The question of the principle of knowledge and senses and the relationship of experience with knowledge was appreciated as necessary for the development of cosmological interpretation. Some pages were added to the two volumes of English treatise with the title and subtitle:

COMPLETE UNIVERSE, DYNAMIC SPACE
&
WAVE PHENOMENA

How the natural laws and forces are applied. The fundamental concepts and relations for a rational Cosmology (Cosmonomy)

(A cosmological theory on the structure of the Universe and matter)
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Thiras & Zavogianni 7 Street
e-mail: filosofiagr@yahoo.gr
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"*Asking correctly is often more than half way to solve the problem*"

W. Heisenberg (1901-1976)

Socrates to Meno: "*Would he try to find or learn as much as he thought that he knew, before tackling the question and so starting to desire to learn?*"

Plato 4th century BC

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"*See the forest not the tree*"

38.8. Sensations are ways of knowing and intellect by automatic (biological) removal of information

The perception (bio-information if you prefer) of external things is alone a manner of thinking (in the broadest sense) created indirectly by the things (automatically, not always consciously). For this reason, the perception of the senses is obvious for all of us and is used by our activities as sound, credible and reliable truth. The perception of external things (their appearance) is always a result of the relation between things and ourselves. This relation with things (the position, the moment, the direction, the distance, the angle, the biological and mental state, etc.) changes in different ways and always shows a part of the reality, never its whole. It is not possible to perceive all things at the same time (or all their parts) and the perception must begin with some elementary traits. The elementary features by which perceptions are created as more complex information are called "stimuli or sentiments". Sentiments, such as a color or heat are **traits of some abstraction**, which is done by itself (biologically) and they show us without differences (and details) even when things are not always the same. The same sentiments and the same elemental information are detected within every other perception. That is, there are always some elementary and constant traits like matter in all the images of things and for different things.

The perception of things must begin with a self-abstraction (biological and careless), because if this did not happen, then there would not be unrecognizable parts of reality. All things would be present with full information. If the determination of perception were made only by external things, then it should show us much more of things -if not all of them. The determination of perception (or bio-information) depends on the possible ways in which the biological body can be affected (receptivity, sensitivity). Without our existence (physical or biological and mental) it would be of course impossible to have a certain perception or information of things. Therefore, the perception of things can never be independent of the quality and potential of our existence as a whole. This can be said in general, without having to refer specifically to some of our biological parts or to some of

its qualities, such as the brain, the nervous system, the sensory organs. That is why any movement of the biological body affects the things we perceive as well as where, when and if we perceive them. For the same reason, another person (who is not exactly the same biological body) does not perceive exactly the same things or at the same time.

So the perception itself (bio-information if you prefer) is piecemeal knowledge (information) of reality, such as the concepts of speech, and it does not show things just as they are (and in all possible ways and all their relations). Of course, because perception is not indirectly the things (without mediation) and does not show us the things exactly as they are (that is, regardless of ourselves), that does not mean that the things do not exist. On the contrary, it means that the things are not totally different from us and that the things are interconnected, interact with each other and have common and stable elements. **Sensory data (such as a color or sensation of temperature) begins with some abstraction** which happens carelessly and biologically, because if not, then there would be not invisible and unobserved parts of reality. Therefore, abstraction, synopsis and distortion begin directly from the first sense, as information does, since **certain attributes of things are necessarily removed**, and sentiments themselves are easily matched with non-existent things or their properties or substances. Now we have a universal interpretation of the finding that the appeared and specific things are not as obvious and well-known as we believe before we think about them. The biological composition of information (sensation) and the mental compilation of information (intelligence) are not two opposite properties and each one cannot exist without the other. Their difference is that the sensation is indirectly realized from the outside, while the intellect directly and deliberately from the inside (mentally). Regarding the same perception of things we can add or remove traits (as we do with linguistically externalized concepts) and then we say that we turn our attention to something or that the spirit is concentrated and we observe.

38.9. The inseparable relation of the soul with the intellect. Life is information and a search for certainty

Biological bodies never perceive the wholeness of things. A new spiritual

reality is created by the biological bodies that does not "count" the whole universe and they consider reality to be only what they "touch"! But the sensations begin in this way. Life and soul begin as "contempt" and "degradation" of the whole world and as if the world were its own content. The view, which is summarized in this formulation, is as follows: Life begins with the synchronized combination of the minimal material elements, which are somewhat the opposite of the whole and the Universe. That is, **the material elements are a minimal reality and not the complete Universe**. When, then, the first forms of life are created, these

1) start from virtually nothing that are the structural elements or matter. (1st abstraction)

2) Within a world that is inconceivably more complex, larger and almost unknown (2nd abstraction)

3) and these forms of life are informed through the senses only locally and for a minimal number of environmental influences (3rd abstraction)

4) and they move, react and experience with this minimal information that they need (consequence of abstraction)

5) and of course they ignore and do not count the whole world and all those that are not perceived by their sensory organs (that is abstraction).

The information, which biological bodies receive from their sensory organs, is minimal compared to the information that reality could give. The living beings (biological bodies) feel and perceive, of course, only what they can through the sensory organs they have and what is necessary for their survival. But at the same time, things around them are more, they are connected in more complex ways, they affect and change in more ways, while living beings do not perceive and understand all of this. The information, which they receive from their sensory organs, is **incomplete, fragmented and abstract, and shows incomplete and fragmented things**.

If "sensation" means the ability to see, hear, touch, and generally obtain some information from external irritations, then as we have explained, this ability does the same function as the intellect. That is, the information, which we receive from the sensory organs, is fragmentary and abstract (such as the concepts of words) and is "recorded" in our memory, as they remind us of something fixed, something the same, something that was repeated,

something which caused us to be in a pleasant or unpleasant mood. In fact, sensation is limited intellect in external influences and not the opposite of intellect. **The abstraction of attributes, the simplification and the concise view of things start from the sensory data itself**, and this selectivity and abstraction indicate that senses are mental activities with "raw material" from the outside of intellect. **The first data of our senses are already detached features and "short" views of things**.

If the spiritual function of abstraction of a human is called intellect or is a mental activity, then the ability of every perception through senses should be called the same. Knowledge and intellectual activity has begun with the first sentiment and is manifested with sounds and all the behavior of biological body. The intellect is directly related to all the mental activities and has begun with the first sense. The intellect as adjuster and selector is the essence of life, the so-called soul. There is not life or a full unconscious psychological being first and then knowledge comes. There is not life or soul without any form of knowledge or information and without the corresponding certainty or uncertainty that accompanies it.

The intellect, through which we perceive and observe things, would be unnecessary if it were not shaped by the habit of some common features of things and by the observation of fixed relations, similarities and situations that are repeated over time. The habit is nothing more than keeping or storing the most common and frequent information within the biological body - we do not care how. We recognize this information internally and mentally and use it. The initial certainty of natural perception becomes a habit and is reinforced by repeating and detecting similarities. It is confirmed without words and hardly retreats with words and many thoughts, if it is not refuted again by the personal experience. If the habit serves the regulation of the behavior and the action of the biological body, it does so, because it is certainty that has come from repeated observations in the perceptible world. By using this "biological memory" respectively, the same behavior is repeated and the same reactions and feelings are produced, and thus the biological memory is perceived externally as a natural learning and adaptation effect. In humans, the habit is not only created by repeating the same external impressions and the same perceptions as in other animals. Humans often repeat some thoughts, movements and choices with the mental transfer of things within the spirit. Thus humans form certain views and acquire habits

through their own thought and not just instantaneous observations through the senses.

Feelings and sentiments are **manners of influencing of the biological stability** which are translated as certainty or as uncertainty. When a living body is influenced by ways that do not destabilize it (in agreement with it) and do not disrupt the synchronization of its parts, then this living body is pleased and confirmed by these ways. On the other hand, when a living body is affected by ways that destabilize it (they disagree with self-regulating body) and the synchronization in the association and the cooperation of its parts is disturbed, then this living body experiences an uncertainty about itself and is displeased (the so-called instinct of self-preservation).

External influences could not mean anything if something did not exist beforehand, which had a direct meaning and information for itself. The so-called "inner world" or soul is always a sense / knowledge of itself. Which word exactly can denote this phenomenon of a body that has information about itself is an issue for a separate book. Do not miss the connection of phenomena due to a word. Perception through the senses is an understanding through other things and external causes. The simplest perception, the first common trait, which an intellect detects, is the stability and uniformity which is felt as hardness, consistency, texture, heat and so on. The reason of all immediate certainty is that a perception is itself an understanding (as it is created indirectly by the other things), and serves in action as if it were sufficient knowledge (utilizing momentary and occasionally the information). The soul and feelings are there, before even we humans think and form knowledge and experience. This priority must not trigger the fallacy that feelings are separate from the intellect, that they precede any thought or intellectual assessment, that they are not connected with some knowledge, and ultimately that the soul can exist without any form of knowledge and more broadly without intellectual functions. The process of removing information and preserving the characteristics of things is obviously an intellectual process of humans. When we think and use the language we can be aware of this spiritual process. However, the intellectual process does not only occur in the form of divided abstract concepts in words and symbols. All living bodies

behave by selecting information

and remove a multitude of effects without being aware (unconsciously) ,

focus their attention in a manner they assess for their survival,

and keep in their memory certain fixed traits of the perceptible things.

Sensory organs can be many, they may have different function and sensitivity. In different biological bodies we can see unique abilities of perception. In the inexhaustible variety of biological bodies we will find some animals that receive information of one phenomenon while the other animals do not. Certainly, animals also have a rudimentary thought, but not what we mean in the narrow sense even for the most stupid human. The thought of the animal - as shown by its behavior and learning processes - is closer to short associations and short memories and closely related to its experiences (such as fear, ferocity, pain, pleasure). If we do inventory of the sensory capacities each animal has and its brief mental abilities, we will definitely remain speechless by our surprise. This is why researchers who are trying to get inspiration and get ideas from animal abilities and to transfer ideas to technology and to we have them as well. However, do not compare the whole fauna and the census of all animal abilities with the mental / intellectual capacity of only one human. And of course, with the phrase "spiritual / intellectual capacity" of human, we do not mean that human is wiser or smarter or rightly informed. We will find that precisely opposite happen ... and maybe will be scare: Human with his mental / intellectual capacity rather loses contact with the real (social and natural) world. Human no more wise is, but rather haunted by lies, imagination and insignificant information.

The information of the senses is not all knowledge and the only form of knowledge. Many people imagine that without the thought and knowledge in the form of concepts and words, we would again have all the information of the senses in our human memory as much as now. Well, if they want to see how much knowledge remains from the "knowledge" of the senses, they have to look at all the other animals of nature compare to human. Take notice of the difference! The most stupid human has spiritual choices and information of absent things, while the animal is mostly irritated by the temporary information of the senses and by biological information that it does not investigate. We should give an explanation for this difference between human and animal. The experience and conscious memory are limited with-

out thought and language and then we can not observe and learn anything that is not perceptible. Because the senses detect only that irritating the corresponding organ. But many different things have relations between them which are not noticeable, most of the time. Two things that are remote (eg moon and sun) have relations that are not revealed by the senses. It is need, a variety of phenomena linked together to be observed, but the sensation may not show how all of phenomena are connected together. For example, the sensation will not show to an ancient human how another human voice is heard from a small device called "radio". Ancient people will check over it without understanding how it works... Perhaps can get a better knowledge only after a lot of educational efforts and by rational guiding the research.

Information and knowledge in its broadest sense is the essence of the soul of the biological bodies that is externalized by sounds and all their movements. The fundamental feature of life is self-regulation with information as every biological body has for itself and with mental processes of choice, assessment and removal of information. The identification of the soul with the information and the most immediate phenomenon, which is the self-regulation of life, require revision of some ancient meanings we attribute to some ordinary words such as "life", "soul", "animate", "spirit". Then many features of psyche/soul are revealed rationally in a unified manner with all the variety of information and its variability.

The biological body with consciousness and thought becomes a cause to itself and self-regulates its behavior. This ability is indisputable, without negating the fact that we have been influenced and we are influenced unconsciously. But self-regulation is not always with knowledge and correct information and there are limitations that are natural, biological, psychological and intellectual. By our awareness and by thinking we can be self-influenced and as a cause to resist a myriad of other causes and - to the other end - to prevent action from unconscious influences. Between the deterministic action of the inanimate bodies (behaving only after they accept some external action) and the action of living bodies (behaving even without accepting some external action, with their information, with their consciousness and by aiming to a result to be realized) some a noticeable difference must exist. So what is the difference in the behavior of a stone that is falling from the behavior of an animal? Those who say that man behaves with causes and past influences should the difference show between a machine and an ani-

mal. These two phenomena of behavior have a noticeable difference. They do not have the same or equal "freedom" or the same lack of "freedom", ie they do not have the same choices and coercions.

In humans, the inherent impulse of seeking biological balance and survival expands spiritually (with information and thought) and appears as will, desire and determination. Many people do not consider the will as a logical process or process of thought, and many have been trained to separate it from thought. Will is proved to be of decisive importance in producing thoughts, insisting on seeking for solutions and methods. The will adjusts the experience towards a goal, as it would not be possible only with habits and with purely reasonable predictions. With constant will or desire a human can do a lot of things that seem impossible to do, and cannot do a lot of things that are easy to do. However the will has this great effect with the light of information and with their mental processing called "thinking." So with the information and the estimations, the will has choices and so what attracts us or what repels us is determined in our soul, and we insist on thinking about how we act or not. In fact, a soul always reacts with information, knowledge and assessments. There is no will without perception of things, without information, remarks and thoughts. We would conclude the same thing about "faith". Religious people usually talk about faith as something independent of thought. They probably have not studied well what human thought is and how the human soul differs from the soul of other animals. They think that faith is something supernatural or just an emotional state or a blind trust, without any thought. Man can have faith in God because this faith is a certainty that has been enhanced by personal experiences, by his logical thoughts, by his erroneous conclusions, and by his erroneous estimations. For example, a heavy object falls next to someone. If the object had fallen upon them, then they would have passed away, and then they or someone else conclude that God saved or protected them. Religious faith as we have seen in society and historically is a trust and a certainty along with many fallacies, with mistakes in people's thinking and with imagination, just like when someone trusts an impostor. The ability of rational thinking of people, the ability to observe the perceptible things and to describe them precisely is usually missing, the educational level is low and the right information is missing, while people easily create worlds in their imagination. Belief is what, in other words, we call "certainty," and their

difference is: Some acquire certainty because they are easily convinced, because they are impressed and because they do not think much more. While those who have certain criteria to appreciate credibility, create reasonably their certainty because they think carefully, they are impartially informed, they ask for more information and data, they doubt and require clearer signs in the common experience. Add to that the hidden hope everyone has, that they will win something by trusting someone who offers them solutions especially at a difficult moment of their life. But hasty confidence and faith created by a few clues often coincide with the certainty that will be created after research.

A division has been established between emotion and thought or logic, from antiquity to the present day. Much has been written in the labyrinths of psychology, but this science has not helped to establish the correct and inseparable relationship between emotion and information within society. The divide between emotion and thought is one of the biggest theoretical errors, leaving societies tolerant of irrationality and fantasies. This division has prevailed and is partly correct, if the cognitive function is limited to conscious thoughts and thoughts with the rules of logic and the mediation of language. If we limit the meaning of the word "intellect" to the intellectual functions that a teacher does when teaching or a student who reads. But even in this case, the feeling is still not completely missing. The intellect and thinking are usually limited to the purely spiritual functions of man. But it is still difficult to separate the intellect from the emotion. People even when they have sex, still do not lack intellect and instead intellect is recruited to enjoy more! Cognitive function is not limited to words and thoughts with language. Information (here is an observation that explains almost everything about human behavior) is accompanied by an emotional reaction, which in general is pleasant or unpleasant. The senses also transmit information. The biological recipient appreciates the stimuli and the information (not necessarily with its own attention). The biological recipient feels safe, that survives and that achieves something or on the contrary feels insecure, that is threatened and fails in something depending on how values its information. This cognitive function is life itself and its driving force. **There is no life without information**.

In the particular case of man, information is stored and used with the tool of language. This ability to store information creates the soul's ability to re-

trieve information, manage it and process it, whether the things from which the information extracted exist or are not present in the senses. Man can bring information about the world into soul and behave with this information, without necessarily having things in front of eyes. While the animal is limited to the information of its biological organs and behaves mainly by assessing this information of its senses and how stimuli are assessed for its survival. Eg a hen wanders in a field and its attention is distracted by certain information where occasionally receives from its environment. Its behavior changes from moment to moment with each change in the information of its senses. While a man may have one thing in front of his eyes, but attention is distracted to something other in his soul, that is, to an information (which may even be an appreciation for something waiting to happen or for something that happened or something he remembered etc).

In conclusion, emotion in man is not produced and influenced only by the information of the senses (colors, images, smells, touch, etc.), but also by the information that goes and comes into soul (and in such case usually we rename it to "mind or spirit"). If the ability to process information (ie thinking) is lacking, then the corresponding emotions (which are related to how information is valued) will not be produced: Is information useful for survival and fulfillment of desires? They thank us and we take advantage of them. Is the information considered useless? We forget them or they are left out of attention. Do we consider that our survival is threatened and that our wishes will not come true? Then we are dissatisfied. The pleasant and unpleasant reactions of course have their deviations. Life is nothing other but an information management and action or reaction with this information for its survival and self-control. The different emotional fluctuations that will be caused to the biological recipient have a close relationship with the mind and the soul as it has been formed as a whole by the information of life and their processing. And because every person has (over time) a formed soul by different information and assessments (different information intakes, with different attention and thinking), so it makes sense that external stimuli are not decoded the same by everyone, even when they are the same irritations. Psychosynthesis has been shaped by the participation of spiritual functions (thought, memory, remembrance, imagination and most other processes). The "observer" is not an empty container, nor does it have the same content as other observers, and the content is volatile.

Ultimately, all psychic features are processes of intellect, ie are information and assessments accompanied by certain reactions, which we call "emotions or feelings" and these induce behaviors with some choices. The choices may be many and we will, after thinking (not necessarily correct), give the order for that choice. And sometimes it happens that the brain is complaining and is not happy with our choice, but we have taken an unpleasant decision. Choosing with our own thought is what we call "free" will. If some biological processes precede a decision, if thoughts precede and if some memories affect the choice, then the result is not fixed. What meaning would a free will have, if we decided by luck? What would be the meaning if our choice were the result of a software that went crazy? The difference in human life is that our choice is not exclusively determined by external actions and purely deterministic and only occasionally, but our consciousness and thinking are mediators. The choice is guided. Also, a pure freedom in the sense of the complete absence of an obstacle is for an unreal world, for our dreams. Such freedom does not exist even in the simple move of a body in nature. Those who have realized that man has weaknesses (biological, psychological, spiritual) and that many results are not dependent on our own thought and will, supplement the "freedom of will" (or correct it without having such thought) with theories about "love" , "understanding" and "forgiveness".

A Universal Natural Law is revealed as a moral issue for human life: When a living body forms and stores information, then it reacts to them and behaves, choosing the environment that offers security information about its existence. When the body can think with the information (as a human), then it reacts with memories and thoughts and thus tries to regulate its life. Humans are not like inanimate bodies, determined exclusively by external influences, or like other animals, whose attention is limited to the senses. Humans have limitations and weaknesses (physical, biological, psychological and intellectual), but we recognize that they themselves become the cause by imagining, by nonsense, by desire - add anything else you want – to act and react. To some extent they are the regulators of their behavior and for many consequences in their lives. But information and thoughts do not end, the purposes are many, the knowledge of things is never complete. A lot of information is not appreciated properly, many thoughts have mistakes, especially forecasts and assumptions and thoughts have gaps. This mental/cogni-

tive deficiency creates mistakes and imagination for things and for ourselves in the world and thus we are mobilized: We are misled, biased, reckless and self-centered. We have a lot of delusions as when we think that things have a relation while they do not have or conversely when they have a relation and we ignore it. Our imagination is more than our knowledge. If the "right" and "wrong" exist within our thoughts, then the law and the unfairness begin from these thoughts, the rational and the absurd behavior, the awareness of reality and the deceit, the sincerity and the lie. Lies, fantasies, mistakes and one-sided logic make us out of reality and produce injustice. The question of how knowledge begins and how humans regulate with thoughts and information their life is inseparable from a global ethics. Spiritual cultivation, cleansing from illusory opinions, impartial thinking, correct assessment of information, and a researching life that serves self-knowledge are indispensable and inseparable from a universal morality. Such a universal morality for a spiritually directed life is not limited to a few moments of good behavior and is credible as a science, whether God exists or not.

38.10. Phenomena... that are rejected

- Do souls exist without matter ?

- Can we continue having experiences, sentiments and awareness of our existence after our death ?

- Do ghosts exist outside our brain ?

- Do angels, evil spirits and the Devil exist as immaterial (bodiless) forms of life ?

- Do spirits and bodiless entities exist, that accompany us like as protectors and that they see and hear us ?

- Are forecasts for the personal luck and daily life possible through observations of constellations and planets? Can successful forecasts be by the playing cards, by signs on our hands and by the remains of a drink ?

- Do the places of objects in our house predetermine remotely what will happen in our life and the success or failure of our goals ?

- Do some dates and coincidences bring us misfortune ?

- Do things exist that have magic attributes (spiritual influence) or particular localities that assemble some spiritual energy ?

- Are there some geographic regions in which the earth time is interrupted and things disappear from our planet ?

- Is the spiritual telekinesis possible (without physical forces) ?

- Are the dreams somehow encoded messages for predictions ?

- Can some physical phenomenon or remotely an effect be caused by the Black or White Magic ?

- Is the evil eye real and does it have such an effect on the psychology of a consignee ?

- Can we cause natural phenomena or heal patients simply by touching the hand or if we mumble specific words ?

Unfortunately no! Those who give affirmative answers to all the above

questions ignore that all individual things have a common substance (as a vehicle for their existence) and the necessary relation of matter with action and time for every action. They accept the possibility of existence and action without material interconnection and without precedence of quantitative developments in time and space. Often, the imaginary phenomena can happen without influencing their material environment, within which (it is supposed that) these phenomena happen. These phenomena happen also with a violation of the physical limits and laws, while the material things would had been destroyed if stopped being regulated by their laws. Some people accept by using their imagination some (bodiless) substances or spiritual forces that are independent from structural elements without having any structure or process and they imagine that the human spirit is consisted of such a simple and independent substance.

This erroneous acceptance of theirs is strengthened by the ascertainment of some phenomena of interaction without the presence of matter in its accustomed form (liquid, solid, gases or plasma), as it can happen for example with the electromagnetic radiation. This is while these intangible phenomena are also connected inevitably with the presence of perceptible matter and with its physical restrictions. The energy does not receive a more complex form and action without matter and without the physical laws and first of all without time and length. The energy is transferred in certain quantity according to laws of motion and every force has a physical process in such a way that nature has always its laws and balance and our world is real and not surrealistic like a dream.

The role of the mindless use of vocabulary and an inability for rational thinking is decisive for the imaginary view of the things. Thus the thoughts distort the reality and relations of things are deduced that cannot be observed by others or are in conflict with the preconditions of their existence. The words do not have an explicit meaning or are comprehended with divergence from their usual meaning and this comprehension is realized in an allegorical manner. By a simple analysis of words a void of knowledge, a false relation, an erroneous differentiation for certain things or on the contrary, an erroneous equivalence for different things can appear easily. Thus an error or omission appears, that allows the deduction of erroneous conclusions.

More concretely.

The immaterial entities (with any name) are endowed with attributes of material things and their behavior is described in the same way as the one that we observe in the known material things. They move in the three-dimensional space, without an explanation of the mechanism of their movement and steerage, communicate with us in the language that we know and also without misunderstandings… These spiritual entities see in the same way and the same things as we humans do, have sentiments (e.g. rage or sympathy) and externalize them, have need to communicate or play a role, sometimes a serious role and other times ridiculous, understand our own thought and distinguish it from a lot of other thoughts, intervene in the material developments in order to deter them or to accelerate them etc. The witness or narrator can tell us nothing about the way that these spiritual entities transmit their thoughts to us and how all signs of their action are obliterated.

Often this imaginary and distorted description of things is desirable and aims in certain cases at the deceit and the showing of our personal possibilities. The imagination is manifested because the description of fantastic events is contradictory and coarse-cut and the immaterial entities behave easily with the absence of any restriction of the bodies while they have simultaneously the behavior of material bodies. They can go through the material things freely, see independently from the distance and the obstacles, neutralize gravity and hover, without the known processes of actuation and working, are maintained without food and without the known biological activities, have any form and shape or appear in front of our eyes in such a way.

Of course, endless questions are raised from such contradictions and their arbitrary attributes, to which we cannot answer since we do not have observations of these actions and their results. Each one of us can think as it wishes as storyteller, without possibility to judge these thoughts for their correctness and of course without acquiring more knowledge, which would be applied for new technologies. Do these immaterial and spiritual entities change during the passing of time? Do they age and die? Do they also tire and become sick? Do they use or produce energy in order to move and be maintained? Are they found separated somewhere or are they not separated from each other and do not have distance from each other? Do their existence depend on their environment or do they not have an environment? Do they

have some structure and are they constituted by organized and adjusted parts and if not, then how do their differences result? Do they react to the influences of their environment and how far away do they perceive? Do obstacles exist that complicate their movement or their visibility? Also how and from where do they receive the influences of material world and how do they distinguish them between the multitude of effects? Do they think and does their thought cause sentiments and exterior movements? Do they have a mental existence or they themselves are independent mental phenomena (self-existent) without a material " wrapping "? Do they communicate between them and create personal relations? Is their behavior regulated by knowledge or by instincts? Do they make errors or know and act rightly always? The list of questions does not have an end, since we need to make a new world for these imaginary events, in order these questions to be answered.

Have those who claim or believe that such spiritual entities exist, as the soul, the spirits, the ghosts, the angels, the demons and whatever they are differently called (as everyone gives a name to or imagines a god) ever wondered about those questions? Have they ever thought of the impasses, the contradictions, the incentives and eventually, if their peculiar imaginary world is better than our own usual world? If we invoke our own inability to answer to the queries and to understand these extravagant phenomena (that we imagined), then this attitude of ours reflects the bias, the cowardice and the lack of wish for research. Anyone can say everything and think of some impressive stories. However, they should not have the requirement to waste our time in order to prove the error or the lie of theirs (who do not have reasonable thinking or do not have respect for the rules of logic). It is not enough, someone to describe or explain to us certain phenomenon, but it is needed to give answers also to the queries that are caused by their allegation and to give us all the information that helps research and does not mislead it. Then, on this condition, we will discuss the case more seriously and with more expectations.

" It is inexplicable! ": When we claim that something which we imagined or we heard from someone exists or happen, while it has actually never existed or happened, then such fantastic events or effects can't be explained. Then they are easily characterized as " inexplicable " and " supernatural ".

How can something be explained that has never existed and also how to describe something which we can't observe? For example, how can we explain that the green horse does have feathers and can fly, since such a horse doesn't exist? How can we explain, that someone removes the stones with their gaze, if we have never seen it happen first and if the way is not investigated? How is a god explained and proved, which has been created by the imagination and is found nowhere in the world? How can we speak with certainty about something, for which source of information or possibility of confirmation doesn't exist? Each one of us can say anything they believe and as they wish. If, however, the confirmation is impossible, then our precious time and our thought is perhaps spent for non-existent things, when we have indeed enormous ignorance for a lot of things found surely around us. It is not at all intelligent. However, imaginary things and worlds constitute a subject that causes mass interest and the curiosity of the magazines and of the electronic media. In the better case, they widen the field of thought, strengthen the creative thought, encourage doubt and give some views of the philosophical investigation.

Imaginary worlds and interpretations with imagination and absurdities are not missing from modern research. Many researchers use concepts that obscure reality or they make generalizations about some observations that are true in a region of the world or in rare natural phenomena. For example, they describe the world as a sea of energy or as global noise and avoid explaining that laws apply to energy and that energy is not just distributed as quantity and evenly. We cannot consider nature as noise and ignore that there is order in nature. Those who say that natural order is introduced by a human brain are even more easily refuted. They have a concept that is not modern and it has persuasive thoughts in the history of European Philosophy. The order and arrangement of nature needs an explanation and not childish explanations or escape from the problem. Also, we can not ignore causality in nature when we have explained a multitude of phenomena of the macroscopic world and causally create the most complex technology. If causality is missing from a region of the world or from fundamental particles it is not concluded that causality does not apply at all to nature. Some researchers involve consciousness and spirituality in physical processes, but locate it exclusively in humans. If consciousness and spirituality are indeed involved in natural processes, then it does not follow the conclusion that this

is only human or that nature does not have its own spirituality.

In general, from the moment when the behavior of an animal stops being regulated and determined exclusively by the information of its sensory organs, the intellect makes inevitably thoughts that distort the perception of the surrounding reality, as it was being presented by the senses more immediately. Almost all the activities of a human and their mood are created and influenced permanently by the information of their memory and by their thoughts on this information. And it is not only this, but until the point, to behave and act more influenced by their mood and thoughts than what they perceive really outside. The thought inevitably introduces fault, imagination, partiality, hasty certainty, inconsistency, absurdity, up to the point that the real data of sensory organs are not assessed and we cannot distinguish what emanated really from our own experience. Thus, many aspects are formed and maintained by thoughts without rules and by imagination, that are not verified in the experience or did not emanate from our own personal experience. On the contrary, many opinions and images, which are in conflict even with our own experience, some thoughts that can't be proved but we do believe them, frivolous opinions which we accepted without thinking and moreover some views that are strengthened by our experience, while they are fallacies, such as are the delusions of senses take shape in the mind. Lies and mistakes raise questions and the answers to them confirm the lies and fallacies.

39.0. Easy generalization with philosophical thinking

Those, who have studied philosophy and directly some older philosophical works, have observed that many older thoughts for the interpretation of nature have tremendous similarities with modern thoughts expressed in new vocabulary and with more knowledge. I noticed this early in my philosophical effort and quickly found that few words with concise meaning can give meaningful information for the whole world. With this encouraging view I wrote and thought about the cosmos for more than 10 years until the publication of the philosophical book "The Theology of Science". I had speculated that the cosmos has common features and many similarities throughout the space and during the course of time. This is the brief explanation of how one can talk about the Universe and about the essence of things in a few words and without any specialization like the ancient philosophers. For example, if things next to us somewhat interact, interaction is a phenomenon that is not only local here. If things change next to us, we can say the same for the whole world, and not just about the things we see here next to us. If here the bodies are divided into a few elemental parts (particles), that can be said about all things. In short, with easy generalization, we can think rightly about a great number of things that are not next to us in the space and time we live, and for more things than we observe. The gravitational force as observed by *Newton* is another bright example of how much time we save and how much we know by easy generalization.

The renowned philosopher *Kant*, rather than concluding the obvious, that things have similarities, common features, and that there are common laws etc, sought paradoxically the explanation for similarities exclusively to human perception. To explain how things have similarities and always some common elements Kant thought paradoxically. He thought that things have common elements because traits are introduced by the biological and spiritual processes of humans. For example, space is a general form formed by the senses and not a common feature outside of things. So we perceive in space everything, since our senses work in this manner and every representation of things is possible by introducing the "space" from the senses. When I carefully studied Kant's core works in the early 1990s, I quickly no-

ticed this paradoxical explanation (and of course I was ceaselessly writing about my own views). In spite of my immaturity then, I appreciated that it is logical and simpler to accept that things themselves have common elements that are summarized in a few words, such as space, time, matter, force, interaction, movement, stability and more. This is, because some other queries arise from Kant's explanation, that cannot be answered rationally and the issue is more complicated: What is an observer and how exactly are the forms of space and time introduced? How does this happen to many other people? Do the other observers perceive a totally different reality (without any similarity)? How do things in themselves affect the human body while the observer is something completely irrelevant to the bodies and things themselves? So, it was more convincing that things are such as they are with their change, their relations, and their interdependence. In the early 20th century, researchers found with the most modern instruments of technology, that things have similarities and common laws, although the boundaries of the observable world have widened. So they were encouraged and began to think with easy generalization, as the philosophers have done so far.

With this courage of philosophers who generalize easily, I was attempting to explain the beginning of the cosmos (that was so great as we were learning then and infinite as I was thought then), and what the essence of bodies and particles might be, and whether they have an essence. Then I thought to start with an optimistic and bold view. I have never hesitated to think the most unlikely, because the simple things around me had already been for me unusual and unlikely to exist. I was amazed by our lives... I was looking for the common elements of the world with which we could think about the whole world, without observing each one thing and separately. For me, movement and matter were not the most assured and understandable characteristics of the world, and they should also have an explanation. What characteristics do you think I found as a basis for all explanations? I took the common meanings of "total" and "part". The time has come for the cosmos to be defined as "the full wholeness of all things", while every perceived thing was defined "as part of a common whole". So I tried to explain things based on the principle of this thought. With the wording of my thoughts on paper I had options for subtle differences of meaning and I was trying to choose the wording that seemed more consistent. This written effort was important to keep my thoughts in mind and to think rationally without new

things being introduced into the mind with the careless use of a new word. I noticed that from the definition of "part" I would never have reached a thing that would be self-existent, independent and primordial. Every part was such because there were other parts. Every part had limitations and dependence on other parts. Every part affected other parts and received influences from other parts. Every part changed and was never complete. As more as we think and get to know one thing, we will also need to think about its adjacent things and we will not find the end. Therefore, we had to forget about the individual things for the interpretation of the world. We do not have to waste our time, since the parts are countless, with innumerable combinations and what we can see is here and close to us, while we will not travel in the vast space.

Then I found it easy to think that only one thing can be considered to be first and decisive for all things: The common Total of all parts. Only this was distinct in my thinking, since only this could not be part (as I was thinking then). It was the common Total of all parts and it somehow had to stand apart from its parts. Then, surprisingly, I wondered: If the Common Total changes over time, then will it be a complete Total? I appreciated that if the Common Total changes, then the frustrating conclusion arises again that the common Total is not the complete Total. If it changes, then it's a part within time ... I had thought. And what was it at first? And how much the total that preceded is decisive? And how satisfactory explanation can a common totality give that is not complete? We should again look at how the common Total is such as it is and from what it is affected or on what it depends ... Therefore, to stop looking for what it has been before and for which thing can explain the whole world , we do not have many choices. For my own solution, I had to think that the Common Total is complete only if it is stabilized and always the same! Only with so convenient thinking did I find an undeniable thing about which I could say: There is one thing on which everything else depends and by which everything else is fully explained. There is one thing that we can think of as self-contained. The complete Total of the world as stabilized was the most optimistic solution. But in order the common Total to be stabilized, it had to be something in all possible ways! A complete Total in all possible ways could be identified with Time or this is equivalent to say that Time is finished for this complete Total. A common Total in all possible ways is stabilized and can provide a full explanation for

all its parts, while no part can give a full explanation ...

But that was how a philosophical adventure began in my life, because the shared experience shows that everything changes. Normally I should have concluded that the common Total is not the same over time. But this common finding of the change of all things did not discourage me. I trusted a simple rationale. I believed that no one could offer a more convincing explanation for the world, with thoughts about any phenomenon, any attribute, about any thing and with any knowledge. This is, because the most convincing explanation should not create query for a previous thing that determines or affects the rest. No part of nature appears to be uncreated. No one can reasonably think of a thing that is connected with the natural world, and this thing does not need any other explanation. The only thing about which we can think and talk without being cut off from the physical world and being sufficient to explain all the other things is the common and complete Total of the world that we summarize with the word "Universe". This was optimistic and so convincing that I was certain that we could find out how a complete and stabilized Total is not seen thus by the common experience. That is, the common finding of the change of all things was not considered to be a denial of the thought of a complete and stabilized Total, and did not discourage philosophical search. On the contrary, it was considered to be the only problem that had to be solved and caused the suspicion that so generalized change as a universal law serves something and has an explanation. On the other hand, things as they appear to the senses are neither exactly the same for all the biological bodies, nor are they exactly the same in reality without us. This was a finding that also encouraged us to rationally think about things beyond our eyes and the limited time intervals of our live. All thoughts which are briefly written here had been formulated carefully until the early 1990s, in the first five years of philosophical quests, starting from a low educational level and avoiding discussing of these thoughts. Here I made a pause in the early 1990s to emphasize that until then as I had been thinking about the complete and stabilized Universe (for which time is finished), the most improbable thoughts and many stupid thoughts had gone through of my mind. But I still could not conclude that the common and the complete Total we call "Universe" exists at the same time toward its parts!

This persistent and long-lasting effort to answer totally, briefly and ratio-

nally to many questions of Philosophy is recorded in the philosophical book under the title "The Theology of Science".[i] It was a boring book of abstract and obscure thoughts and eventually misunderstood. The way it was written (the personal experience) would rather be another more interesting book… A peculiarity of this intellectual effort was that the author avoided basing his thought on ready-made views and previous theories. For this reason, he had chosen to express his thoughts with the usual vocabulary of everyday life and with the least number of new words. We can infer a multitude of random and fragmentary observations from our experience and a lot of separate explanations faster, more easily and not randomly. This is possible through the theoretical analysis or after reduction of notions into few general concepts and with our ability to know more phenomena through observation of some relations and similarities to the closest and most common things of our experience. The things have similarities and we can describe them in groups, we can generalize and make calculations on average and statistically.

What was the intuition that motivated a young man to attempt to write for many years about the total of things with the most abstract words? What did it encourage him and made him seek the explanation of a lot of phenomena with a few concepts and not prefer the concrete things and clear definitions? Human intellect has an ability that many well-educated people and scientists have not properly appreciated. We can describe things with short vocabulary and overall. We can think creatively and with imagination, but in a way to facilitate logical thinking. We can have different views through assumptions and predictions with reasonable consequences. Our thinking can so easily and finally unconsciously, drift away from the answers and be deceptive.

When we do not name any particular thing and we search what traits are the same (common) for all the things without exception, this easy thought can be checked equally easily in the experience. If you claim that all the things have a common trait, then we will be supposed not to find one thing which would not have this trait. This extreme generalization, with which we attribute a trait to all things without exception, has the advantage of not having to precisely identify the number of things with the same trait. We do not need to determine how many things have the same trait, which these things are precisely and what are not and a time-consuming and difficult investigation and in every detail.

For example, suppose that we claim that the politicians are liars. With this generalization we make possibly an error, since we attribute the same trait (that they say lies) to a number of political persons and not to a few particular cases from our experience. Then, if all the politicians are not liars, it is not easy to calculate their number and distinguish who the liars are and who are not. It needs time for investigation and to overcome a lot of difficulties (in what society, in what times, when they said lies, if it was a lie or an error etc), while the danger of some inaccuracy in the conclusions or invalidation of conclusions from developments in reality exists always.

Do the same traits exist for all things without exception? If they exist, then this case means that these traits will exist in every picture (or more widely in every perception) of the things. If the same traits exist in all the things, then it results from this thought, that their common traits might be observed from all humans and in all the experiences. It is true that all things have certain common traits and in point of fact this theoretical ascertainment has already been stated since ancient years. We have been informed by history, that, humans had thoughts (correct or erroneous) in ancient years about all the world and general opinions about a big number of things were expressed very easily, without having previously searched the things. Humans had this possibility by nature itself and their biology, because the words, which were modulated by their voice, expressed and transmitted some abbreviations (summarizing traits) of the things. Words themselves are not the things, we do not forget it. They are made and connected to each other so as to express the things and this could not possible, if common and constant traits did not exist in the things and also for the other people. An exclamation (vociferation) in a moment of fear transmits a message of danger and the same message can be received from a lot of recipients and then, those recipients will express themselves in a similar way (with a similar exclamation). The meanings of the words reflect and correspond to some common traits that many other people will recognize when they hear the same words (with the sound details of their tone).

This ability to refer quickly, succinctly, briefly, concisely and overall to a great number of things, with few words and by observation in a minimal number of cases, was perceived by few humans called philosophers who attempted to use it theoretically. As we are informed by the historical testimonies, *Aristotle* (384-322 B.C. born in the ancient city *Stageira of Mace-*

donia) was the first who researched the rational and linguistic possibility of humans and wrote down on paper his observations and conclusions. The writings of Aristotle about the human thought and logic were assembled in a book with the known title " Organon " in the Byzantine Period. Aristotle founded a region of Science that we call " Logic " and his theoretical work influenced decisively the philosophical and scientific thought of the Arabs and all Europe for a lot of centuries later in the Middle Ages. The basic observations of Aristotle about the formation of our thoughts and how we distinguish the truth (such as the laws of logic, identity, not contradiction and the law of excluded middle) have been taught until today in the schools and in the Universities of all the world, in some cases without knowing him. Aristotle's philosophical work did not cease to constitute a source of inspiration for many thinkers and researchers of philosophy. In the era before Christ, Aristotle already distinguished and mentioned a small number of words in the daily vocabulary, only ten fundamental concepts, which he called categories. These categories include the first and essential traits that we find in the things and the other concepts and things can be classified and be categorized under these concepts.

A thing is something, with certain attributes (quality), it has the property of having, it is related (or is connected), it is in space, in time, it affects somehow, it receives somehow actions of other things and may contain a quantity. One of the fundamental concepts for which many philosophical theories have been formulated is the substance. We can separate a lot of things according to the quality, the quantity, the time they exist and the space they are in, how and with what they are connected to, how they are affected and what they cause and so on.

Many centuries afterwards, *Immanuel Kant* (1724-1804) processed again the Aristotle's categories in his own philosophical effort to explain the success of mathematics and the failure of metaphysics and claimed a foolishness (even for that time of history) in one of the most intelligent and arduous philosophical theories that have strengthened the philosophical current of Agnosticism. Kant claimed that we never know things as they are alone and independent, but only as the things seem to us through the categories that our human intellect introduces. He considered the human intellect as something isolated, detached from things and the things completely different than the phenomena. The abstruse German philosopher *Hegel* (1770-1831)

replied very aptly a few years later to this foolishness (I'm sorry Kant) in his philosophical work under the title "The Logic":

" *These categories, unity, cause, result etc of course belong to the intellect. If from two facts that we perceive, one is the cause and the other is the outcome, their causal relation is not categorized in the perception, but it is conceived only by the intellect. However it does not follow from this fact, that the categories are only own our determinations (exclusively) and that they are not also determinations of objects. However Kant, consider them in this way ...* "

Since the ancient years, some humans have attempted to talk about the totality of things and about things that are distant in space or time, after they had observed a lot of resemblances and common elements by their limited experience. I believed also in the same capability, without having observed it well and without having learned about Aristotle's thoughts in the start of my own attempt. The ascertainment of certain resemblances, the theoretical possibility for correlations from a phenomenon in order to explain another, the capability to think with the broadness of some notions for many things together and in figures of speech, gave optimism and courage.

In the beginning of my philosophical effort I could make a lot of thoughts and I sought logical (reliable) answers about the substance of all things, using certain general notions. The first general notions which I perceived as keys (essential) for the philosophical investigation, were the notions of the cause, result and relation. Very quickly then, I perceived the long prospect that the abstract notions of " part " and the " totality " gave to my philosophical investigation . I demanded, that everything has the trait to be a part and not the total. Then, I combined the notion of the word " part " with other traits and other similar words by this consistent observation, such as the restriction, the limits, the obligatory relation of a part with the other parts, the obligatory action of a part and simultaneously the reaction, because it is connected permanently with other parts, the inherent change in the existence of a part and the impossibility for a part to be complete, immutable, without change. By the permanent relation (action-reaction) between the parts, I inferred the notion of " interaction " as a better-aimed word in order to imply the permanent relation that the parts have with each other, in order to be

parts, etc.

I had many expectations and somehow I had a feeling, that the solution of cosmological problems was hidden in the permanent relation of the notion " the totality " with the notion of " the part " and their coexistence. I did not overtake (avoid) the theoretical observations in the abstract notions as a game with words. I perceived that **the obligatory relations, which I observed amongst certain notions (which were traits of all things), reflected some relations and attributes of all things**. I perceived it with the same logic, as the numbers and their proportions can be applied in mathematics and reflect relations of things. If I had a theoretical conclusion, such as that the abstract concept " complete totality " should be considered to be a stabilized and always the same so as to result some other obligatory relations, which I had deduced for the " parts ", then this would was a conclusion about the Universe too, since we consider it as the total of all things and with all ways of interactions…

Paradoxically, while I was thinking easily about the total of the things and was attributing certain common traits to them and was observing some obligatory relations (in the notions), I observed with the same easiness theoretically that the things are more complicated than we observe in our daily experience. The ease with which I was talking about all the things returned as a difficulty, when I was talking about a particular thing! I was impressed when others had distinguished the things clearly in their thinking (explicit segregation) and also when someone had used words like "independence", and if they had defined with clarity which the cause and the effect were. An example: All things in the thought were parts of a total and nothing of them were not an independent or initial cause. Thus, a query arises theoretically: How can we determine what a cause is and what a result is between the things, since we cannot find the initial cause and never a final result... This is, because, theoretically, each thing, which becomes a cause, is not the cause to itself and this thing has also a cause and has been realized with other causes. If the cause has a cause, then it is not the unique cause. If the result becomes cause, then it is not the unique result. How do we distinguish, therefore, the initial cause and the final result, since a beginning and end do not exist in the thought? How do we define something as cause, since it has been created with other causes and is connected with other things that influence it? When we look at things and try to explain their behavior, then we

try to find substances, in particular some discernible things and obvious actions. When we think about things too much without observing them and try to explain their behavior, then we seek explanations with invisible forces, with movements and laws ... The individual things are never enough.

When we talk about a “cause”, we mean in other words that some forces are applied and some things influence some other things. The things move to approach some other things or some other things mediate. Therefore, if the same things do not mediate or if not exactly the same things are used, then the results cannot be exactly the same and in the same amount. Moreover, when the things, which mediate or are used (for a result) are not stable, but these change somehow (especially when they change fast and unstably), then it is more difficult to identify and determine the same results. If many things combine and mediate... and if these change (without a pace), then we talk about “indeterminacy”.

If we look with our own eyes at the things then we will see that many answers are more difficult than we would like them to be, but also many other answers are simpler and easier, than we thought. But many times, we do not like the answers or they are not complete. With the effort to give a more meaningful and complete answer, we forget the first and most simple observations. Our thought is lost in the relations of things and overstates the exceptions. With our own eyes, we will see many different things in many directions, which are in equal and unequal distances from each other and things as large as we want. Many of them are apparently connected together in many different ways and many other things do not appear to be connected. Some of them are linked closely and abut each other extensively or at one point, while many others are linked from a farther distance, directly or some things mediate in between. Also, many things move obviously and continuously, while many others move slowly, and not continuously. Many things connect somehow with each other, while some visible or tangible objects do not seem to mediate. Unseen forces are applied (eg, magnetic, electrical, gravitational forces). We talk logically about causes and effects, because we observe a motion or change - call this phenomenon as you want - and developments and therefore we observe the flow of time. In a movement something follows and something is earlier. We perceive what follows as a result, while what precedes as a cause. Many things move obviously but when they encounter another body, then we observe action and reaction (as

it is expressed by the Newton's law). A result or more results can follow. Deformation or breakage of one body or of all of them can be caused by the impact. In other cases, the things exchange synchronized a force and the result seems to be clearly regulated and impressive. (Many examples can be added here ...). **In all cases, the result is not detached and well separated from the cause**. **What precedes creates or causes some effect, but together with the recipient of the action and momentum**. For example, a stone is pushed by a hand on the ground. In order a result to be produced, the stone needs to exist and have its chemical composition and formation, its mass and its weight, its durability and the association of its molecules, etc. The result will not be clearly derived from the application of our own force and by the separate movement of our hand. Pushing in the same way the "mealy" soil or water, with the same strength and to the same direction, then a different result will be generated.

So, if we look at things directly, we will see that the result is predictable and clearer:

when the things are clearly separated from each other,

when they do not have their own motion,

when other forces are balanced,

when many things do not mediate,

when the movement is realized in relatively low speed and slowly

when other forces or other things do not interfere during the time the things move and when they do not interfere abruptly and without a steady pace.

Some thinkers restrict their observation to these most common cases and they think about the cause and effect as if they were well individualized. But things are complex in nature and forces and resistances are permanently applied, which are easily destabilized. Also, a body is not simply one since it is constituted of a lot of connected parts, either we see it regarding its external environment or we see it as a complex thing and regarding its interior. For a multitude of results, many other things mediate and may not be stable. The result is not determined solely by an external cause. That is, the result does not depend entirely on what the cause is and how it works. It depends and is determined even by what the thing is on which the action takes place

and how it is affected until the final result is produced. That is, it depends on the composition of the thing upon which the cause acts, its form or structure and how its parts are connected to each other. For example, we press a switch to turn on the light because a switch already exists and is constructed and connected in such a way that we can push it in a certain way and produce the expected result. The cause exists because it can affect an environment and because some results from other causes already exist and work together. One or more results are produced because certain reactions and changes are caused to the recipient of the action and under certain conditions. Action has some recipient. Causes do not produce results irrespective of the recipient of the action. In different recipients the results are not the same. If the causes and actions work together with the recipient of the action then neither the actions nor the causes are easily separated from the results. If the time of interaction is shorter then the distinction becomes more difficult. Things, which already exist and are the way they are, receive actions in some of the many possible ways. The boundaries of things, the way they are made, their shape, structure and materials, their volume and density, the position and sequence between their different parts, their fields, etc, predetermine how they can be affected. The things that already exist predetermine which actions can be implemented, in which way, for how long, how fast, with how much force, at what moment etc. Therefore, the results are not explained and not produced exclusively by the actions that precede and we distinguish them clearly as external and as causes. **The things, which already exist and receive the actions, contribute necessarily to the result**. These things, which mediate and receive the actions, exist as future to their causes. Prior to action, a result is already realized, which can receive action from other causes. This logical condition for the occurrence of the cause is **the principle of utility** (or contribution) and feasibility. We mean "feasibility" in the broadest concept, that things are useful and specify or predetermine how many and what results can be caused.

It is not just the causes that will bring the results, but so it seems when many things have similarities. **When things have similarities in their form and structure, then there are likely to be many similar ways of reacting as recipients of a same action, and then joint results are produced**. With the emergence of life, the result can be chosen and then utility is revealed as feasibility. This is, because the information is assessed and the body reacts

and adapts to produce the desired effect and to avoid the unwanted. The action is regulated and directed to preserve life and achieve balance. Especially, the result is prepared theoretically, imaginatively and abstractly by human thought, is predicted with knowledge and experience and thus is selected or rejected.

By the abstract notions of only three words " part ", " change " and " interaction ", all things in my thought had become unstable and without explicit limits of beginning and ending! Really, the easiness with which I was talking about the total of things, was causing a difficulty to me, when I was talking about a concrete thing! By the more abstract notions of the world and with the simplest thoughts, I understood that great voids existed in our knowledge about the visible things and phenomena of casual and provisional absence of their relations! However, these same easy thoughts, from which the conclusion for the complexity of things resulted theoretically, led easily to conclusions and solutions about many other problems and about irrelevant issues, which we evaluate as more difficult. This is for example, the role of the inorganic matter in the Universe and the relation of matter with a minimal time of an energy change. Another example is the necessity of interruption in the evolution and in time of existence of all things, including the living things.

I want to remark here, one of the many paradoxes of the philosophical undertaking that resulted to a book under the title " The Theology of Science ". In the long and everyday effort to formulate the theoretical thoughts about the traits of all things, the concept of "force", which is a well-defined phenomenon in physics and is described with mathematical precision, was not used. Paradoxically, in my own juvenile philosophical effort, this notion was not used in order to avoid unknown phenomena and because I hesitated to attribute the force as a certain trait of all things. Well or badly then, I considered that the term " force " expressed an inexplicable and metaphysical phenomenon, the way in which it is caused should be explained and not to use this term in order to give explanations. I preferred to use some other terms to replace the " force ", some terms which I considered to be more explicit and safe in order to denote something about the things. I preferred to think about the things as if they were themselves that affected and influenced or had possibilities for interaction with their movement or with the

mediation of some intermediary things. The term " force " reminded me of phenomena that could exist without the material world, invisible, bodiless and independent existences, something that I couldn't accept under the abstract concept of " thing ". The things of which I was thinking were inextricably connected within a whole, were permanently interacting and they could in no way be preserved or exist without bidirectional interconnection with the material things.

Somehow like this, I was formulating everyday for many hours thoughts and reworded them with minor differentiations and I was writing many pages… I will not extend my thoughts further here to narrate how the first book " The Theology of Science " was written and what was written in it. I only emphasize the great advantage of human thinking and I make comprehensible that we can think efficiently and consistently (rationally) about issues, that seem to be the most difficult. We can approach in solutions of scientific problems or to simplify them, without having to specialize in few concrete things. Moreover I emphasize, that in certain cases, some of the philosophical and scientific questions cannot be answered with the knowledge of individual things but, on the contrary, the questions are obscured and some fallacies are caused.

Many times we do not know so well as some trained and skilled persons know. But our ignorance does not prevent us from thinking. When we talk and express our thoughts, then we apply rules of logic and grammar in order to be understood. Certain rules of logic and language are necessarily applied and do not depend on any specialization. Instead, all sciences apply these rules of logic and grammar. Mathematics also applies rules of logic, regardless of our measurements for things. For example: The elements of a set are somewhat connected to each other or it is possible to be connected with each other in only one most effective way. This is a logical thought applied by all sciences. The elements X of a set S can be named differently in different sciences when the object of research is different. The parts can be called "gears" in engineering, "electrons" in atomic physics, "people" in sociology, "States" in politics, "cells" in biology. Read some more connecting rules of things as provided and imposed by rules of logical thinking. The following thoughts are some of the first thoughts about cosmological research that introduce someone to the field of cosmology. But you will not find them written in any books about cosmology.

• The whole is more than just its part.

• The whole is not the part, but it does not completely differ from what it contains.

• The parts are somewhat connected to each other.

• If the parts are numerous, then some are interconnected with less mediation. Some other parts are interconnected with more mediation.

• If the parts change, then the ways, in which they are connected, change somewhat. Conversely, if the ways of linking the parts change, then the parts themselves change somewhat.

• The set includes the parts and together includes the ways these parts are connected.

• If the parts change, then the whole includes parts from different time intervals.

• Parts of the parts are also parts of the whole.

• Many parts together are again a part of the whole.

> Every thing can affect in many ways under certain common conditions. Every specialist is forced to investigate and describe the result according to the following conditions and answer the corresponding questions. The result is always affected:

· From the distance. How much is the distance of things? The distance was constant or changed, and how often did the distance change?

· From the surface approaching. How much is the surface of the body and which side approaches?

· From the duration (of the time interval) of the influence. How long did things stay in touch or in the distance of interaction? Was it all the time at this distance?

· By the stability of the form and structure of the thing that affects it. (For example, it is fluid or in gaseous form and how hard or soft it is). The stability of the form and structure is important, because whether the body has a stable surface or stable limits and how this body has connection with other bodies, depends on stability. In addition, whether parts of it are detached,

transferred and mix with other bodies and how often these distortions occur, depend on stability.

· From the environment in which things are connected or approach and whether their environment is changeable. That is, if things are surrounded by liquids or gases, or if they are in a vacuum, if they are pressed by the application of other things and what the temperatures are.

· The effect is influenced by the application of other forces that maintain the contact of things or make contact more indirectly (eg friction).The effect is influenced by whether the forces are applied steadily and by the characteristics of force such as size, angle, time etc.

· The effect is influenced by how many other parts interfere and whether the forces between them are concurrent or canceled.

· Finally, the effect is influenced by how many other results are produced on the receiver of the action modifying it and by many other attributes of receiver.

39.1. Two basic terms for rational thought, for Science and Philosophy: Immediacy (direct relation) - Indirectly (relation with a mediation)

It has been heard many times, that a butterfly, which flies in one hemisphere of Earth can cause storm in the other. This could be one of the infinite examples that we can say, in order to express the general law: Every detail (in volume, in time, in movement etc.) can cause big changes, new developments and a considerably fact in combination with other actions and after a time interval. By a detail we were given our birth and by a detail we die, as I often say. The detail can be the flying of a butterfly, can be a sting of insect, your fart, the moment of a walk, however these details are in a lot of cases under a decisive term: The detail can cause some incredible consequences but this is realized after the mediation of many intermediary things or after a long time interval and with the contribution of certain other effects. That is to say, not immediately but indirectly, not always fast and in a straight line (not directly), but late and in combination with other things (in an indirect way).

The mediation of things and phenomena, the transfer of action through a

lot of things and the time, which passes until the appearance of a result, constitutes a characteristic trait of the reality, which we can express with the notion " indirectly ". Easily, we can think now the opposite characteristic, since this one would not have meaning and existence without the other. The mediation of a minimal number of things, the transfer of action without mediation, the appearance of a result in a minimal time (or even simultaneously with the action) or the result without mediation, constitutes a characteristic (feature) of the reality, which we can express with the notion " immediacy ". Consequently, now we can say logically:

The flying of a butterfly can cause a storm in the other hemisphere of Earth, indirectly and after the mediation of other developments and things and with the contribution of certain effects. The indirect contribution, the most indirect action, the mediation of a large number of intermediary things and phenomena and of a long time interval render everything a detail concerning the eventual and distant results. Consequently, we can say: Yes, the detail is important and decisive, we should however note and not downgrade the most obvious and direct effects, which can prevent or reverse the result, that is prepared by certain other actions.

The simple term " immediacy or directness " and the term " indirectly " are both essential and important for the rational thought and for the description of the things, as much as the notions of " quality " and " quantity " are . These terms have an enormous importance for Science and particularly for cosmology and this became perceptible by the writer, in the beginning of his philosophical effort to formulate his physical interpretation of the creation of nature. By a historical retrospection in Philosophy, we will find that these terms acquired notable importance for the general description of the world and a central role for the formulation of a philosophical theory in the abstruse thought of the philosopher *G. Hegel*. The notions " directness or immediacy " and " indirectly " were unavoidable and were considered essential for the general description of the cosmos for the author and writer of the cosmological theory, that he named after some years " Theory of a Finished Time and the Relativity of Energy ". How indispensable and fecund these two terms " indirectly " and " directness " are for the general description of the Universe and how important they are for Science and not only for the Philosophy, will be perceived by everyone with some brief thoughts that follow. These are some thoughts with which the cosmological theory of the

Completed Universe was being formulated for a long time and led to theoretical observations that shed light on physics and astrophysics.

As I said, in the beginning of my philosophical effort I perceived the exit of the labyrinth of the philosophical research using the abstract concepts of the "part" and "the whole or total". So I began writing about the things with the notions " part " and " total " and I observed theoretically the connection that all parts should have from each other. Soon the moment came to observe the need, the things with their action on others not to cause all the effects simultaneously. Easily, the thought followed, that the parts of nature in order to be distinguished and be separated from each other, should not exist in the same moment. In addition, nothing should be exactly the same as another or with the same modes of connection, as if they were perfect copies. Theoretically, all parts should be connected to each other, act and influence each other, in order to constitute parts of one total. However, our experience shows that this interdependence of theirs is not equally decisive for the existence of all remaining things (everywhere in space). We observe things that remain unaffected from the distant action of some other things and that can exist without many other things. All results are not caused at the same moment. So the thought followed quickly that the effect of a part (of the reality) on another part was not at the same time an effect on all remaining parts. For certain things the effect is fast, direct and nearest in space or time, while for other things, the effect is very distant up to impossible. Therefore it was needed to introduce these concepts with which I would make a segregation in the common notions of "relation" and "interaction". It was needed to seem that interactions exist or are realized between the parts that are permanent, or that are realized continuously or in near distance. But also a lot of interactions are not realized in the same moment and they do after a longer time interval or after the re-transfer of energy in a longer distance and with the contribution of many other things. Then I thought the notions of the words " immediately or immediacy or directness " and the opposite notion " indirectly or mediation ". Also, the concept of "interaction" was distinguished by the concept of "relation" as a particular case.

" *The relation has a notion that is wider than the one of interaction and it is possible not to observe an interaction between a thing and some other thing (with which it coexists or not), but this observation does not mean that these things do not have a relation.*". ()

Because I considered the total of the things to be stabilized and always the same within the limits of a longest time interval, then the moment came, when I thought of a limit in the most indirect way of interaction, an insuperable limit in the time interval of an interaction, also a limit in the longest distance, a limit in the number of parts and things and a limit in the number of things that can mediate… How important to Science the general description of the world is with the above abstract concepts, is revealed when we think that there are time limits and there is neither infinite time between the developments of the Universe nor an infinite number of "parts". A first and most important theoretical conclusion results from the simple thoughts and with these abstract concepts, with the terms " indirect relation " and " direct relation ". If therefore, the total of things is always the same, inside the limits of a longest time interval or if things aren't infinite in number (as I deduced through rational thoughts), then a limit is imposed theoretically on the " indirect relation ". The next conclusion is that in nature an infinite number of things and an infinite amount of time do not mediate up to the last result. From this theoretical thought - perhaps simplistic to some educated thinkers – imagination was needed to come to the following conclusion: Without being clear and certain in the beginning, it is concluded that there are results that are the most indirect and have always been realized, have been materialized in advance and are constantly present. If the wholeness of things (the full Universe) is always the same within a maximum time interval, then the results of the most indirect effect of things have always been there, and everything is influenced by all the rest (have been influenced by all the other parts) in the most indirect way, which is the same for all parts of nature. The most indirect way for a result could be only one.

"What are these more indirect results, which have always been realized and have a minimal impact on every thing?" I was wondering to provoke the imagination. A little hastily this answer followed: "As it will be proved, these common elements (from the most indirect effect of all things) are the common modes of interaction, which are called matter", that is to say, the structural elements of things. (p129) With this theoretical approach and ascertainment, philosophy was disconnected forever from physics and Science! It would be a philosophical, coincidental and unfounded thought, if in the course of this philosophical effort and the rational unfolding of thoughts a lot of theoretical observations and thoughts had not arisen that coincide

with phenomena and observations of modern science and give explanations, avoiding the impasses of physics.

The two terms " indirectly " and " immediately " are necessary and important for the description of nature and are not a game of words. The existence of more indirect relations in things (distance in time and length) implies that there are conditions or laws on how things are connected, since all things cannot exist in the same direct way (towards each other) in the same immediate mode, with any priority and at the same time (between them). The vague meaning of these two words ensures that a priority exists and a time mediation in every effect and in the connection of things and gives a meaning to the separate existence of every physical thing. The indirect relation in nature is distinguished from the directness with enormous divergence (in length, in time, in the number of things and in certain sizes) and it has a limit. The next concept, which has a " key-meaning " for the interpretation of nature as a total, is produced by these first notions (indirect-direct relation) and is briefly the notion of " matter or structural elements ".

By an analysis of concepts, we can easily avoid the quick conclusions that emerge from some brief points of view, such as the usual thought "that all things are connected and depend on one another." It is not enough to say that things are dependent on one another (as they are really) and so we think we have provided a satisfactory explanation. We observe that the dependence happens with some physical processes and can be described. It can be a natural shift process until two things come in contact or a frequent repetition of their contact, it can be an electromagnetic interaction, it can be a fast electron exchange within a bloc of molecules, it can be the breathing of air into the lungs and the balance in placement of a body on top of another etc. Not all dependencies are the same. Some things depend more directly and in many cases, while one thing cannot exist without the other. But dependence can be one-sided and the existence of one thing depends on the other, while the other thing can be without the first. We understand that the world has not ceased to exist, but people "leave" the world. A patient in the surgery depends on the doctor's conscientiousness and ability, but the doctor's life does not depend on the patient. We notice that existence can depend overall. But we also notice dependence without which the existence would again continue and would not be destroyed. The dependence can be two-way and so many things are significantly affected by each other. The dependence can

be creative and reinforcing for all parts, or only one part can be strengthened, while dependency can be devastating for the rest of the parts.

Ultimately, the most certain and easiest knowledge is about general and global phenomena and about those that are repeated very often. On the contrary, the rare and no repeated phenomena and individual things with their details require witnesses, special education and a new language of expression.

NOTES

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