

ASSOCIAZIONE
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DI ECOBIOPSIKOLOGIA

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The ecobiopsychology is a new methodological discipline, which intends to study in a scientific way the relation between man and the environment that surrounds him. Man is the ultimate aim of a development that ties together in an inseparable way the mineral, the vegetal and the animal kingdoms, in a process of systemic-complex organization. Starting from this evolutionary assumption, the ecobiopsychology intends to study the possibility of man to revisit by means of his conscience the archetypal aspects of life, sedimented in the body as instincts and traceable in the psyche as symbolic images.

The Weltanschauung which the ecobiopsychology tends to is not the one dominated by a thought of casual relation, which reduces to "sign" and "semantics" all what concerns nature and man. On the contrary it can be defined as a holistic approach, which endeavors to put together in harmonious and vital way the conclusion of physical and biological sciences with those of human sciences. Such a wide program, of course, requires the dialectic integration of many disciplines, and this is made possible by means of a correct use of the analogic and symbolic thought. Through the symbolic language and the comprehension of the analogic significance of shapes, colours, images of all what surrounds us, it is possible to go back to the archetypes present in man. This way makes possible to recognize the plot of the totality of the world (*Unus Mundus*), and therefore the sacral sense of the existence.

With these premises, ANEB operates as scientific association without a purpose of gain, and gathers scholars of various scientific fields, ranging from Psychology and Psychoanalysis to Literature and Philosophy, to Art and Aesthetics, to Mythology and Religion History, to Economics and Social Sciences, to Biology and Physics. The aim of ANEB is, therefore, to recover a common language of approaching the world and man, based on a "circular logic", as analogy, which allows to tie the psychosomatic aspects of the being, and the synchronic events of the becoming.

THE PSYCHOSOMATIC CODE OF THE LIVING

ANALOGY AND SYMBOL AS INTEGRATIVE ASPECTS OF THE RELATIONSHIP BETWEEN MAN, NATURE AND REALITY
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“COMPLEXITY” AND MAN

At the end of the 20th century, the view of man's reality and nature is increasingly based on the “awareness of a mutual relation and interdependence of physical, biological, psychological, social and cultural elements”¹. According to scientists and researchers, the interaction between man and his physical, psychological or social environment determines a never-ending exchange of information that shows us the extreme “complexity of real world, and the difficulty in understanding it, through the rules of the deterministic approach”.

The traditional scientific inquiry was able to go beyond the appearance of reality in order to pick up the basic principles and general laws, on which it built the physical rules of the world. Today, on the contrary, modern science after having improved Quantum Theory, Molecular Biology and Psychoanalysis, wonders about dependence and autonomy in its investigative job about life.

“Suddenly the development of the scientific knowledge brought to a critical state the method that had promoted its growth”², opening a debate about the opportunity to describe the complexity of the phenomena world by using deterministic laws. The result of this process was featured by a new logical approach that thinks about reality as a “complexity” system, denying a too superficial analysis.

Reality, in fact, is so wide that we can't understand it only by our intelligence; we can catch it only by melting our thought with the dark contents of our emotions, in order to build a subjective empathic-cognitive pattern, able to communicate with the world. Then, researchers have to face the “complexity” subject at different levels. The complex thought, able to lead towards a new approach to reality, “should fulfill many conditions for its existence: it should connect the object to the subject and its environment; it should examine the object, not only as an object, but also as a system/organization that poses the complexity problems of an organization; it should respect multi-dimensionality of beings and things; it should work/talk with uncertainty, and matters that never could be related to rationale; it should not destroy the world of phenomena any more, but try to consider it as less mutilated as possible”³.

The multiplicity of reality, its proper complexity, can be analyzed, through the construction of a “new science”, able to interpret phenomena, no more tied to the manipulation of *ethos*; actually, the recognition of complexity brings us to a different knowledge, involving not only the importance of rationality, but also the irrational value of empathy.

No doubt, the problem of complexity pushes scientists to overcome the dilemma of the quantitative concept of the modern science, and allows them to get in touch with qualitative aspects of reality, arbitrarily attributed to human sciences.

The syncretistic sight of the complexity idea, introduce a modern cosmology of unity, implying that besides the material level inquired by science, there are “entities” that cannot be renounced to, such as psychological, social and cultural facts. This gives way to a “circular” and “synchronic” logic.

¹ Capra F., *Il punto di svolta*, Feltrinelli, Milano 1986, p. 221

² Morin E., *Scienza con coscienza*, Franco Angeli, Milano 1988, p. 198

³ Morin E., *ibidem*

“Circular” means that the relationships and references pattern could be intuitively caught only when the detecting mind can overcome the linear mode of rationality; “synchronic” has to do with analytical psychology, and underlines the immediacy and uniqueness of the empirical knowledge.

Along the cognitive process of these complex events, the prominence of the rational thought has got over, because the complexity of the examined phenomenon involves so wholly the inquiring subject, to deeply transform it.

The Islamic tradition asserts that there are three levels of knowledge: the first, called “knowledge of certainty” (*‘ilm al-yaqîn*), is similar to the listening of a fire description and it can be compared with the method used by the classical physics to describe phenomena, reducing them to their basic principles; the second, called “eye of certainty” (*‘ayn al-yaqîn*), is similar to the looking at the fire and it can be metaphorically compared to the Quantum Theory, that observes the complexity of reality; the third, called “truth of certainty” (*haqq al-yaqîn*), is similar to the being burnt and it can be compared with the study of the complex phenomena that change the one who faces them.

The knowledge of them, in fact, involves not only the rational thought but also the circular and synchronic one. The inner meaning of “complexity” suggests an approach to reality which is no more simplified, but opened to the contemporary view of all the multi-stratifications existing in the phenomenon at issue. The complexity based on these superimpositions of events, needs a descriptive logic no more linear (peculiar to the rational thought), but circular, as already said.

Consequently, *analogy* is the closest logical figure to state the possibility of a circular thought. The original meaning of analogy is to express an identity of connections which links two by two the terms of two or more couples. If, for instance,

$$\frac{A}{B} = \frac{C}{D}$$

we can say that A is to B as C is to D. To be more precise, quantities to compare in analogical terms must be homologous. Analogy imposes a direct link between elements that work in equivalent manners, through their qualities and in connection, obviously, with the objects of which they are part of⁴. More deeply described as a thinking mode, analogy works three basic tasks out:

1. *Heuristic* function, to say it contributes to the process for the hypothesis invention
2. *Synthetic* function, in order to make different possibilities converge towards a single direction
3. *Evocative* function: it temporarily stops the logical judgment, in favour of an “esthetic feeling of astonishment”⁵.

Therefore, we can say that analogy collects the opportunity to melt the data of the logical thought functions with the irrational and emotional contents, decisive for the heuristic process, in a single system.

In fact, there can be no creative process of task hypotheses without the use of analogy. “Analogies are not secondary underpinnings of theory build-up, but essential parts of them. Analogy often leads to the conceptualization of theories, but once theory has been defined, analogy can be left apart; this is a false suggestion”⁶. If analogy is fundamental in the heuristic process, within the epistemological field, from a psychological point of view analogy represents the logical mode, by which unconscious expresses itself (*primary process*), opposite to the normal mode of working of consciousness, supported by the *secondary*

⁴ Delattre P., *Teorica dei sistemi ed epistemologia*, Einaudi, Torino 1984, p. 26

⁵ Melandri E., *L’analogia, la proporzione, la simmetria*, Isedi, Milano 1974, p.17

⁶ Campbell N. R., *Physics: The Elements*, Cambridge University Press, Cambridge 1920, p. 129

*process*⁷. Along the more recent developments in logic and system theory, applied to the difference between conscious and unconscious systems, we could affirm that the conscious system undergoes classical Aristotelian logic, ruled by *identity* and *no-contradiction* principles; on the contrary, the unconscious is submitted to a different but anyhow coherent logic: it is a logic based on the *generalizations* and *symmetry* principles⁸, less known and employed. The generalization principle shows that the unconscious system works with individuals (people, ideas, objects) as if they were parts or elements of a class or set. For instance, one patient's personal features are assimilated in the "man" class: and, if this patient has got a problem with another person, that is extended to all human beings.

The symmetry principle says that the unconscious system faces the opposite relation of any connections, as if it were identical to the connection itself. To say more easily: it treats the asymmetrical relations as they were symmetric. For example: if "John" is "Peter's" brother, the inverted relation is: "Peter" is "John's" brother (symmetric relation); but, if "John" is "Peter's" father, the inverted relation is: "Peter" is "John's" son (asymmetrical relation). The unconscious treats all the asymmetrical relations as they were symmetric, and in the example above "Peter" is no more "John's" son, but he could be also "John's" father. Therefore, according to Matte Blanco, the cognitive function of the psychic apparatus is the results of the meeting of the generalization and symmetry principles with the rules of the Aristotelian logic. We can affirm that the logic of unconscious is the translation of something not far from logic, in terms of conscious thinking, and wider than conscious logic and, consequently, more general. So, the conscious logic is only a possibility of the many, expressed by the unconscious thinking. According to the communication theory, the "bi logic" of Matte Blanco is explained through the existence of a "logical-numerical language" and an "analogical language". The numerical language (the consciousness one) has a very complicated, but efficient, logical syntax, but it lacks an adequate semantics in the relationship field; on the contrary, the analogical language has got a semantics, but no syntax to define the nature of relations in a not ambiguous way⁹.

It is clear, as we said above, that exists a close relation between the bipolar concept of the inner life, structured in conscious and unconscious, secondary and primary process, and the numerical and analogical communication's models.

According to these observations, we can assert that analogy could be a kind of "open logic", covering the whole universe and we can affirm that causality principle is just a particular aspect of it.

In fact, the logical-causalistic, proceeds in a linear way in deducing its links, towards a final judgment. On the other hand, "the analogical thought" has a circular progress, because it continuously widens the conclusion's order, following the connection logic that links in their succession unexpected events, constantly changing the logical order of deductions along a creative process.

We could metaphorically say that analogy is a circle while the logical causalistic thought is a range of lines inside the circle; and, in a complex system perspective, it could be compared to polygons within the circle, with more sides as they get closer to the external circumference. Complex facts would coincide with the tendency of the polygons to become circles in the example above; the circularity so intercepted could be imagined and the global unity of the unconscious, more than the rational. The point that could be made is that, if the analogical circularity is the main characteristic of the unconscious function, the same circularity can never be joined unless being completely unconscious, and so having a dangerous regression on the consciousness level.

⁷ Freud S., *Precisazioni sui due principi dell'accadere psichico*, in *Opere*, vol. VI, Boringhieri, Torino 1979

⁸ Matte Blanco I., *L'inconscio come insieme infinito*, Einaudi, Torino 1981

⁹ Watzlawick P., Beavin J. H., Jackson D. D., *Pragmatica della comunicazione umana*, Astrolabio, Roma 1971

Referring to the above metaphor about polygons, circularity can be considered as the final results of the rational thinking tendency, to open a reflection on its appliance to reality; it is possible to build interpretative models near to the unconscious topics, similarly to the rules of the unconscious logic, understandable by consciousness. It is not by chance, that many nuclear physicians have reached paradoxical conclusions in scientific area, more similar to an intuitive comprehension than a rational one.

The approach to complex phenomena involves a continuous fluctuating of thought between the analogical dimension and the logical-causalistic one: the result is a no more fragmented description of reality. This happens because analogy is characterized by its plasticity, in order to allow the thought to link apparently far events: the conclusion is to create a model “opened” to new information.

However, in order to create a widening of the state of consciousness, this model should be structured according to the logical-causalistic rules. These last represent an unavoidable frame to allow heuristic function to be evocative, and in the same time, not to fragmentize the consciousness itself. Only in this perspective we could say that there is a new knowledge of the complex phenomena, that become more understandable, thanks to an investigative mind now connected to the logic of events.

SYMBOL AND INTUITION

In the first chapter analogy has been emphasized as basic premise, to allow the investigative mind to lead complex phenomena to a standard, understandable for Ego. In the present chapter we will focus on the relation between analogy and intuitive skill. Founding hermeneutics¹⁰ consider imaginative aspects of a pulsion or instinct, not only as by their semiotic expression, but also by their virtual and archetypal “shape”. Within this kind of hermeneutics, an important role is the symbolic work, and its ability to unify conscious and unconscious. The etymology of the word “symbol” comes from the Greek *syn-ballein* and means “to join together”. In the beginning, the *syn-bolon* was an identification mark, an object made of different materials, signifying hospitality from family to family and from town to town; the object was divided into two halves, that put together again, allowed the bearers of its parts the recognition of belonging to the same clan. This unifying function was also applied to thought processes, so that “symbolism” turns phenomenon into idea, idea into image, therefore leaving idea inside image always active and unreachable¹¹.

For this reason, G. Durand states that symbol, opposite to sign, possesses an opener logic. “In a sign, meaning is limited and significant is endless, also when arbitrary; allegory translates a defined meaning through an endless significant. In the *syn-bolon* the two terms are infinitely opened”¹².

The significant of the symbol is its visible half, to say, its iconographical shape, while the meaning of the symbol hides itself in the other invisible half, in which lays the multidimensionality of the infinite meanings, open to any interpretations. Symbol, then, is a real “infinite inside the finite”, and its peculiarity is to bring a meaning rich of many meanings, in such a manner that H. Corbin affirms that symbol can “never be explained once for all, but is must always be decoded once again, as a musical score, that is never interpreted definitively, but needs always a new performance”¹³.

Therefore, visible and invisible within symbol cross themselves in a transparent and dynamical reality, whose detectable “shape” – the significant – dissolves more and more in endless meanings, that allow to understand what appears as a mystery. On these bases, H. Fischer-Barnicol asserts that “the thought symbol is a transcendent force, invisible and untouchable, that can be seen in a real object. In other words: the symbol is a

¹⁰ Durand G., *L'immaginazione simbolica*, Il Pensiero Scientifico, Roma 1977

¹¹ Marchianò G., *La parola e la forma*, Dedalo, Bari 1977

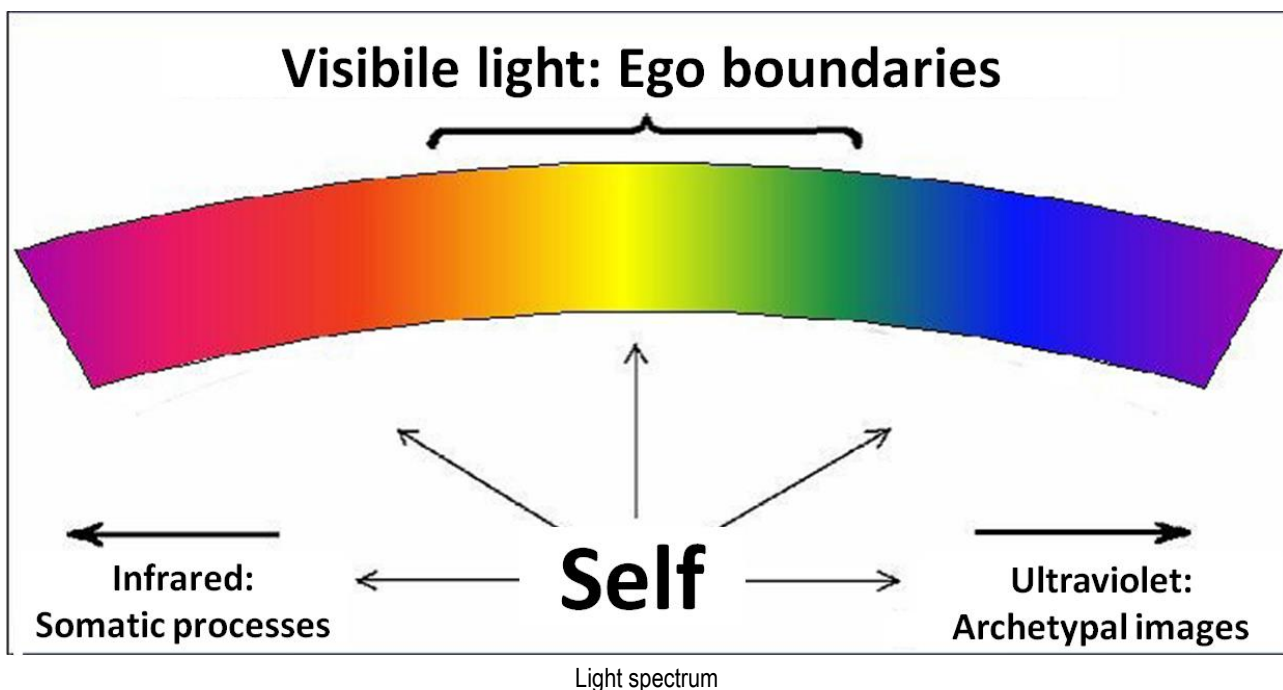
¹² Durand G., *op. cit.*

¹³ Corbin H., *L'imagination créatrice dans le soufisme d'Ibn 'Arabi*, Flammarion, Paris 1958

material reality, the representation of which allows another dynamic and spiritual reality to show itself. An overspatial and overtemporal element shines from a matter, extraneous to its nature. Consequently, the symbol as an object does not coincide with the symbolized reality. The symbol is only a mean of exteriorization that allows a force, not rejoinable sensitively, to make its action become evident, similarly to human soul in respect to body and language”¹⁴. The Fischer-Barnicol’s overspatial and overtemporal force is referred to archetype, for studies concerning the complex phenomena about man and nature. Archetype, a term used by the late-Hellenic philosophy, showed the original model of shapes, which perceptible things are just copies of. In later times, archetypes are “aprioristic forms” of the analytical psychology, that organize experience and for that they are defined as regulators of representations or models of innate behaviour.

For man and nature, these archetypes may be found either in the phylogenetic aspects of “life” phenomenon, or in its mental representations, existing in human psyche. Through symbolism, man can approach the knowledge of archetypal dimension – the infinite above remarked – that shows itself in the contemporarity of physical events and instinctual behaviour, similarly to what happens in the mental forms that are supported by facts – the meaning of reality.

By using an analogy linked to the light spectrum (see picture above), C.G. Jung¹⁵ has summarized the relationship between archetype and instinctual behaviour, on a side, and the related psychic image, on the other side. The “ultraviolet” pole (on the right) and the “infrared” one (on the left), are terms used only as an analogical model of thought. Concerning man, and in a wider sense all the universe, psychosoma could be assimilated to the light spectrum.



For man, the “infrared” pole is closer to psychosomatic processes, that should become in prevailing somatic aspects of instinctual behaviours and materials event; the psychic aspects should prevail within the “ultraviolet” pole, as “images”, “representations”, and thoughts.

¹⁴ Fischer-Barnicol H., *Gestalt als Transparenz*, in: M. Schneider, *Il significato della musica*, Rusconi, Milano 1979

¹⁵ Jung C.G., *La dinamica dell'inconscio*, in *Opere*, vol. VIII, Boringhieri, Torino 1976

This analogy could be applied to “complex” structures; on a side, they are concrete because of the systemic structure of the model; on the other side, they collect psychological, social and cultural values, whose field of study goes beyond the traditional one of science.

Now, along the logic-causalistic pattern that sustains the more consciousness-opened function mode, analogy as logic structure of thought, can be considered the fundamental axis of symbol (the part supporting the work of the obscure half of it); therefore, it is unavoidable that symbol, as synthesis of the two operative psychic aspects above discussed, should be considered the key-stone to the study of natural phenomena and their complexity.

Jung not casually defined as “transcendent function” the operative peculiarity of symbol, that allows psyche to reach a new psychic dimension, more ordered and less troubled, joining together conscious and unconscious. Confirming the link of symbol with analogy, there are more structural and dynamical considerations about their function mode. In fact, an “informative field”, apt to the heuristic function construction, is represented by analogy, and its definition of a new cognitive space: a similar “informative field” is represented, inside the symbol, by its power to join the opposite informative aspects, belonging to different “conscious field”.

More, analogy allows psyche to build an auto-regulating game of references, and links images not immediately understandable: for instance, the analogy among hair, thoughts, waves, sea-waters, tears, etc., which are elements apparently separated but connected by the same rhythm; symbol allows instead unconscious energy, and the correspondent vision, to enter consciousness, without forcing unconscious contents. Such a function is defined as the “transforming ability”, the numinous and the core of primary unconscious image¹⁶.

To dream of killing a relative, for example, in order to express the need to get rid of a dependent condition, is different from seeing the person who dominates us for a no-return journey.

Symbol and analogy are the basic axes to give way psyche to reach unconscious phenomena, in a neat manner, also to complex phenomena of man and nature. It is clear the relation among symbol, analogy and intuition. Intuition is the event comprehension without intellectual mediation and puts psyche, that investigates the phenomenon, directly at the center of reality, picking it up sympathetically, almost getting into what is unique and not expressible.

«On the contrary, analysis – H. Bergson remarks – multiplies to the infinite its views, to complete a representation never completed, with an always inexhaustive desire to embrace the object around which it is obliged to move»¹⁷. Analogical intuition is the phenomenological action that looks neither the cause nor its consequence for, but tries to wear all the content out”¹⁸.

Now, some psychologists treat intuition as a thought aspect of 3-6 years old children, when there is not the ability to define concepts yet, other than showing tools by use, empirically and in a personal context¹⁹; researchers of other areas, in phylogenetic studies about intuition, judge that it is a Gestalt’s faculty to know the world.

«I affirm that gestaltic perception is identical to the mysterious function of intuition, that with no doubt is one of the most cognitive faculties of man. When scientist is faced by a plenty of apparently incompatible facts, he suddenly ‘sees’ the regularity that links them together; what was inexplicable becomes clear as a revelation, and we can compare this kind of experience to a Gestalt, hidden in a puzzle, generally considered as a privilege of artists and poets, that emerges unexpectedly by the back stage chaos [...]: intuition carries on a fundamental role in every inductively-processed research, also in the most rigorous one. It has been proven

¹⁶ Jacobi J., *Complesso, archetipo, simbolo*, Boringhieri, Torino 1971

¹⁷ Bergson H., *Introduzione alla metafisica*, La Scuola, Brescia 1970

¹⁸ Minkowski E., *La psychopathologie: son orientation, ses tendances*, L’Evolution Psychiatrique, Paris 1937

¹⁹ Piaget J., *La nascita dell’intelligenza del bambino*, La Nuova Italia, Firenze 1963

that no important scientific discovery was done without a intuitive Gestalt perception. Without intuition, the world would present itself to us as a disconnected events accumulation. We couldn't understand laws and pre-eminent rules of that chaos, if we had trusted our mind's conscious mathematical and statistical operations, without any aids of the Gestalt – perceptive computer, active at unconscious level. In fact, as every other specialized types of Gestalt perception, intuition simultaneously keeps into account a higher number of premises than what is normally possible to any results of conscious thinking processes»²⁰.

In this perspective, intuition is a complex faculty of psyche, the only one able to conjugate in itself the irrational unconscious aspects and the rational conscious ones, according to a rule that allows the global interpretation of phenomena. Intuition is the only faculty of man able to catch the variety of reality and the complexity of nature, through the global perception of the informative relation's network. This perception that unifies all single aspects of reality allows to conceptualize them in an important set, assimilated by memory and compared with data based upon experience, till the transformation of the investigating mind. For the superimposition features of the trend to unity and the transformation of the sensorial data, intuition is strictly bound to symbol and analogy, and they represent the psychic modes, able to understand complex phenomena. To study the "complex" phenomenon of man and nature and, in a more abstract sense, of reality, we need the preliminary condition of a gestaltic "sight", peculiar to the intuitive faculty, without which the phenomenon would be "fragmented" in its parts. This complete function of the reality insight is the same present in the symbol, thanks to the features of the "opened" link, put at disposal by analogy.

Therefore, analogy, symbol, intuition can be considered as apparently different aspects of the same thinking process, for what interests the approach to complexity phenomena. Analogy allows, by its "open" logic, to build general models, even though unconscious; symbol turns these unconscious models into systems understandable to consciousness; intuition picks this change immediacy up, allowing the enrichment of psyche, through the amplification of consciousness.

A NEW WELTANSCHAUUNG: ECOBIOPSYCHOLOGY

Above, we have examined how modern science has submitted nature and man to a process of continuous dissociation, "scarifying a lot of what we consider reality, for mathematical schemes that have only advantaged us in manipulating matter, on a quantity pattern"²¹; the final result is the loss of the quality of life and its value.

"If today the 'domination on nature' has caused overpopulation, the lack of 'breathing room', the coagulation and congestion of life in large cities, the exhaustion of natural resources, the decay of biologic environment through machines and their by-products, the outspread of mental disease, and many other accidents, some of them irremediable"²², there is no doubt that to overcome the suffocating environment of "matter", created by the *hybris* of machine civilization, man must discover again a global vision of the world and a very close connection with nature, intended as cosmos, that talks to man in an apparently new, but ancient language.

Linking to nature, once an endless dialogue, nowadays has been submitted by man with an egocentric and narcissistic monologue, and Nature has become something alien and less important. Every attempt to re-establish the ancient alliance is contemned, for it is either "primitive" coming back to an empathic attitude towards nature, and "animistic" or "pantheistic" to overcome the distance from the natural world.

Through the loss of certitude about the complete view of cosmos, man has discovered a set of events that he can control and measure as he likes.

²⁰ Lorenz K., *Il ruolo della percezione della forma nel comportamento animale e nell'uomo*, in L.L. White, *Aspetti della forma*, Dedalo, Bari 1977

²¹ Burckhardt T., *Cosmology and Modern Science*, in Tomorrow, London 1964

²² Nasr S.H., *L'uomo e la natura*, Rusconi, Milano 1977

«But, in this new wear of 'deity on earth', that reflects no more its transcendent archetype, man is menaced to be devoured by Earth itself, which he seems to rule»²³. World reality nowadays speaks to man by using reasons of "complexity", the new paradigm that indicates the need for a global view of cosmos; it obliges everybody to push back the fragmented sight of the scientific materialism, in favour of a re-discovery of metaphysical principles, the only ones able to overcome skepticism about the world reality vision. For "metaphysical principles", we do not mean to simply connect the human and scientific data, leading to a degeneration of a sort of mysticism, with no evolution for man; on the contrary, we mean the study of the archetypal function of symbol, its prerogatives linked to information theory, its tendency to neg-entropy for consciousness, its importance as "regulating factor" for Ego and the development of Ego along the Self path. Metaphysics is instead the traditional science of symbols: it inspires and settles the universal values of empirical science discoveries, and allows to collect the psychological value with real data within symbols, that they possess, to amplify consciousness. It is better than a bio-ethic: this last is usually shaped as a set of moral troubles that have to do with the general relations between science and life, with solutions centered on the consciousness' survival of Ego; more, bio-ethic has often left the belief of the multiple state of being apart, like the cosmic correspondences, and symbols, once heritage of "universal" sciences as alchemy.

The need for a re-discovery of archetypal principles and traditional symbolism allows science investigations to speak a language, no more alien to the consciousness of man, giving him a role nearer to the natural world.

In fact, all the modern science improvements are horizontal, on the material and concrete plan of existence, also in the case of galactic matter, and for this they do not touch other levels of life. On another side, human intelligence, and its consciousness, is speculative and composed by a subtle "matter", which can be hardly integrated with the reality examined by science. Human intellect is open to Infinite or Absolute, while science is addressed to indefinite and relative. Only by the symbolic function it is possible to start a synthesis process, allowing to legitimate scientific knowledge no more as "relative", but as a *continuum* that strictly ties nature with human psyche.

Symbol could work the vital task out of being the connecting link between modern science and archetypal principles that have ruled Man and Nature ever since, therefore going beyond all the partial and fragmented view, to introduce an effective gnosis, able to find archetypes out everywhere.

To do this means to carry out the sacralization of cosmos, to say, to develop the tendency to a global vision of reality, inside human psyche, as a basic need; for existence, it represents the reflection of the archetypal function of the Self, inner regulating factor that can fight the emptiness and nihilism of modern man Ego.

In fact, a way to see the dynamic reality of archetype in the world complexity is to understand symbolic language, to find out the synchronic concordance among natural world shapes, colours, life pictures, to find them as sediments in human body, as functions, organs and apparatus, and active operations in symbolic pictures of the human imagination.

«To educate men to such an interpretation of symbols does not mean to deny things reality. It means instead to reveal the knowledge of another aspects of things, more real and more strictly connected to their existence root, that are the central points of the modern scientific research. To teach that the tree shows the several states of being, or that the mountain is a symbol for cosmos, or that the sun is the symbol for the intelligible principles of the universe, does not mean to diminish botanical, geological and astronomical discoveries. If nature has to regain its meaning, if the relation between man and nature has to be saved from the incumbent dangers, symbolic consciousness must be presented not as a fancy, but as a science linked to ontological roots of things»²⁴.

²³ Nasr S.H., *ibidem*

²⁴ Nasr S.H., *ibidem*

The investigation on Man and Nature relationship, intended as above, has brought research to develop a complex program, that could be considered ecobiopsychological. Ecobiopsychology is a new discipline aimed to connect semiotic codes of infinite forms of the living world, and their languages (ecological aspect), to analogous languages of the human body, that summarizes in its ontogenesis the phylogeny of the so called biological world; it is possible to find again this relation between “world” and human *bios*, in the cultural and psychological aspects of the “world” itself, thanks to myths, history of religions and collective images of mankind (psychological aspect)²⁵.

For instance, to trace a link among the destruction of Amazon rain-forest, the carbon dioxide increase (ecological aspect), the lungs disease, such as the increase of breathing allergies, asthma (biological aspect), the enormous number of panic attacks, peculiar to nowadays world (psychological aspect), is not an intellectual virtuosity, but a scientific event on which our attention should be led.

After a deep analysis, for the vegetable kingdom we can affirm that carbon dioxide is absorbed by leaves of the plants, that contribute to form carbohydrate through the chlorophyllian photosynthesis. During this process, oxygen is freed into atmosphere. In man lungs, as symbolic “leaves”, anabolically utilize oxygen, that for plants is a catabolic product. Therefore, we can assert that, in respect to breathing gases CO₂/O₂ human lungs and the leaves of the plants work in an inverted way²⁶. In breathing allergies, asthma, emphysema there is a breathing spasm, characterized by an increase of carbon dioxide in the lungs residual air and in blood²⁷.

As in the vegetable world, there is a work that moves the balance of respiratory gases towards carbon dioxide. In panic attacks, carbon dioxide is again the reason of the crisis, because neuronal receptors seem to react to that gas²⁸.

We have summarized data from ecology, pneumology and modern psychiatry. Thanks to the heuristic contribution of analogy and the symbol stimulus, the ecobiopsychological method can relate apparently far events, that belong to different semiotic codes, building a unifying analysis and reflection model. Certainly, if generally speaking the world goes towards a carbon dioxide increase, human psyche observes ancient fancies of “suffocation”, sedimented in our unconscious, with the spurt of uncontrolled aggressiveness: this is represented by panic attacks, individually, and by destructive expression of modern society, collectively. In our unconscious, it is not possible to arbitrarily manipulate the chemical composition of air, without including inner changes in human psyche, because the so called “breathing atmosphere” outside, in human psyche corresponds to balance in the outwards relations²⁹.

In fact, if anybody of us has his/her own individuality with respect to Ego, we are in contact with the entire world with respect to breath^{30 31}.

Through inspired and expired air our emotions are thrown in the world, and when we feel suffocated by a too overwhelming psychological surroundings, we need “a good breath of air” to recover. The breath dimension, linked to oxygen life-cycle, not casually has been celebrated in all cultures as the most important point for the survival of human spirit.

²⁵ Frigoli D. (ed.), *La forma, l'immaginario e l'uno*, Guerini e Associati, Milano 1993

²⁶ Frigoli D., Ottolenghi D., Cavallari G., *Il corpo analogico*, in D. Frigoli, M. Zanardi, *Il codice psicosomatico del vivente*, ANEB, Milano 1987

²⁷ Serafini U., *Il problema generale dell'asma bronchiale*, in *Atti dell'81° Congresso della Società Italiana di Medicina Interna*, Pozzi, Roma 1980

²⁸ Gorman J.M., Liebowitz M.R., Fyer A.J., Stein B.A., *A neuroanatomical hypothesis for panic disorder*, *American Journal of Psychiatry*, 146, 148-161, 1989

²⁹ Frigoli D., Masaraki G.L., Morelli R., *Verso la concezione di un Sé psicosomatico*, Cortina, Milano 1980

³⁰ *Upanishad*, UTET, Torino 1976

³¹ Eliade M., *Tecniche dello yoga*, Boringhieri, Torino 1972

Psychoanalysts have noticed the breath anguishes, to affirm that air is the “Universe milk”³². To alter such a relation means to leave devastating death and “suffocation” fears emerging, and a reduced breathing vital space, with obvious consequences in relation to the aggressive relation with the outside world.

On these conceptual bases of systemic and complex investigation, ecobiopsychology has begun to understand the Aids’ and cancer roles as detectors of the uneasiness of the Western society. Immune diseases reveal a deep collective difficulty in a symbolic and concrete sense, expressed by an alteration of the phylogenetic structure, responsible for the recognition processes of the internal environment of organism³³.

Modern Psycho-neuro-endocrino-immunology³⁴, a recent psychosomatic model that relates stress events with organic alterations, questions man about the psychological loss of the collective identity, and the real effect is the appearance of Immune system diseases.

The ecobiopsychology setting-out, linking altogether environment, human body and its psychological appearances, begins to give a no more abstract epistemological answer to dilemmas of nowadays man.

To consider environment not only as one of the several “loci” to be protected and conserved, but as the unavoidable aspect of a complex macrosystem, allows the human body to become the microcosm, analogically with respect to the rules of the embryological ontogenesis of man and, more, in his organs and apparatus. If we consider, then, that psychological images of man, found in his artistic, religious, cultural and mythological production, are superimposable beyond ethnic and linguistic differences, with a collective unconscious model³⁵, we must observe that these images and topics are supported by the phylogeny, intended as a common psychological feature, and represented by human body.

For instance, the sea, that is the cradle of life, as many researchers have remarked, is composed as human blood plasma³⁶ and this liquid part is linked to the concept of emotion (*emo-agere* = to work on blood). We can therefore affirm that, at a psychosomatic level, any emotional fact refers to precise bio-chemical and humoral elements of hematic life.

On the other hand, psychoanalysis has observed that dream images of sea and waters often appear in the oneiric productions of the worst identity and unsolved emotion crises, and that their more or less transparent iconography is a source of anguish for the dreamer. Beyond these remarks, what can be the link among oneiric sea image, blood plasma, and real sea? Why, to express a core emotional change of our psyche life, are we obliged to refer to an oneiric image, sea, obtained from an external reality, according to our need for a change and symbolic rebirth?

Our consciousness does not know that the sea is the cradle of life, unless one is educated, and living species have started the exploration of earth from the sea; but our body reminds very well the phylogenetic feelings connected to this ancestral transformation, and therefore the unconscious informs consciousness with the need of a psychological change in symbolic form, using as language a plastic image, picked up from the ancestral memories buried in the body.

For that, it must exist a common knowledge, able to link natural world events, human body, and human psyche, utilizing same images, working analogies and identical reflections³⁷.

This sort of *sapientia naturalis* is known by analytical psychology scholars as the archetypal function, that is able to contemporarily operate materially and psychologically.

³² Resnik S., *Persona e psicosi*, Einaudi, Milano 1976

³³ Spano I., *Verso un'ecologia della medicina*, Guerini e Associati, Milano 1990

³⁴ Biondi M., Kotsalidis G., *Psychoneuroimmunology today*, Journal of Clinical Laboratory Analysis 1990, 4, 22-38

³⁵ Jung C.G., *L'uomo e i suoi simboli*, Mondadori, Milano 1981

³⁶ Laborit H., *Biologie et structure*, Gallimard, Paris 1968

³⁷ von Franz M.L., *Psiche e materia*, Boringhieri, Torino 1992

To approach the working mode of archetypes, as indicated by the modern ecobiopsychological attitude, implies for psyche the possibility to fluctuate between analogy and causality principle, conscious and unconscious, symbol and sign.

In this studying perspective, ecobiopsychology could become the modern scientific paradigm to regain the real centrality and totality of human consciousness, thanks to a man no more extraneous to the knowledge of nature norms and to the comprehension of its functions. If in past times man had to protect himself from natural forces, today it is nature that has to be preserved from man: the way to realize such a program is to give life again to a philosophy of nature and man, starting from the qualitative values of forms, colours, infinite elements, by which nature shows itself. Thanks to analogy and symbol, these elements should be put inside human body, where phylogeny had synthesized its own primordial imprints, sedimenting them in physiological structures and apparatus, to find them again in the mental images, born in that same archetypal background, defined by alchemists as fundamental *prima materia* for the "Big Opera".

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