenation, the conscious and sensitive organism is evolving. The neuro-plasticity of the sub-individual components of the organism (the molecular decomposition and recomposition of biological matter) interacts with the rhythms and the super-individual automatisms of the techno-linguistic swarm, the bio-informatic super-organism which is embedded in the totalitarian governance of semiocapitalism.

Techno-linguistic interfaces are linking the organism with the bio-info super-organism of the Net, and language is subjected to the automated wiring. Cognition is taken in the inescapable loop of this endless self-confirmation.

Only the excess of imagination can find the way for a conscious and consciously managed neuroplasticity, but we cannot know if the imagination-excess still functions when cognitive wiring is set.

This is the question that we are going to deal with in the coming decades, this is the next game, the neo-human game that we can barely sense beyond the apparently unstoppable and irreversible catastrophe of the human civilization that is underway.

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