# THE STAGES OF KNOWINGNESS AND THE THOUGHT

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Accepted May 18, 2022

The knowingness is an indispensable process for the materialization of the evolution of the individuals, through the development of new functional and structural neuronal circuitry at the level of the brain. The knowingness can be either scientific, or paranormal or theological (divine).

The process of cogitation has both a material substrate (the telechip), as well as a well-documented energetic field, but up to the present moment there had not been published any conclusive results of the research which had been conducted in this field, neither had been developed any instruments for the detection of the presence of thoughts.

This information carrying energetic field can be transferred from the emitter brain towards the receiving one, as well as towards certain command apparatuses.

The processes of cogitation require an important energy consumption. The neurons, these minuscule, as well as esoteric structures which are present in a fascinating variety of shapes and sizes, are interconnected within an extremely dense network which the science will attempt to unravel for many decades to come.

Keywords: process of cogitation, thought, energetic field, neuronal circuitries, neuroplasticity.

## **INTRODUCTION**

The knowingness represents the active and complex form of the reflection, of the appropriation and of the reconstruction by the subject of the objective relationships through the process of cogitation.

The knowingness is therefore a process which is indispensable for the materialization of the evolution of the individuals, through the development of new functional and structural neuronal circuitry at the level of the brain<sup>1</sup>.

Based on the contents of the acquired information, the individuals can, through the process of adaptation, comply with the continuous changes which take place at the internal, as well as at the external, levels, and thus they can discover new laws and principles.

The extent in which we are able put into effect the esoteric capabilities of the brain depends on how interested we are to achieve the changing-over and the promotion of the knowingness processes, as well as of the manner in which we approach our existence in general.

The competences, the talents and the innate abilities can be developed and greatly improved during the childhood period.

Proc. Rom. Acad., Series B, 2021, 24(1), p. 109-123

While we are learning, thinking or feeling anything, within the brain become activated billions of cells, pathways and neuronal circuits which we want to become ingrained in our living in order to achieve the improvement of the performances connected to the memory processes, the increase in the speed of the thought processes, as well as the improvement of the problem solving capacities.

The neurotransmitter which has a crucial function in the processes of knowledge and learning is represented by serotonin. It plays a major role in the structural remodelling of the brain.

The habituation of certain abilities leads to the intensification of the neuronal discharges and to the enhancement of the myelination process. The increases in the process of myelination lead to the improvement of the communication between the cortical regions, as well as of the performances.

The thickening of the axons, as well as the increase in the survival capability of these structures during the learning process is achieved with the help of the oligodendrocytes, which enlarge the myelin sheath.

The emotions, the stress and the depression influence negatively the morphology of the axons.

The brain, in its capacity as a starting point of behaviours, adapts its architecture and functions in such a way as to be able to accomplish new tasks through a series of processes which are known under the generic denomination of neuroplasticity.

The respective processes include the dynamic reconfiguration of the neuronal connections, of the shapes of the cells and of their dimensions, as well as of the degree of axonal myelination, of the synaptic power and of the hippocampal neurogenetic processes<sup>2</sup>.

The neuroplastic changes are adaptive processes, of both functional and structural nature, which take place at the level of the brain during the entire lifespan in order to achieve new abilities in response to the action of both internal and external stimuli.

The abilities and the intelligence influence the results of both the process of knowing and of that of learning.

The functional and structural cerebral changes which take place at the level of both the grey and the white matter in the brain are interconnected and they can unfold concomitantly in time in order to answer to the action of the new specific stimuli.

The molecular and the cellular events which are involved in the enrichment of the cognitive activities and in the consolidation of the memory processes can be of a functional, as well as of a structural nature.

The functional events include the release of the chemical mediators, the changes that take place at the level of the receptors, as well as the activation of the post-synaptic mechanisms.

The structural events refer to the build-up of the new dendritic spines, to the increase in the diameter of the axons, to the increase of the myelination process, as well as to the hippocampal neurogenetic processes<sup>2</sup>.

The lack of use of certain cerebral functions leads to their disappearance.

The stimuli enriched environments, which are saturated in novelties and challenges that require the focussing of attention, play an extremely important role in the stimulation and the advancement of the knowingness processes.

For their part, these lead to developments and positive adaptations which can be observed even after longer intervals of time following the completion of the critical learning period during the first years of the childhood and during the young adult period.

The lifestyle also plays an important role in the promotion of the cognitive processes and of the cerebral neuroplasticity. Here we can include the existence of an adequate diet pattern (intermittent fasting, the reduction of the meat consumption and of that of hyper-caloric foods for the older adult individuals), the physical exercise, the excursions, the mnemonic practices, the enrichment of the vocabulary, the lecture of science-fiction literature, the learning of a foreign language, the creation of various artistic artworks, the playing of a musical instrument, the practice of dancing, as well as the romantic relationships, the normal sleep schedule and the leisure activities.

The lifestyle mentioned above, which exposes the brain to a wide range of novel stimuli, either encourages or stimulates the release of the chemical mediators, the activation of the postsynaptic mechanisms, the changes at the level of the receptors, the myelination of the axons, the degree of synaptic readjustment, the number of the dendritic spines, the dimensions of the neurons, the opening of new pathways and neuronal circuitry, the increase in the levels of connectivity between the neurons, between the neuronal regions and between the different regions of the brain, the development of new pathways, as well as of new neuronal circuits and networks, together with the strengthening of the older connections between the neurons

The various forms of both functional and structural plasticity, which are found in different periods of time, ameliorate the cognitive performances, increase the processing capacity of the memory, intensify the introspection, the empathy, the attention, as well as the concentration processes, activate the visual and the auditory acuity, enhance the degree of thoroughness of the knowingness and learning processes through the facilitation of the transfer of information from one cell to another, and reduce the risk of the development of the neurodegenerative diseases.

#### THE STAGES OF KNOWINGNESS

Within the limitless field of research, we include the scientific knowledge, the knowingness of the paranormal phenomena, as well as the theological, or divine, knowledge.

The scientific knowledge satisfies the spiritual requirements of the people through the provision of perspectives and impulses which will help them to pass from a state of confusion to understanding in order to put forth a rich dimension of life which would otherwise have been unattainable.

The results of the scientific knowledge, in spite of their relative character, are the product of the creative work, as well as that of investigation, inspiration, meditation, reflexion, revelation, serendipity, and exceptionally, of genius.

Therefore, the science is a system of knowledge which is based on heuristics, that is, on the observation, the measurement and the reproducibility of the unexplainable phenomena.

The knowingness of the paranormal phenomena refers to the phenomena for which there are not in the present either sufficient scientific explanations or any explanation at all. I am making reference here to the persons who are endowed with superior sensorial capabilities of meditation, intuition and clairvoyance, who use particular proceedings and technologies, which are unknown to the ordinary people, and who appear to be the providers of energies that are specific for new forms of matter.

The extrasensory perception refers to the acquirement of information through other means than the normal senses.

We include here the precognition, where the anticipations, the dreams, the presentiments, etc., precede the actual accomplishments, as well as the premonition which refers to the anticipation of certain future events without the existence of a rational motivation.

We talk here about the presence of a special capability of rapid, non-programmed knowingness, which short-circuits the classical steps of the scientific knowledge and which is a priori lacking of a scientific motivation, of a pre-knowingness.

We also take into account here, among others, the **telepathy**, the premonition or the presentiments, as well as the teleportation, the telekinesis, the levitation, the empathy, the non-verbal communication, the hypnosis and several others.

The telepathy (From the Greek tele - far and pathos - affection, feeling, sentiment) is a parapsychological phenomenon of extrasensory communication between people, without the intermediation of the common sensory organs, which consists in the direct and remote transmission of the thoughts of an individual to another person.

The telepathy manifests itself through the occasional remote perception of the phenomena and of thoughts.

The reality of this phenomenon, which is questioned by some scientists, remains debatable.

Is it possible a scientific approach of the phenomena which had been mentioned above? Definitely yes, due to the fact that the physics of the XX<sup>th</sup> century (the quantic physics, the relativity, the cosmology and the epistemology in general) had rendered evident that the matter must be considered in relationship with the neuroscience, that is, with the psyche or the spirit.

Consequently, the human being must be considered as a dual entity, both corporeal and spiritual, which is located at the interference between certain objective phenomena and abstract conditions, both visible and invisible.

If until recently the materialistic, or the corporeal, entity had been investigated preponderantly by the natural sciences, while the spiritual aspects were especially the study objects of the metaphysics, of the occultism and of the religion, today both the materialist and the spiritual sides must be construed in a trans-disciplinary manner.

The intromission of the physical sciences within the field of the human invisibleness is the result of a series of successful experimental research studies in the domain of parapsychology, which were until recently inaccessible to the scientific rationality.

Here we find the involvement of either the individual, or the collective dynamic neural fields<sup>3</sup>, that is "the psi phenomena", beyond which the metaphysics, the occultism, the hermeneutics and the religion acquire valences of speculation, abstractions and transcendental hypotheses such as "The Absolute Idea" or "The supreme Spirit".

In this context, the universe of the spiritual knowledge has two planes:

- One which allows the exact sciences to penetrate within the invisible spaces of the human existence which are represented by the field of parapsychology;

- Another, which remains outside the capabilities of the objective knowledge of the human being due to the inexistence of the appropriate technicalinstrumental equipment.

The theological (divine) knowledge has its origins in the transcendental, that is, in a reality which is superior to the intelligence and to the normal experiences.

It is based on the theological creation, the revelation, the ecstasy and the unexplainable.

The evolutionism does not go against the Bible, but it disagrees with the scientific evidence.

The creationism denies the evolution of the species by means of natural selection, and it cannot be placed on an equal footing with the evolutionism.

The Bible is not a scientific book, and it has not the purpose to offer a description of the functioning of the physical world, but to explain a series of spiritual principles. In conclusion, we can assert that there is no contradiction between the religion and science, but on the contrary, there is a fundamental concordance between the two domains.

The science provides us with increasingly more knowledge concerning The Creation, while the religion supplies us with more and more information about The Creator.

Nevertheless, the world is characterised by an excess of science as well as a deficit in conscience.

However, the human beings have a single brain, which is the headquarters of all the cognitive abilities.

It is essential for us to know that all our unconscious actions (which are under the coordination of the brain stem), our subconscious ones (which are dependent on the diencephalon and on the limbic system), as well as the conscious actions (which are coordinated by the cerebral cortex) are controlled by the brain<sup>4</sup>.

The cerebral cortex, whose activities are both creative and critical, differentiates us as humans from the rest of the mammals, especially due, among other characteristics, to its large weight which is used for the cogitation processes.

#### THE THOUGHT

For hundreds of years, it had persisted the creationist and mechanistic mystical vision concerning the existence of the order and of the nature of the universe. The physical reality was created through observation.

This philosophical-religious doctrine pleaded in favour of the direct, extrasensory contact between man and divinity through intuition, ecstasy and revelation.

Towards the end of the XVII<sup>th</sup> century, during the period in which had lived the French philosopher and mathematician René Descartes  $(1596-1650)^5$  it had been reached the decision that the matter and the mind are two totally different aspects of the reality.

According to Descartes, the matter was controlled by objective laws which belonged to the domain of science, while the human mind, which was too personal and too subjective in order to be measured and studied, was under the auspices of the religion. The science studied the matter, while the religion and the philosophy took charge of the mind, so that the two concepts should not be mixed. This Cartesian dualism, in which it was a clear separation between the matter and the mind, had dominated Europe for centuries.

Descartes voiced the right of the rationality to accept as truthful only what is presented to us clearly and distinctly, so that any reason of doubt should be removed.

"The methodical doubt" (the Cartesian doubt) leads us to the thesis of "cogito, ergo sum" (I think, therefore I am) as a first undoubtable truth from which should start the reconstruction of the philosophy. From this truth might result the conscience of the existence of a soul-substance, with the attribute of thought, together with which, and independently of, might exist a body-substance with the attribute of expansion. Both substances are subordinated to the supreme principle, to that of God, while the idea of God might be a hardwired idea.

After about one hundred years it had come the period of Isaac Newton  $(1642-1727)^6$  and of his mathematical laws, which had allowed the coding of the mechanist substrate of the dualism of Descartes.

English physicist, mathematician and astronomer, Newton had substantiated the classic mechanics by defining its basic notions, and had enunciated the three principles of dynamics, as well as the laying the foundation of the astral mechanics through the discovery of the law of universal gravitation (1687). He had also invented the telescope (1668), had important contributions in the field of optics, in the study of the dispersion and interference phenomena, and had issued the corpuscular theory of light.

In mathematics, he had laid the groundwork of the infinitesimal calculus in the same period of time as Leibnitz and he had established the formula of the binomial which bears his name.

In his concept of the world, the materialistic ideas intertwine with the deistic ones.

In 1679, when Robert Hooke  $(1635-1703)^7$  had asked Newton to demonstrate that a planet moves on an elliptical orbit if it is under the action of a force which is inversely proportional with the square of the distance between it and the sun, Newton's interest for astronomy had grown.

The result he had achieved in that year had represented the mathematical evidence of the elliptical movement, which had never been conveyed to Hooke.

In 1684, Halley, the secretary of the Royal Society in London, had visited Newton in order to ask him what shape might have the orbit of a planet which was under the incidence of the inversely proportional report with the square of the distance. The answer of Newton had been immediate: "Elliptical, because I had calculated it".

Halley had asked Newton to show him the calculations, but he had answered that he had "misplaced the papers", and had promised to begin to make again the calculations. After several months, Halley had received from Newton a paper with the title of "De motu corporum in gyrum" (About the movements of the bodies which rotate), which he had presented in front of the Royal Society. Before the paper had reached the press (on the 5<sup>th</sup> of July 1687), Hooke<sup>7</sup> had found out that the author had not made any connection between his name and the law of the inversely proportional report with the square of the distance, law which he considered that he had discovered before. This was the starting point for a long lasting dissension.

Taking into account the small incidents which had taken place during the life of Newton, everyone had been impressed by the words he had expressed after his admission as a member of the Royal Society: "The fact that I had reached the position in which I am now is the result of the fact that I had leaned on the shoulders of giants". Evidently, he was making reference to Galileo Galilei, Tycho Brahe and Johanis Kepler.

In this way, the laws of the matter had become cognizable, coherent and predictable.

In the chapter about the Newtonian vision of the world, it is said that the physics can stop at the border of the human body, or at that of the brain, which in that period was totally esoteric.

The scientists were studying the brain as an object which was governed by the physical laws. According to the mechanic theory of Newton, it was accepted that everything in existence was in fact matter, which was governed by pure mechanical forces.

Later, the idealist philosopher Berkeley had totally rejected the materialism with the motto of "esse est percipi" (to exist means to be perceived), which meant that everything in existence was created through the observation of the respective object.

Although the almost solipsist position of Berkeley might seem to be a little off the edge, numerous idealist philosopher had been since then quite enthusiastic about it.

On the other hand, the idea that the world which surrounds us is created through its observation had never been considered seriously. Most of the scientists in the eighteenth century considered that the world was composed from small solid particles, which they had called "atoms".

It is assumed that these observed a series of mechanical laws, in a way which was similar to that of the large particles, that is, the planets.

During the nineteenth century and in a large part of the twentieth century, the scientific thinking had been generally assimilated to the materialistic thinking.

The Newtonian physics had been dominant until the end of the nineteenth century, when it came the turn of Albert Einstein  $(1879-1955)^8$ , a German physicist who had emigrated from Germany (in 1933) and had settled in the United States of America (in 1940). Einstein is the creator of both the theory of special relativity and of the theory of general relativity  $(1916)^8$ , which had revolutionized the orientation of the modern physics, this representing an important turn in the scientific conception of the world.

He had determined the formula which bears his name:  $E = mc^2$ , where E and m are the energy and respectively the mass of a body, while c is the speed of light, formula which had been verified subsequently during the experiments of nuclear physics.

Einstein had explained the laws of the photoelectric effect based on the quantum hypothesis advanced by Planck<sup>9</sup>, thus confirming the corpuscular theory of light.

He had also developed the theory of the specific heats of solids and the theory of the gyromagnetic effects, which Haas had also named  $(1915)^{10}$  it as the Einstein effect, while he had researched the possibilities for the emission and the absorption of light, with applications in the field of lasers. He had been awarded the Nobel prize in 1921.

The Einsteinian theory concerning the nature of the matter and of the energy had represented one of his greatest achievements, due to the fact that his new concepts had provided the explanation of the contribution of the energy to the building-up of the matter.

The fusion between the matter and the energy had represented a huge leap for the understanding of the nature of the reality. The highest possible speed with which the large objects can travel is represented by the speed of light.

The laws of physics are essentially the same for the entire matter (both the objects and the particles) and for all types of energy (both the light and the waves), which travel with the same speed. For example, if I drive my car with a speed of 90 km/hour, and you are in a train which travels on a parallel trajectory with the same speed, we both have the sensation that we are standing still because our relative speed creates a relative time for both of us.

For this reason, the space, the time and even the mass are relative, depending on the speed with which we travel, on the place we are located in space, and if each of us gets closer to, or farther from our destination.

In the beginning, the researchers believed that the light is a wave and that it behaves as such in all the circumstances. Later on, they had observed that, in certain conditions the light behaves like a wave, while in others it has the characteristics of a particle.

The experiments conducted by Maxwell Planck<sup>9</sup>, Niels Bohr<sup>11, 12</sup> and others had demonstrated that the light is both a wave and a particle. The results had led to a scientific concept named quantum physics, according to which the light behaves differently depending on the influence exerted by the person who observes the phenomenon.

In this way it had been possible to explain its capacity to be transmitted around a corner.

The laws of the classical physics had begun to fracture along with the discovery of the quantum physics, according to which, following the measurements and the observation of the minuscule universe of the subatomic particles, these behave in a different way compared with the large objects which can be found in the natural world.

The quantum enigma represents the encounter between the physics and the conscience. The quantum mechanics had revolutionized our world.

"The quantum theory tells us that an observation of an object can influence instantaneously the behaviour of another object, which is located at a great distance, even if there is no physical force through which the two objects might be connected"<sup>13</sup>. "According to the quantum theory, an object might exist in two or more places at the same time, even in places which are located at great distances from one another. Its existence in the specific place in which it happens to be becomes a reality after its conscientious observation".

During the last week of the nineteenth century, Max Planck had declared that the vision about the world which we name today "classical" should be abandoned.

Planck had presumed that an electron can radiate energy only as snippets, that is, as quanta.

Beginning with 1905 and until 1923, Einstein had been the only, or almost the only scientist who had considered seriously the quantum of light.

Niels Bohr<sup>11, 12</sup> had accepted the quanta as being the expressions of a fundamental state, as well as the fact that the rotational movement of an object can exist only in quantic units.

The physics had met with the conscience in the 1900s, but this reality had not been acknowledged.

The questions which are raised by the quantum enigma are more profound than the answers we might propose in a serious manner.

The quantum theory functions perfectly; none of the predictions which had been made based on this theory had ever been proved to be wrong. This is the theory which stands at the foundation of the entire field of physics – and thus, to that of the entire science. But if we bring the quantum theory beyond the practical purposes, its implications are bewildering<sup>13</sup>.

The quantum theory tells us that the encounter between the physics and the conscience, such as it had been demonstrated in the case of the small objects, is applicable virtually to everything, and "the everything" might include the entire universe<sup>13</sup>.

Most of the physicists set aside the creation of the reality through observation, considering that its importance is reduced beyond the limited field of the physics of the microscopic entities.

Due to the fact that the quantum enigma is rendered evident in the simplest experiments, its substance can be understood in its entirety even with only a minimal technical training.

It had been discovered that the electrons were appearing and disappearing when they released energy. When the energy acted upon an electron and caused its movement nearer the nucleus, this particle, instead of demonstrating a behaviour characterized by an equal and continuous manner, behaves more like ball which tumbles on the stairs, alternating between gaining and losing energy.

The divergences between the laws of classical physics and those of the quantum physics had become more pronounced when the physicists had realised that the minuscule particles, which are parts of the structure of the atoms, were reacting to the mind of the observer.

For example, when they were observed and subjected to measurements, the waves had undergone a transformation into particles, and more than that, the presence or the absence of an observer had led to changes of the results of the quantum experiments. Consequently, the subjectivity influences the behaviour of both the matter and the energy.

All of a sudden, the objective world of the matter and the subjective universe of the mind were not separate issues anymore.

The fact that the mind and the matter are now connected in the quantum universe of the subatomic particles as well demonstrates that the mind has a direct effect over the matter.

There is a global agreement among all the specialists in the field of the quantum that the observer has an influence over the minuscule world of the subatomic particles, and when it comes to the microcosm, to the objects and the matter, the classical physics continues to dominate. We shall be told that the observer has no influence over the objects with large dimensions and over the objective universe of the matter, as well as that, in accordance to the results of the experiments which had been performed, the idea that the thought can be used in order to control certain life consequences is simply an impossibility.

If it is possible for the elementary particles at subatomic level to transform into and from energy and if they conform themselves to the influence of the observer, then the humans have at their disposal an enormous power potential in order to influence the nature of the reality.

The subjective mind (the process of cogitation) of the human being and the act of observation in itself affects both the microcosm and the macrocosm of the solid objects, fact which is dependent on the observer. Not all the individuals get the whip of the energy which is necessary for their involvement in such actions.

Nevertheless, I am of the opinion that, through the phenomenon of neuroplasticity, we can train our brain and our thinking processes in order for them to function better and to become efficient participants in the process of observing and influencing to a greater extent of the objective world.

The researches concerning the human thought process had begun in the nineteenth century, along with the studies about the subconscious of the American psychologist William James<sup>14</sup>.

He had revealed the extraordinary power of out subconscious, galvanized by beliefs, as well as how much our life can be influenced by this concentration of thought, and also the extraordinary role played by suggestion, which is transmitted towards the internal organs through the thought waves.

The thought is a powerful force, with both positive and negative results. When our train of

thought is a negative one, the negative signals can return in time to the person who had emitted them, the same as in the case of the positive ones, on the strength of inverse connection of the Universe.

As a result of the evolution of the matter in time had come into existence the structures which were specific for the phenomenon of life, structured hierarchically in multiple levels, from which resulted the completeness of the system, together with its complex connections and communications.

These connections and communications are established between each part of the cell, between different cells, as well as between the entire living assembly and the environment.

The intelligence is represented by the intellectual capabilities of the human beings to develop concepts through creative activities and by using the verbal symbols.

The intelligence cannot be extended beyond the human beings. The communication through the use of the articulate language has a dual way of manifestation: a semantic one, through words, and another through the energetic field which is emitted concomitantly.

In order to understand the meaning of the words it is required the learning of a language. The decoding of the energetic field which is common for the entire living world is accomplished without the use of the language. In this way it can be explained the relationship between the human beings and the domestic animals, the communication with the infants before the development of the speech, and even with the foetus.

The thought is a material force by means of which we can exert an influence on our neighbours.

The thoughts are composed of material particles which are named telechips and which have energetic fields that are specific for the different forms of activity<sup>2</sup>.

The energetic fields of the telechips which are emitted by the brain can act at very long distances. They can be received by certain brains which are in phase coincidence with the emitting brain, or they can remain into the ether.

The observer and the thought have an overwhelming importance for the understanding of the reality.

The biophysics cannot offer us yet data concerning the presence and the action of the telechips, but is a certainty that they will be deciphered in the future.

Beyond our concept with respect to the space and time, there is an unlimited energetic field which connects us all. The reality is not a continuous and constant flow, but a field with endless possibilities over which certain brains can exert an enormous influence, but for which it is required the existence of a series of concordances with regard to the process of cogitation and the conscience between the emitting brain and the receiving one.

The greater the energy of the thinking field, the more powerful is its influence over the objective world<sup>2</sup>.

In this way, the transmission of a thought (message) between two brains which are at a great distance from one another has a material support, which is represented by an energetic field which is coded through informational signals that can be decoded by the receiving brain.

The process of cogitation is not an abstract form at the level of our brain, but its concrete, material product. Our thoughts represent a material force which is expressed by energy that is modulated through information carrier signals.

When we are thinking, we release in space an energetic field which is picked up by another brain, for which the thoughts are intended (telepathy). This fact explains the simultaneity of the same ideas.

There are authentic scenes in this respect (the suggestion, the hypnotherapy, etc.), but they do not lead yet to their understanding.

The neuroscience had demonstrated that our process of thought has the capacity to organize, to modulate and to set in motion certain operating mechanisms<sup>3</sup>.

This type of psychology, in which the interventions are based on the mental exchanges of energy, does not belong anymore to the field of parapsychology.

The shaping of our cells is performed depending on the cognitive and the affective content, and also on the positive or the negative effects.

Our thoughts, which come together at the level of the brain, end up in the "ether" by travelling through very long distances, and from there they can be picked-up by certain human beings who think in a way which is similar to that of the person who had emitted them.

In this way, it is possible that during a certain period of time, 2–3, or more scientists and scholars can influence each other.

There are scientists who had studied and created "independently" the same thing, most probably because their thoughts had met, that is, they had become convergent. According to this, it can be drawn the conclusion that no scholars or scientists had ever discovered a thing, or a phenomenon only by themselves, without being "helped" or influenced by other scientists who had thought at the same time about the same problem.

We have to understand that this emission of thoughts which travel unhindered through the Universe ("ether") can help in a positive way our fellow human beings. An example refers to the discovery at the same time of the non-Euclidean geometry by Lobacevski, by Gauss and by Bolyai, even if the first who had published the scientific paper had been Lobacevski<sup>15</sup>.

We dispose of the capacity to change our mind and our brain (anatomically and physiologically) through learning, training, physical exercises, diet, music, adequate sleeping hours and neurogenesis, that is, through the phenomenon of neuroplasticity.

By using the prefrontal lobe in order to concentrate towards the inner self, the Buddhist monks are able to achieve a better coordination between their thoughts, their mind and their actions.

The simple accumulation of knowledge helps the brain to adopt new and unusual visions concerning the existing things, the environment, as well as the internal environment of the body through a new mechanism.

Through repeated instances of concentration on the reality and the way we regard the existence of life, we end up by perceiving something which we didn't even know that existed.

Through the accumulation of new life experiences, we succeed in changing our thoughts, our mind, as well as our lifestyle.

In this context we can mention the sacrotherapy and the sophrology.

**The sacrotehrapy** excels in the maintenance of the health of the human organism through the use of several beneficial methods such as communion, sacrament, confession, fasting, psalms, prayer, etc.

The sophrology is the medical discipline which aims to the strengthening of the human body by bringing it in a state of total relaxation, both physical and mental, with the help of the Yoga exercises, as well as of the Buddhist, Zen and mystical meditation, which have a beneficial action on the subconscious of the patient.

Our brain sees what the eyes convey through the optic nerve, and the reality is perceived depending on the neuronal circuitry and on the memories which had been configured and ingrained in the brain, while our behaviour is conditioned by the perception processes.

We perceive the reality according to our memories, and therefore from the perspective of

the past and not in view of the possibilities in the future.

As and when we improve on our capacity of concentration and the willpower, the thoughts can influence our lives.

Throughout history, there had been important figures that had shaped their actions depending on the intentions, thus managing to transform the future using the same equipment which is available to all of us.

In the present day, there are in progress numerous studies which explore the almost virgin territory between the matter and the process of cogitation.

The thoughts had become substance, and we cannot separate them from the matter in a manner which might be similar with that of Descartes.

The thoughts influence the physical phenomena and interact with the entire matter in the Universe. The personal reality is a simple reflection of our personality<sup>16-18</sup>.

The consequences of the development of the brain through the phenomenon of neuroplasticity are extraordinary because they can change our future. Through neuroplasticity, through the channelling and the focusing of the attention, through learning, facing challenges, music and an adequate diet, through mental and physical exercising, through the use of the knowledge instruments, as well as through feedback training and willpower, we can cross from thought to action and to the maintenance or the transformation of our behaviours in a beneficial way.

When the subjective thoughts take over the control over the objective world, we can get a step ahead the present scientific laws and theories.

When we shall be capable to reproduce repeatedly the observation process and we will also be able to measure it, we will find ourselves in a position which is superior to everything that surrounds us.

The acknowledgement of the fact that the thoughts control the environment gets us finally among the causes and not among the effects. When you know what result will be caused by your thoughts, and when you can anticipate your own future, there will be no reason for the presence of stress.

We had ascertained that during the mental exercising, the brain does not differentiate between what it thinks internally and what it experiences externally.

The application of this principle allows it to always be with a step ahead of the environment.

In other words, through the mental exercising we can induce changes at the level of our brain before the moment when the action of the external actions takes place, this being in fact not a recording of the past, but one of the future.

The sensations and the emotions are nothing but the final product of the experiences.

If we admit the fact that the thoughts have something to do with the future, then our existence will not unreel exclusively in character with the sensations which are familiar with the emotions experienced in the past and with the life lived from memories. The brain processes the memories as emotions. In such situations, we generate unconsciously thoughts which are reported exclusively to the past, while we also create even more habitualness and banality.

The true energy of the creation means to rise above the habitualness and the prosaic routine in order to become creative.

To think in such a way that allows you to transcend what you actually feel and to describe in writing a level of consciousness which is superior to the experienced emotions represents a great effort for anyone.

When we surpass the thinking condition related to our body, and which we place through an act of will at the level of the brain, we move towards new, limitless, unknown and unpredictable experiences.

The human corporeal universe, as well as the extracorporeal one, offers a lot more possibilities than we had already been accustomed and conditioned to accept or to imagine.

We have to mention that we are based on our self-consciousness, which animates our physical body, as well as on the more comprehensive, universal consciousness, which gives life to the entire matter.

Both levels of the conscience are practically inseparable and they are present within us.

Therefore, at a more profound level of conscience we are in relation with the entire Universe.

The energy which warrants the unity of the universe, as well as that of all its components (including the humans), can be influenced by our conscious actions.

For this reason, our thoughts can induce changes at the level of the infinite network of energy.

Along with the physical changes of or body, there are also changes which take place at the level of the energetic field in our personal life, that provide us with new contexts which are appropriate for our new personality. The countless events which take place within the infinite universes of the quantum physics also cause new experiences in our own existence.

Each fresh experience is accompanied by a new emotion, which can become even our own nature, and which will help us to surpass the primitive programs.

In this context arises the need for an original paradigm of the process of knowing, which we can apply in order to initiate a superior experience of the reality.

When we pray, we concentrate over a thought or an idea which we wish to accomplish. The voluntary thinking offers us the possibility to enter in contact with a superior force or intelligence. We are talking about a voluntary intelligence without any compromises, which exceeds our capacity of intellectual knowingness.

Our own native intelligence responds relentlessly whenever the personal willpower is in concordance with that superior intelligence.

The thoughts are more real than the physical sensations which are produced by our own body. The thoughts co-exist with our consciousness. Nevertheless, it is still necessary for us to exert our own subjective willpower and to make the effort to enter in contact with the superior global intelligence.

When the emitting brain interacts with the receiving brain by means a feedback circuit, we might witness unpredictable parallel creation acts.

Our creations can have sometimes an unpredictable stimulating character, when they might be captured by other people. Consequently, our creative thoughts can have a stimulating, unpredictable and surprising character at the level of some of the receiving brains.

The emotions of happiness inspire us to set off the process of superior, creative thinking, or to recommence it in order to achieve its improvement. At that moment, we develop a new cerebral network which will help us to continue the research work in order to discover new facts.

We have to instil ourselves the desire to experience a personal creative experiences, otherwise we shall remain the prisoners of the stage of primitive thinking, without the knowledge of the joy and the ecstasy which are provided by the discovery of something new.

It is necessary to conduct researches and to become passionate about a certain action, which should demonstrate through observation, measurements and repeatability the existence of new data and laws that underpin the phenomenon of knowingness. The harmonization of the thoughts with the experimental data, which are achieved with accuracy and based on peremptory arguments, offers a new range of potentialities.

In this way, we can project ourselves in a new future, which is easy to experiment and demonstrate, and which open the gates toward new and ineffable possibilities.

The brain is perfectible, but in order to achieve its development, we must make the jump from the implicit and immanent towards the explicit and enlightening, so that all its functions and circuitries will be under the influence of the thoughts.

By improving our brain through training, challenges and continuous learning, we become capable to perform a multitude of new discoveries, which might remain unknown if we continue to exist within the boundaries of our old self.

Following the achievement of a new morphological and functional evolution of our brain, we shall be able to think and to behave differently than before, and we shall find ourselves into another context, within a new existence and in a new reality<sup>2</sup>.

Although the process of cogitation has a material substrate (the telechip), as well as a well-documented energetic field, until now there had not been published any conclusive results of the researches conducted in this field, neither the development of any devices which allow the detection of the presence of thoughts. The component of the thought-wave particle is still in the hypothetical stage. However, it exists because the action of the thought-wave material particle and of its energetic field can be perceived effectively, but nothing more.

The IBM Company had announced even since 2000 that they had in plan to develop a mobile phone operated through "the power of thought", without being necessary anymore the dialling of the phone number.

All the people who work in this field are in agreement that the thought is an information carrying magnetic field, while the energy from the emitting brain can be transferred to the receiving brain, or from the emitting brain towards certain command devices.

Each man had in his life moments when he had sensed the presence of a thought which was sent by a close person.

The most illuminating case is represented by that of the twins who know immediately if their brother or sister encounters a sensitive problem of life. The fact that the thought-wave has also a gravitational component can be inferred very clearly from the possibility of lifting the body for 5-10 cm, or even more, from the ground through the concentration of the mind and through prayer.

The lifting of the body through levitation cannot be attributed to the paranormal.

The consumption of cerebral energy during the process of thinking demonstrates that the thoughts are energy-intensive consumers. This is the reason for which it is said that thinking is the hardest work there is.

The brain represents 2% of the weight of the human body, but it consumes up to 20% of the energy which is received by the body through the daily intake of food and from the environment.

Consequently, the thought-wave and the telechip have a great energetic support.

It had been demonstrated that the brain is an extremely complex system, for which we have no other equivalent and neither a language that might allow us to describe it.

The neurons, these wonderful, but also esoteric structures, are present in a fascinating variety of shapes and sizes and are connected within an immense, extremely dense network, which the scientists will continue to try to explain away for many decades to come.

### THE CONVERGENCE OF THOUGHTS

All the thoughts which are generated by the brain get into the ether, from where they might be received, or not, by the individuals who think about the same cultural or scientific subjects.

Further on we give you several illuminating examples for the convergence of the thoughts.

One of these examples is related to the discovery of the non-Euclidean geometry.

The fifth postulate from the geometry of Euclid (323 BC - 283 BC, Alexandria) had been regarded with suspicion even during the Hellenistic period because Euclid had perceived the structure of the "elements" in such a way that the respective postulate was not used in the formulation of the first 25 mathematical sentences. He had asserted that "if a straight line falling on two straight lines makes the interior angles on the same side less than two right angles, the two straight lines, if produced indefinitely, meet on that side on which are the angles less than the two right angles". One of the objections had been that the intersection

point could be located at any distance, even to infinity.

750 years after the death of Euclid, the mathematicians in the period of Psoclos (450 AD) wanted to do something to escape from the confines of this postulate through the contrivance of other equivalent postulates.

In the XVIII<sup>th</sup> century, Girolamo Saccheri<sup>19</sup> had proposed the demonstration by means of contradictions, through which one of the equivalents was not true.

Other mathematicians, among whom we mention Johann Heinrich, Lambert and Adrien-Marie Legendre, had obtained similar results through the use of the same strategy.

At the age of 15, Karl Friedrich Gauss had begun to study the fifth postulate from the geometry of Euclid and had shown that the demonstrations which had been developed before his time were not accurate. After 25 years of work, Gauss had reached the conclusion that the fifth postulate was independent from the rest of them.

This meant that based on an allegation which contradicted the fifth postulate it was possible to develop a compatible geometry, and Gauss had proceeded to do this thing for his own pleasure; but the scientific paper had not been published, his conclusions being only communicated to several friends.

After only a short period of time, another two talented mathematicians, Nicolai Ivanovici Lobacevski and János Bolyai had reached the same conclusion as those of Gauss. They had shown that the fifth postulate is independent from the rest of them.

In the year 1826, Lobacevski<sup>15</sup> had been the first to publish his new theory of the non-Euclidean geometry.

Bolyai had published later, in the year 1832, independent from Lobacevski, a new variant of the non-Euclidean geometry. All these mathematicians (Gauss, Lobacevski and Bolyai) had started from the hypothesis according to which any given point can be crossed by multiple parallels to a straightline.

Nevertheless, in the following quarter-century, the non-Euclidean geometry had not a significant impact on the field of mathematics.

In the year 1854, the great mathematician Bernhard Riemann<sup>20</sup>, through the performance of an analysis of the basic concepts of geometry, had offered few details of a mathematical nature, but had succeeded in making the non-Euclidean geometry more accessible. At the same time,

Riemann had issued the idea of the existence of a multitude of non-Euclidean geometries.

Afterwards, Eugenio Beltrami<sup>21</sup> had succeeded in demonstrating that the original non-Euclidean geometry of Lobacevski and of Bolyai is compatible, if the Euclidean geometry is also compatible.

Felix Klein had demonstrated that the two geometry versions of Riemann are compatible to the same extent as those of Euclid.

Therefore, in the model which is easiest to understand, it is considered that the reference plan is the surface of a sphere, and the interpretation of the geometry is performed according to this.

Accordingly, if the plane is replaced with a sphere, the role of the straight-lines is played by the large circles of the sphere, which are subject to postulates such as: "two distinct points determine at least a straight-line" (which replaces the first postulate of the geometry of Euclid) or "A straight line has an infinite length" (which replaces the second postulate of the geometry of Euclid)

The new postulates had characterised with accuracy the spherical geometry in which the straight line is perceived as being the circle with the maximum diameter of a sphere. When the large circles of the sphere are considered circles and not straight-lines, the spherical geometry can also be described by the original postulates of Euclid.

In other words, the space in itself is non-Euclidean in nature, and this is because we see the space at a reduced scale, and at a reduced scale the earth appears to be flat.

At a larger scale the straight line has a different definition, and it is of a non-Euclidean type. The British mathematician Arthur Cayley (1821–1895)<sup>22, 23</sup> had created a geometry of his own, "the geometry of the geometries", which had brought important contributions in both the descriptive geometry and the analytic geometry.

Cayley had reached the conclusion of the existence of type of geometry with "n" dimensions and had introduced the tensor calculations.

There are also other examples concerning the convergence of the thoughts and the help which had been received by many scientists in this way. There are also inventions which had inspired the future researchers to rediscover certain things.

We can also find signs of the convergence of thoughts within the field of anthropology, as well as in that of archaeology.

In the present day, there is a small number of researchers who can be considered scientists because their majority are only amateurs, or just supporters of the science. Both theoretically, but also practically, the scientist observes, measures, reproduces, formulates hypotheses and conducts experiments in order to verify his hypotheses, and finally to formulate a particular theory.

The German philosopher and psychiatrist Hans Berger had performed the first electroencephalogram in the year 1924, and subsequently, in the period between the years 1930 and 1940, the researchers had identified several types of brain waves:

- the delta waves (under 4 Hz) which are generated during sleep;

- the theta waves (between 4 Hz and 7 Hz) which are associated to the sleep with deep relaxation;

- the alpha waves (between 8 Hz and 13 Hz) which are generated when we are relaxed and calm;

- the beta waves (between 14 Hz and 38 Hz) are generated when we think intensely and when we are solving problems;

- the gamma waves (between 30 Hz and 100 Hz) which are involved in the deep mental activity, in reflexion, as well as in the process of planning.

The global activity of the brain is composed of the mixture of all these frequencies, but depending on what we are doing at a certain moment, some of them manifest themselves more than the others. Any signal received from the unconscious, subconscious or conscious brain is a carrier of information, which implies the existence of an energetic field during all the thinking processes<sup>3</sup>.

The subconscious is closely related to the consciousness, this being the point of origin for the information carrying energetic field of the initial thoughts, which are followed by the language.

At the level of the entire living world, (both plants and animals), there is a communication path through information and intimation which had also been used by the human beings before the development of speech, that is, approximately 4–5 million years ago.

The communication between the human beings through the remote transmission of the information without the use of words goes by the name of telepathy.

The first researchers who had revealed the existence of this phenomenon had been Harold Puthoff and Russel Targ in the year 1976<sup>24</sup>. This is about the so-called Stargate project which had been developed at The Princeton University in The United States.

The scientific explanation of these phenomena, which are considered today as being paranormal, might depend on the level of our knowledge of quantum physics, of information theory, as well as of neurophysiology.

The waves through which are transmitted these information are still unknown, but it had been observed that much of this information remains in the subconscious, this being the place where we receive telepathic data and messages unconsciously.

In the experiment conducted by the biophysicist Kamenski, of telepathic transmission between Moscow and Novosibirsk (3000 km), the condition had been that the receiver should be in an adequate state of mental relaxation.

The attempts for the remote transmission of information using waves of 10 Hz (alpha waves), which have the highest energy, as well as biogravitational support composed of matter and antimatter, that is, positrons which might travel backwards in time (memories) respectively matter particles that might travel into the future, to persons in a state of hypnosis, sleep or dreaming, did not yield any results.

The main role in the transmission of information through a biological path is played by the brain, which emits and receives corpuscular neural waves which are endowed with an amazing energetic field, which has an esoteric character for the present.

There will be necessary a long period of time until the moment when the physics will intervene clearly in the description, the measurements and the characterizations of the above mentioned corpuscles, which can transform in energy and vice versa.

In the year 1930, Wolfgang Pauli had predicted the existence of the neutrino particle, which had been subsequently discovered by Reines and Cowan in the year  $1956^{25}$ .

The neutrino particles have no weight, and neither electrical nor magnetic charges, so that they can voyage across the earth and our bodies like they are travelling through vacuum.

For this reason, it had been advanced the hypothesis according to which it is possible the existence of other similar particles, that make the connection between the matter, the psyche and the thinking processes, which had been named mindons by V.A. Firsoff, or psychons by Burt and Carrington.

In the year 1949, Feynmann<sup>26</sup> had advanced the hypothesis which is known under the name of

"Feynmann's Diagram", according to which it is asserted that the Universe is composed of matter and antimatter. The antimatter particles, respectively the positrons, might travel backwards in time, while the matter particles might travel into the future, so that the time appears as a positive transparency (slide), with two superposed halves, where one of them travels towards the future, while the other, that is, the memory, goes towards the past.

As the result of the construction of a time with two dimensions, Dobbs had introduced another particle named psitron.

The previously mention particles of quantum physics, known under the names of mindons, psitrons, and more recently tachions, might act upon a neuron which is in a state of unstable equilibrium, with a probabilistic outcome (Heisenberg).

In the year 1959, G.T. Chew<sup>27</sup> had created the bootstrap theory, in which the author proposes the giving up of the idea of the "fundamental brick", which refers to several types of moving particles, and replacing it by the concept of field (the particles being transient condensations of the field).

Subsequently, together with M. Jacob, they had issued the topological bootstrap theory. At this level, the events occur instantaneously.

It is also not at all negligible the theory issued by Aharonov and Bohm, with regard to the replacement of the notion of field (for example, the electromagnetic field) with the concept of potential. This is where the Aharonov-Bohm effect had its origins<sup>28</sup>.

For the brain, the surrounding world is just an illusion. During the millions of years of existence and evolution, our brain had become used to transform this matter and energy into a rich sensorial experience of its interaction with the world.

Actually, the brain generates its own reality even before it receives information from the sensory organs. There is therefore an internal model.

Every brain is unique in its own way, and it has a different interior life.

We know that the neurons communicate between them through chemical signals, that is, through neurotransmitters, as well as the fact that their membranes provide a quick transport of the electrical signals along their length. There is no free space in the cells within the brain. Although we might be inclined to assign a function for each cerebral region, we ascertain that the activity of this noble organ can only be understood as a whole, because there is no area of the brain which operates in isolation.

The colour appears for us to be an essential quality of the surrounding world, but in reality it does not exist. Only in our mind the light wavelengths are transformed in colours.

We distinguish only the visible light, which is only a fraction of the electromagnetic spectre. The human biology has access only to a small fraction of the electromagnetic spectre, which is represented by the colours of the rainbow. This is the only portion of the electromagnetic spectre for which the human brain is equipped with biological sensors. In reality, not all of us perceive the light in the same way, and the receptors for the gamma rays, for the x-rays, for the ultraviolet and the infrared light, as well as for the radio and the radar waves are completely absent.

In certain situations we have the sensation that the reality is running either more slowly or more rapidly.

We only believe what the brain tells us, in spite of the fact that the Universe within our head exceeds by far the limits of our conscience.

Our life is moulded and coloured by what is happening at the neuronal level, but the experience is the final result of the hidden networks within the brain.

Some of the actions, beliefs, convictions and preferences are determined by the cerebral networks to which we don't have access consciously.

#### **CONCLUSIONS**

The human brain, this extremely complex organ, is composed of more 100 billion neurons, which fulfil the roles of ensuring the intellectual and the psychic functions, of receiving sensorial messages, as well as of commanding the movements.

Our genes offer general information concerning the construction of the neuronal networks, while the experience provides the rest of the circuitry which is necessary for the adaptation to the environment. This organization had allowed the human species to conquer every ecosystem on the planet and to begin its incursion in the solar system.

When the phenomenon of telepathy will be deciphered, it will be possible for it to be used for the communications in more special situations, such as, under water (where the radar waves cannot be detected), in cases of disasters (shipwrecks or aerial crashes), in the communication with the animals which live underwater, etc. It is worth remembering that it had already been achieved the telepathic connection between Earth and the astronaut Edgar Mitchell during the Apollo 14 space mission.

If we achieve the scientific certification of this phenomenon concerning the transmission and the interpretation of the thoughts we will have more opportunities for knowing the world.

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