

The Physical Universe as a Quantum Information Structure

Peter Kohut*

ABSTRACT

The information essence of the Universe dominates over its physical aspect. Its dynamic hierarchic information structure is a manifestation of a divine Mind with its Idea (Intelligence), so the Universe is rational and comprehensible for us. Our individual consciousness as a part of universal consciousness of God deals with information carried by energy. Only consciousness can give the real sense to information coming to us from the objective world through energy supporters. Divine universal as well as our individual consciousness (subject) create the internal side of the Universe reflecting its external side (object) represented by structured quantum energy as a holder of divine information structure and architecture. Information encodes the creative power of consciousness. The physical Universe (non-living and living Nature) with its unbelievably rich information contents is a true food for our senses and our mind in the process of our conscious cognition and creativity.

Key Words: physical universe, divine, quantum information, object, subject, opposite, anti-pole, unity, consciousness, God.

The Unity Principle of the Physical Universe

If we start our consideration with existence at the highest level of abstraction, we can only state that something “is”. This “something” remains undefined existence until we say that there is “something else” towards which “something” defines itself as a difference. **“Something”** and **“something else”** are not two independent existences but they are two opposites (anti-poles) of the same “one”. The relation of anti-poles is not static but dynamic as only their mutual activity creates relations. The simplest form of mutual activity of anti-poles, that creates the essence of matter, is their **attraction and repulsion** manifested as pulsation – vibration – oscillation.

“Something” excludes its anti-pole – “something else” by repulsion. But at the same time the anti-poles remain connected together thanks to their attraction. Thanks to repulsion and attraction, the anti-poles remain in a unity (mutual relation) that cannot be broken. The bipolar “one” is a self-repulsion and self-attraction of its anti-poles that can be symbolically marked as “+” and “-“. This bipolar “one” represents an **elementary quantum connection (relation)** of anti-poles (opposites), so we name it the **quantum dipole (+/-)**. It is the dynamics, motion, pulsation, oscillation, permanent approaching and merging (attraction) and receding (repulsion). This self-motion of quantum dipole is the mutual motion of its anti-poles. Repulsion and attraction are two faces of the coin. One predicts the other. Such is the dialectical logic of “one” that is bipolar and represents both - the basic building block of matter (space, energy) and elementary unit of information.

* Correspondence: Peter Kohut, Ph.D., Email: pekohut@gmail.com

The **dialectic relation of the whole and its parts** defines the exact mechanism of the unity principle of the Universe.

The whole – “one” thanks to its intrinsic contradiction differs and divides itself into parts (many “ones”) in such a way that every part is connected with the whole, what means that every part is connected with all rest parts of the whole. As all connections of these parts are also parts so all parts are connections – links, relations, quantum dipole networks, too. Part and connection are the same as well as particle and interaction. There is no difference between part and connection. Every connection is a part of space and every part of space is a network of elementary connections. The dialectical separation of the part out of the whole means its separation out of every part of the whole. Such separation means the creation of its connections with every part of the whole and it is possible only if the whole and every part consist of elementary bipolar connections (quantum dipoles (+/-)). The quantum dipole (+/-) so represents the elementary structural unit of the Universe (space, matter, energy). Every “+” pole is connected with all “-“ poles of the Universe and reciprocally. So, **everything is connected to everything**. The principle of universal connection of everything with everything creates the general Unity of the physical Universe. This **Unity principle** is basic for the whole Universe based on its internal dialectics. Only by dialectical logic the bipolar essence of matter can be discovered because dialectics has the universal power over Nature.

The Universe is a network of non-local connections +/- and “perceives” all of its parts. On the other hand every elementary quantum +/- “perceives” the whole Universe. These non-local connections are in radical contradiction to the Einstein theory of relativity. They not only exist but represent the substance of the Universe. It means that the Universe is always universally interconnected. Thus, the principle of universal simultaneity and synchronicity is valid. What is simultaneous in one system is automatically simultaneous in all others. The network of non-local bipolar relations represents at the same time the information structure of the Universe, which information contents represents the dynamic reflection and implementation of divine Idea as will be shown later. Quantum non-locality, complexity and synchronicity of the dynamic universal quantum network of bipolar relations are the evidence that the Universe is mainly the dynamic information quantum structure. Einstein believed in the law of locality, where two objects can interact only if they touch each other or if their interaction is mediated by some other object; but non-locality, or inseparability, is a fact of nature. Objects are not only affected by local mutual pressures but mainly by what happens to other objects. So they are always in a direct mutual communication (interaction).

Every connection of anti-poles (+/-) represents the individual elementary quantum of matter-energy-space-information. It is the elementary building block of matter and information and the base for its structural composition in which everything is connected with everything.

Schematic representation of a quantum dipole:

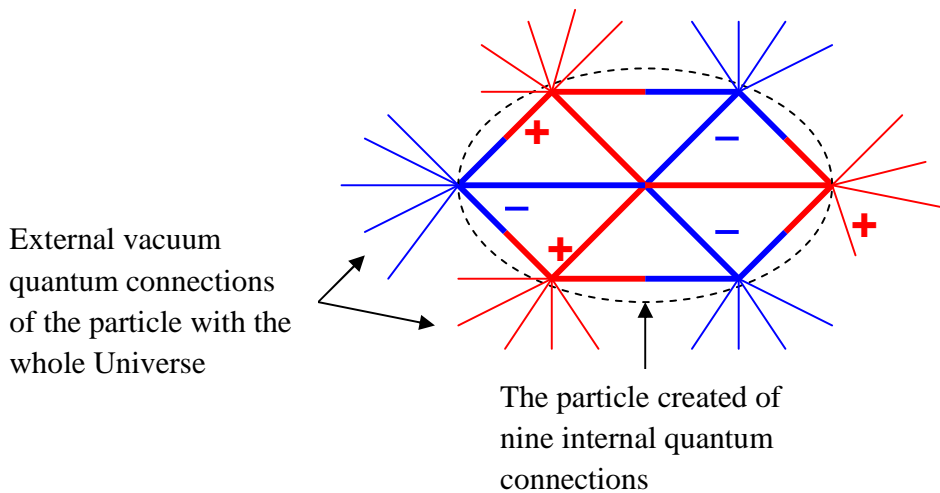


Every particle is completely defined by the number of positive and negative poles and the intensity (energy) of their connections. This intensity defines their length and form of their mutual motion. These intrinsic properties of particles are manifested outwards as charge, mass, spin, magnetic momentum and so on.

The quantum dipole is an elementary discrete quantum of matter as well as the connection of opposite poles. So it represents discontinuity as well as continuity of matter.

Bipolar quantum dipole being the basic structural unit of space-energy is at the same time the basic structural unit (bit) of information, so the Universe is not only the physical structure of its energy but, at the same time, the digital structure of its information created of two opposites. Its physical (energetic) aspect is a holder of its information contents. So energy of the Universe is the carrier of its information.

Scheme of a particle (neutron) compound of three '+' and three '-' poles with nine internal connections (quantum dipoles) and indication of external connections:



Vacuum

The length of quantum dipole is indirectly proportional to its energy, so the length d_{ij} of quantum dipole in conjunction with its energy e_{ij} gives the same value for every elementary quantum dipole ij :

$$\delta_k = e_{ij} \cdot d_{ij}, \quad \text{where} \quad E = \sum_{i=1}^k \sum_{j=1}^k e_{ij}$$

where: i – number of positive pole, j - number of negative pole

The constant value $\delta_k = e_{ij} \cdot d_{ij}$ represents **the universal law** giving the energetic and length (geometric) characteristics of the Universe into their mutual relation. From this simple basic relation Coulomb's and Newton's laws just directly follow as shown in detail in my monograph "God and the Universe" [1].

Apart from very short quantum connections (dipoles) responsible for material form of matter – particles like photons, electrons, protons and neutrons, as well as atoms, molecules, compounds, there are long and very long quantum connections interconnecting material objects and creating their interactions and vacuum. We distinguish the **vacuum in atoms, molecules and interstellar spaces**. So the vacuum is a link of particles in atoms as well as celestial bodies. The vacuum consists of external quantum connections that are much longer than inner connections in objects. It depends on the point of view which quantum connections (dipoles) are **external (vacuum)** and which ones are **internal (particles, bodies,...)**. In an atom, the internal quantum dipoles create the particles (proton, neutron and electron) and their mutual quantum connections create the **atomic vacuum**. In a molecule, the internal quantum dipoles create the atoms and the mutual quantum connections between atoms in a molecule create the **molecule vacuum**. The long quantum dipoles connecting celestial bodies create the **cosmic vacuum**. A considerable part of cosmic energy is concentrated in these vacuum connections (cosmic vacuum). It is the so-called "dark matter".

Contemporary physics does not know that the nature of the vacuum is the same as the essence of any other form of matter. The length of quantum dipole defines whether it is a part of a material form (particles, atoms, bodies) or a vacuum. Every elementary **quantum dipole** is a **holder of elementary quantum of space and information**.

The vacuum created by long quantum dipoles represents the external quantum field that can manifest itself in various forms. If it represents the connections between electrically charged particles, it creates the electrostatic field. If it connects material bodies, it represents the gravitational field. If it connects the particles in atomic nucleons, it represents the field of strong and weak interactions.

The Nature of Light

Light as a **quantum of radiation (photon)** represents the elementary particle consisting of bipolar connection of opposite poles "+" and "-", which thanks to their mutual attraction and repulsions perform a permanent **oscillation (vibration, pulsation)** manifesting outwards as an **electromagnetic wave** during a flight. This fact is a consistent and factual explanation of the **"wave-particle" duality** of light. The radiation, as a bipolar unity of anti-poles, manifests in a form of elementary particles (quanta, photons), but as a form of their mutual attraction and repulsion (oscillation) represents a wave of electromagnetic field. Only a bipolar dynamic unity of opposites can be the internal source of oscillation and energy of a photon. There is a cardinal difference between dialectical understanding of "wave-particle" duality and **Bohr's complementary principle**, accepting this duality as a strange property of Nature without its deeper understanding.

The photon is an oscillating elementary quantum dipole or a beam of pulsating quanta. It is not a point-like particle, but represents the elementary quantum of space, which, through its external relations, is connected with all other parts of the Universe (its positive pole “+” is connected with all negative ones “-“ of the Universe and its negative pole “-“ with all positive ones “+”). Photons do not move “in” a free space-like vacuum, but thanks to their external connections, they move “towards” all other parts of the Universe, which are also spatial holders (carriers). We do not need any **background** in order to allow particles to move in it. All elementary particles, interactions, force fields, as well as the vacuum are only certain structures of elementary bipolar quantum connections directly and mutually interconnected. As everything is connected with everything else, so every part moves towards all others thanks to their mutual connections. The vacuum consists of elementary quantum connections between particles. We need no background as necessary condition for the motion of objects and so it is incorrect to say that particles move in space. We can only say that they, as holders of space, move towards other spatial objects thanks to their mutual connections which are also spatial holders. The expression that something moves in space is only an approximation which is incorrect at the quantum level. This is the main reason for huge interpretational problems of quantum theory which does not know the real essence of quantum reality, as it accepts moving particles as points independent of space (vacuum). All interpretational problems of quantum physics are the consequence of trying to describe motions of elementary particles “in” space represented by a coordinate system.

Let us come back to light. Quanta of electromagnetic radiation – photons, in comparison with other elementary particles, have some specific properties. A photon is an elementary connection of opposite poles + and – (quantum dipole) with spatial characteristics – volume and length. Just the simplicity of a photon allows its perfect oscillation (vibration) in a plane perpendicular to the direction of its flight. As it is a free quantum, it cannot resist its dragging by expanding Universe in a direction perpendicular to its oscillation and so it has no rest mass and its speed expresses the **speed of cosmic expansion**. Such is the nature of the speed of light as one of the basic physical constants, unknown until now.

PHOTON = FREE OSCILLATING QUANTUM DIPOLE (+/-)

It is unbelievable how blind is contemporary fundamental theoretical physics that cannot detect the following simple facts and truth:

1. Photon as a quantum of free energy is a particle because it represents a unity of two opposites which mutual attraction and repulsion cause its oscillation manifesting outside as a wave. Wave-particle duality of a photon is not a consequence of complementarity principle, but the dialectical unity of opposites. We do not need unbelievably expensive colliders to understand the simple fact that the elementary structural unit of matter, space, energy is a bipolar relation of opposites – quantum dipole (+/-) and all forces (interactions) are nothing more than attraction and repulsion. It is evident that every wave, having sinusoidal interpretation, can only be the consequence of mutual dynamics of two opposite aspects of waving (oscillating) entity. For example, the harmonic oscillator manifests the mutual dynamics of its kinetic and potential energies. So we need no extreme energetic collisions to detect the unified interaction within GUTs theories, as this interaction is very simple – attraction and repulsion of opposites. All forces

(interactions) are nothing more than attraction and repulsion. We only need to find how these basic interactions can manifest in various forms.

2. All material objects represent bound forms of energy, so their basic constituents must be mutually bounded quanta of energy = photons = quantum dipoles (+/-). Elementary particles cannot be point-like units without any internal structure, as their different qualities (charge, spin, amount of mass and energy) can be only the consequence of their different structures of bipolar relations +/- .

Photon is an elementary unit of energy - space as well as information. Its informational aspect is given by its bipolarity and its relation to all other elementary quanta +/- of the Universe. It means that every photon (quantum dipole) is the way (relation) to the whole Universe, so every photon is the centre of the whole Universe. All existing photons represent the same Photon manifesting itself through many photons. The only **one central Photon (God)** has two faces – internal (subjective) as a unity of everything and external (objective) as its structure (network) consisting of all mutually interconnected photons (quantum dipoles +/-). One Photon represents the centre of the differentiated reality having its physical (space, energy, time) aspects as well as information contents and manifestation.

To be in Light means to be in the centre of the Universe. Let us look at this moment from the physical viewpoint.

The **expanding Universe** is an **increasing network of elementary quantum connections (dipoles)**. If we select a certain part (system) of the cosmic network, we must remember its universal connection with the whole Universe. Every system is in relation to, and interacts with all others. This is the true nature of relativity. Einstein's idealization of uniform motion of reference frames in his special relativity theory (SRT) does not correspond with reality. He did not take into account interaction of moving system with its real surroundings, the vacuum. He did not assume the vacuum to be a physical reality and supposed space to be empty.

Every **moving body drags its own "vacuum"** created by its elementary external connections with the whole Universe. The intensity of **mutual pressure (local interaction)** between the moving body and its surroundings increases during its acceleration. This intensity also depends on conditions in which the body is placed. In places with higher local pressure of vacuum connections, the interaction of a body with the vacuum is more intense. Near massive celestial bodies, the vacuum pressure is high and decreasing with a distance. The higher the **gravitational potential**, the greater is the local **pressure of the vacuum**. The intensity of local pressure of moving body with the vacuum depends on the speed of the body as well as gravitational potential of the vacuum. **Time dilation (deceleration of processes)** can only be the consequence of increasing intensity of mutual local pressure of moving objects with the **physical vacuum**. As uniformly moving objects can be in different relations to the vacuum, so time (speed of processes) decelerates in objects with more intensive local interaction (pressure) with a vacuum comparing to the others. Also bodies in places with different gravitational potentials have a different interaction with their surrounding space (vacuum). The higher is the velocity (or the greater the gravitational potential), the greater is the interaction with surroundings and the slower are the processes (time dilation). Time dilation (deceleration) really exists but not as a

consequence of SRT. Other effects of SRT like length contraction and relativity of simultaneity do not exist in reality and have never been verified experimentally.

The cosmic vacuum is created of long quantum dipoles connecting mutually all celestial bodies. If we want to observe the mutual motion of bodies, it is important to choose a reference frame. As it is complicated to define the immediate speed of motion towards some universal frame, usually the dominant body (system) in the given environment is chosen as a basis, because its external quantum connections with the whole universe significantly form its surroundings. For example, Earth, Sun or centre of Galaxy are dominant in their respective surroundings. The erroneous and non-physical is Einstein's declaration that all uniformly moving systems are mutually equivalent and none of them can be privileged. The ideal privileged reference frame is the vacuum with zero gravitational potential. Measured time dilation is just the consequence of mutual asymmetry caused by different speeds of moving bodies towards common surroundings (vacuum). Two bodies moving uniformly are asymmetrical if one had prior acceleration. They have a different intensity in local pressures with the vacuum, and their internal processes (times) have different speeds.

Experiments verified that objects (bodies, particles), accelerated to the speed v with respect to objects at rest, slow their internal processes (time dilation), according to Lorentz's relation:

$$\Delta t' = \Delta t (1 - v^2/c^2)^{1/2}, \quad \text{where:}$$

Δt – time interval elapsed in the system S at rest,

$\Delta t'$ - corresponding time interval elapsed in the system S' having the velocity v

The objects S and S' are in **asymmetrical position** with respect to the surrounding vacuum. From the viewpoint of the system S at rest all processes (time) slow in the moving system S', what means that from the viewpoint of the moving system S' all processes (time) accelerate in the system S at rest. Achieving the speed of light, system S' disintegrates into the light and becomes light, then all processes in the light system S' stop and $\Delta t'=0$, what means that for the light system S' the **speeds** of all processes in the rest Universe are **infinite**, so the whole history of the Universe is just present. The whole Universe with all its possible histories (all its eternity) is just present (now and here) from the viewpoint of Light. In Light, only the eternal "now" and omnipresent "here" exist. To be in Light means to be outside time and space. Everything is just now and here. The **Light (God)** as the centre of being so represents the basic universal reference frame. To be in Light (subject) means to be everywhere and in every time, but to be made of light (object) means to be in space and time. To be in Light means to be in God, in its internal (subjective) side representing the self-conscious individual, as well as universal, person. The external side of Light, with its dynamic structure, represents the created Universe - object.

We can support this clear subject-object relation also from the viewpoint of dialectical logic. We have found bipolarity to be the basic structural unit of space, energy and information, where "something (+)" can be determined and defined only by its contradiction "something else (-)". Both contradictions represent only repeating internal differentiation, only simple negation, without returning to itself by negation of negation. Only by **negation of negation** "something" can create the relation itself to itself (infinity) through **overcoming its own contradictions**.

Something, by negation of negation, creates again and again its simple relation to itself through its opposite. So being in itself represents the infinity (**subject – personal GOD**), while being in other means being in space and time – physical and information Universe, which is the other side of a subject – God. God refers to its “being in other” (physical Universe) which is contained in Him and simultaneously differentiated from Him. Through negation of negation God performs His **self-reflection - “being for itself”**. God is the absolute Spirit = **self-conscious “I AM” and “I WILL”**. He represents the highest level of self-reflection, the consciousness of Himself in his created World (Universe) and, at the same time, the consciousness of His world in Him. So God performs his self-consciousness, self-knowing, through its own limit – physical Nature (other of something). As self-consciousness, God is a person (subject).

The relation between Spirit (God - subject) and physical Nature (object) is at the same time, the relation between inside and outside (limit of inside). “Something” can obtain its determination (quality = information contents) only through its limit. The dialectical law of negation of negation, at the level of the whole Being, is a manifestation of dialectical relation “subject-object” as the relation of universal Ego (Self) to itself through its contradiction – non-Ego, where the self-conscious activity (process) comes from Ego (Self). Being, as a whole, represents the universal self-consciousness of God. All existence is in God - Light, including the object (physical Nature). Nature represents the border-mirror through which God performs His self-reflection.

So, the Universe is a limit of “something = God” thanks to which it curves and encloses remaining without any own limit. The fourth dimension is a necessary condition for curving and closing the Universe.

The Universe is a pulsating, expanding and contracting finitude without any limit.

The Universe is “one-whole” which anticipates “many – parts” included in “one-whole”. The expanding Universe as a whole in its parts, as a “one” in its “many”, expels thanks to repulsion a new “one-part” from itself. This “one” as a quantum dipole (+/-) is bipolar. The repulsion means that one new negative pole “-“ is expelled from all positive poles “+“ of existing parts (quantum dipoles) and consequently, new positive pole “+” is expelled from all existing negative ones “-“. Expelling one new pair “+/-“, means at the same time the creation of many elementary connections of this new pair with all existing elementary quantum connections (dipoles) of the Universe. So, the Universe is an expanding network of quantum dipoles (connections). During cosmic expansion, the repulsive force is in its active stage, and the attractive force, as a reaction to repulsive one, is in a passive stage and manifests itself as a global cosmic gravity. Both these forces are equal but with mutually opposite orientation. When the repulsive force will exhaust itself in its active stage, the stage of cosmic expansion ends, and the attractive force starts cosmic contraction. Then the repulsive force passes to its passive stage, and as a reaction to an attractive force (being now in its active stage), manifests itself as a global cosmic antigravity. During cosmic contraction, the Universe gradually incorporates its quantum dipoles into itself, until it becomes only a sole quantum dipole and starts again another stage of cosmic expansion.

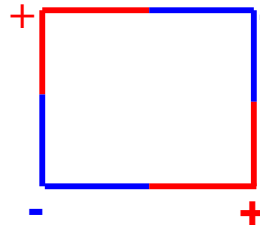
As a sole quantum dipole (+/-), the Universe is in its initial quantum state. Cosmic transition to the second state is accompanied by expelling and creation of a new pair “+/-” in such a way, that

every “+” is connected with all “-“. So, in the second quantum state, we have four quantum connections (+/-).

1. The first quantum state of the Universe:



2. The second quantum state of the Universe:



Expelling a new pair (+/-) represents the transition of the Universe from one quantum state to the following. In reality, the Universe expels firstly one pole and then the other opposite one. The Universe alternates its symmetric states, when the number of positive and negative poles is equal, with its asymmetric states, when the number of poles of given polarity is greater than the number of opposite ones. This asymmetry in the first stages of cosmic expansion could be the reason of prevalence of matter over antimatter.

The Universe in its symmetric quantum state k consists of k positive and k negative anti-poles with k^2 connections – elementary quantum dipoles.

The space is created of elementary quantum connections – dipoles, so their number defines the volume of space.

The dynamic network of quantum dipoles represents the unitary field, which can be easily described by the matrix in which the lines represent the positive poles, and the columns – the negative ones. Points of intersections represent the elementary quantum dipoles as connections of anti-poles. Cosmic quantum transition (jump) from one symmetric quantum state to the next, during cosmic expansion, can be described by addition of a new line and column. New points of intersections represent the new quantum dipoles (connections) which are created during elementary quantum cosmic transition (jump).

The table of increasing cosmic network of quantum dipoles

Quantum state		1	2		k-1	k	k+1		n
	Poles	-	-	-	-	-	-
1	+						+/-		
2	+						+/-		
							+/-		
k-1	+						+/-		
k	+						+/-		
k+1	+	+/-	+/-	+/-	+/-	+/-	+/-		
n	+								

The cosmic transition between two symmetric quantum states k and $k+1$ is accompanied by creation of a new pair (+/-), marked with a red colour, together with creation of new quantum dipoles in a new line and column belonging to the symmetric quantum state $k+1$. We can see that during the transition from the state k to $k+1$, the new $2k+1$ quantum dipoles appear. Symmetric quantum state k is represented by k^2 quantum dipoles (+/-).

The elementary quantum connection (dipole) represents the elementary quantum of space, its volume etalon. Quantum transition from one quantum state to the next represents the elementary quantum of time – time etalon. One quantum transition (jump) of the Universe is the smallest possible cosmic change – motion, which the elementary quantum of time is connected with. Time of cosmic expansion is given by the number of quantum jumps k and the volume of space is defined by the number of elementary quantum dipoles, so the following relation is valid:

$$V_k = k^2, \quad k = 1, 2, \dots, n$$

This relation represents the **basic quantum space-time equation of the Universe**.

The basic quantum equation of the Universe $V_k = k^2$ represents the basic rule for space-time quantization and at the same time the dialectical unity of space and time. Parameter k varies from 1 to n (expansion) and backwards from n to 1 (contraction). Parameter of the number of elementary quantum connections V_k consequently varies from 1 to n^2 and backwards. Parameter n cannot be infinite, so neither V_k can.

This basic equation of cosmic dynamics is analysed in detail in my paper [2] with all its consequent mathematical formalisations and important physical consequences.

The basic quantum equation of the Universe $V_k = k^2$ represents at the same time the increasing information structure in which the creative divine Mind imprints its Idea – Word – Intelligence. Consciousness is always a process of creation of its own world through its creative imagination and active will. Imagination (Idea) as a basic divine attribute finds its manifestation (incarnation)

in the dynamic structure of the Universe. Creative consciousness of God unceasingly creates its own world and consequently reflects it to Himself by His perception and interprets it by His imagination. This eternal communication of Him with Himself is the informational process at the highest level of divine game, which, of course, finds its manifestation at many hierarchical levels of energy-information reality with many active conscious players.

The basic manifestation of information is the reflection of something in something else – what means **communication**. This communication has its **sense** in evolutionary processes at all levels of reality leading to increase of **complexity** and **organization** of evolving entities. The highest level represents the Universe as a whole with its evolutionary process of increasing complexity, structural differentiation and interconnection being the physical as well as information body of God. The Universe is a living energy-information organism of highest complexity. Physics deals only with physical (energy, spatial, material) aspects of reality not knowing its information essence, which is much more important. Physics cannot see this **informational aspect as a manifestation of a divine Mind (Imagination)**, so it denies it. But the physical Universe (object) is united in God – subject, where the whole unbelievably rich complexity of the Universe is just present. In Light (its internal subjective side of reality) the whole differentiated and interconnected reality of the physical Universe-Nature (external side of reality) is united. Energy as such is only a blind vibration - motion if we do not accept its true sense to be a carrier (supporter) of information. Only through energy God can manifest His active creative Will by creation of His own world (physical and information body). Light quanta are ideal energy carriers of information. Energy of the Universe is energy of divine Consciousness and Body (Soul). Its quantity, as the basic quantitative characteristic of God, is constant. To say that God creates energy is nonsense. Energy is an eternal attribute of GOD so it cannot be created. God is the Light of this World. God is just the Light (energy) of which everything is made. Spiritual does not mean non-energetic, it only means to be self-conscious, self-aware “I am” and “I will”. Spiritual is at the same time energetic (physical).

The Universe as a whole is a **dynamic cybernetic evolving living system**, where every consequent elementary quantum step (jump) is under the direct control of a divine Idea (intention-goal-imagination) defining what possible choices are to be performed among enormous number of possibilities. Intentions and decisions of God, by managing the evolution of the Universe, manifest His free WILL. Of course, His free WILL is limited by the actual state of the Universe and possibilities existing at every step of cosmic dynamics. Manifestation of divine free Will means that there are huge numbers of possibilities for a free choice at every step of cosmic evolution. Divine free WILL does not mean that GOD can do impossible things. He can do only what is possible. Our human free will can also do only what is possible. The evolving Universe looks like a big computer (hardware) constantly computing its future states from its current state according to its own computing program (software) reflecting divine goals to which the cybernetic process is directed.

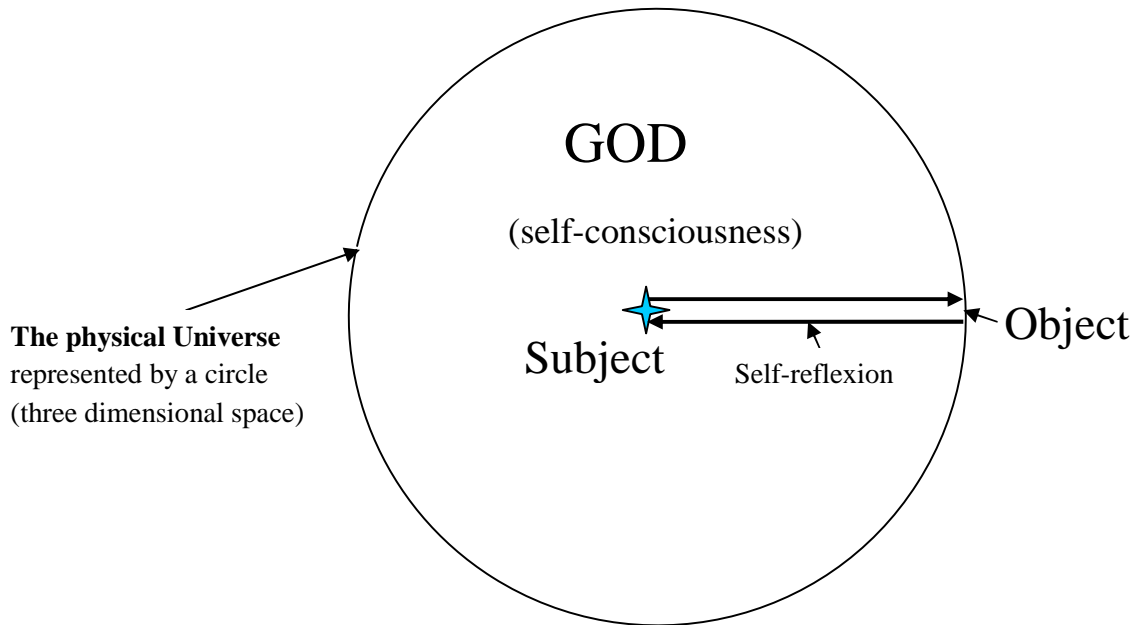
Evolution is not blind but oriented to the highest level of power, freedom and consciousness. It represents a process of solution of the following basic dialectic contradictions in God: *powerless-power, necessity – freedom, random – regularity, matter – spirit, consciousness-unconsciousness, Ego – non Ego*. Evolution has its clear divine goal: **freedom, power, self-conscious “I AM”**. Freedom of spirit represents the true power.

We can make analogy between the role of information in the cosmic evolutionary process and digital information on DVD, which enables the development of multi-variant computer game in time. The full information about the computer game is contained in the program on DVD, the information for the whole cosmic evolution is in a divine Mind (Idea, Intelligence), the information for evolution of life on Earth is in DNA reflecting the information structure of the Universe, etc. This game can be developed to many different variants in time (computer game) or to unbelievably rich and branched processes in space and time (divine game). All possible variants of divine game known as evolution are just present in a divine Mind in a form of a pure Idea (Intelligence) which is gradually incarnated into the information structure of the Universe at all its levels (including DNA on Earth) which is the source of creative evolution with the clear beginning and finish of this never-ending process. The computer game contains the whole information on one level, but divine information is spreading into many subjects and objects being at many levels of Creation (Universe). The whole process of computer game flows through visual manifestation of information structures, programs, blocks and instructions being only objects of the game, while the uncountable number of subjects and objects at many hierarchical levels of reality are involved in the process of divine evolutionary creation. All subjects, including us, are intelligent and active players of this divine game.

The self-consciousness of God contains His whole created world in Himself being at the same time differentiated in two opposites – subject and object, where subject represents the centre of the world through which God reflects Him to Himself. GOD as a subject-object relation is unlimited, where subject has its limit in His world (object), which is again unlimited. The physical Universe is a source of His energy as well as a holder of His divine creative Information. The relation between God and His physical Universe can be imagined in the figure below.

God according to the above image represents the four dimensional reality limited by three-dimensional space, which is closed, having no limit. The physical Universe, being a limit of God, is unlimited. Of course, God as a quality, as a self-reflection, is unlimited as He never and nowhere begins and finishes having His limit in his unlimited created World. God, in the centre of His world, represents the apex of self-conscious “I AM”.

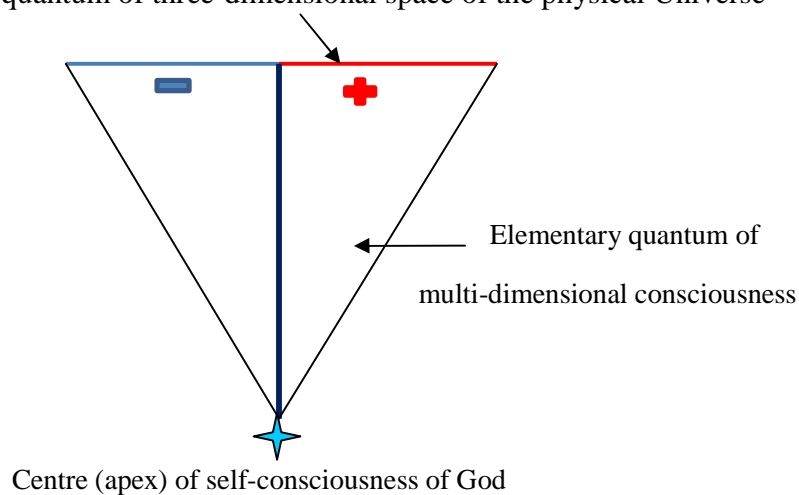
I am aware of myself because I reflect myself into my conscious world as well as this world is reflected into me, so I reflect myself into me through my conscious world. My consciousness creates my world according to my creative imagination and active will, which at the same time creates me and I am aware of it. I am in my consciousness which is in me. I am always in the world of my consciousness (subjectivity), I cannot get out. I am always here and now, in my consciousness. So the real world is only the world of my consciousness with its imaginations, inspirations, feelings, emotions, knowledge, concepts, desires and goals. The outside objective world is reflected in me. It represents the other side of me and I can “see” it only through the form created by my consciousness.



The physical Universe consists of elementary quantum dipoles +/- representing the elementary quanta of energy and space. Three-dimensional spatial quanta are limits of higher multidimensional reality. As consciousness is in the centre of the whole world, so it is in the centre of all its elementary parts (quantum dipoles). These quantum dipoles, being mutually interconnected, overreach their three-dimensional spatial reality into higher dimensions.

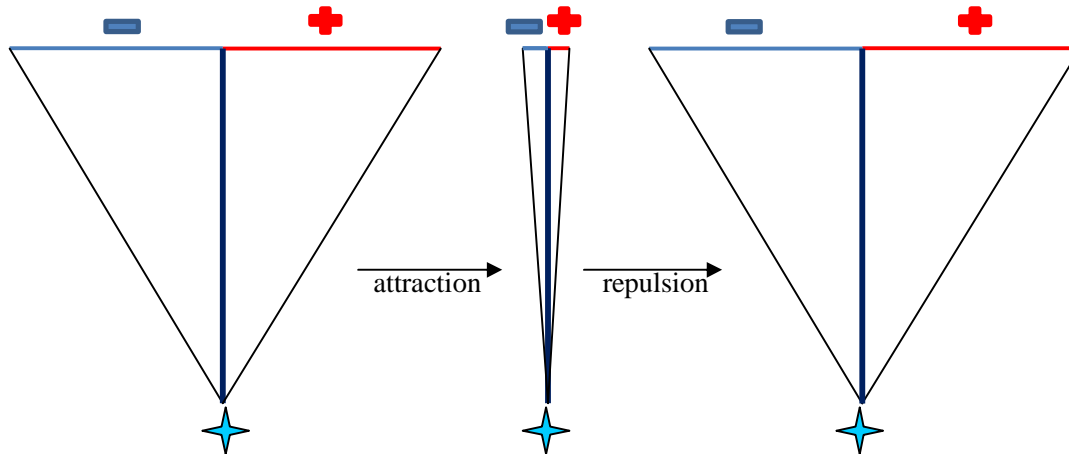
The image of a quantum dipole overreaching its three dimensional limitation is as follows:

Elementary quantum of three-dimensional space of the physical Universe



The connection of the centre of consciousness with an elementary quantum dipole creates the elementary quantum of consciousness. Although the physical Universe is defined by its bipolarity creating three-dimensional space, the whole being overreaches this bipolarity to three-

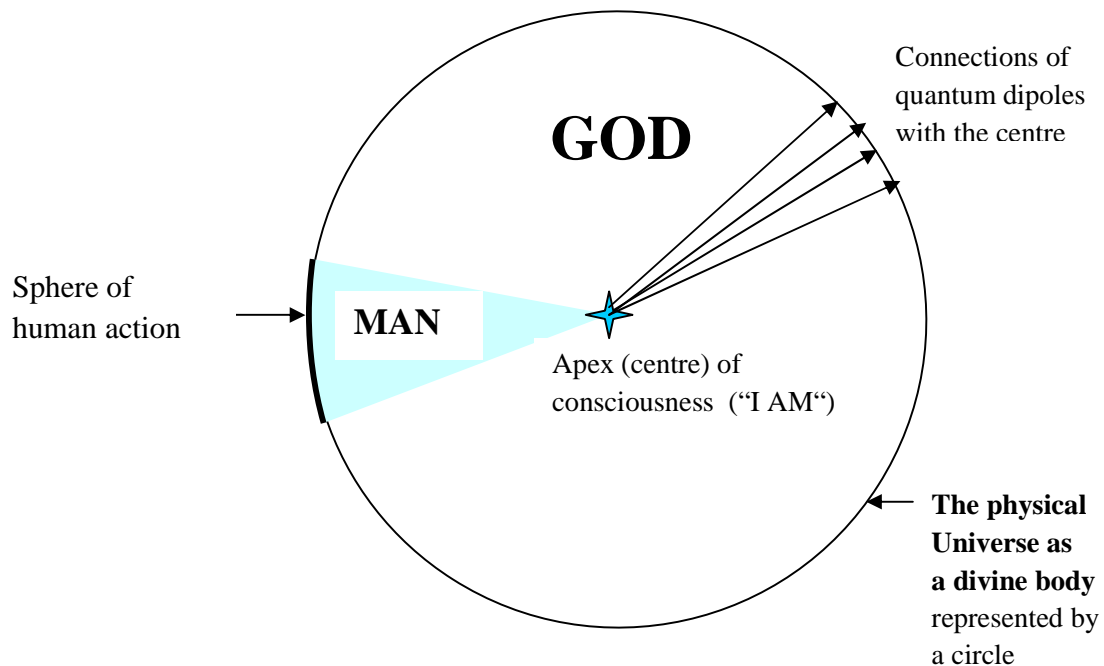
polarity of multidimensional consciousness of God. The whole multidimensional conscious world is limited by bipolar relations of opposites creating its physical (energy) and information structures which represent the external aspects of three-polar relations creating the divine consciousness as a “subject-object” relation. The relation “subject-object” is also energetic as energy (motion) is necessary for self-reflection and consequent physical manifestation of conscious creativity. Attraction and repulsion of opposites, being the source of energy (motion), have their multidimensional manifestation representing the three-polar multidimensional motion of quantum of consciousness:



We can see that the motion of a quantum dipole, in our case it is its oscillation - attraction and repulsion, is reflected in a multidimensional reality of consciousness. It looks like consciousness has no power over the physical reality and only passively reflects its motion (energy) in itself. But it is not true. Consciousness uses this energy (motion) for its own management according to its creative imagination and active will. Every three-dimensional spatial quantum dipole is only an outside limit of multidimensional quantum of consciousness, so the evolution of the physical Universe is under the management of the divine Idea and intentions of God.

Although the appearance of our solar system with Earth and life looks like a result of totally blind and accidental cosmic evolution, it represents indeed, the implementation of imaginative intentions of God managing the cosmic evolution by using all its dialectical laws.

God acts through the whole Universe, which creates His body (soul), while Man acts through his limited multilevel physical body (soul), by which the universal self-consciousness of God is individualized into the individual self-consciousness of Man. So God operates through Man in his individualised form. But the centre of self-consciousness of God as well as Man is the same. Although the divine self-consciousness is universal, it is at the same time individual as God is a subject – individual person. Man is also a self-conscious “I am”, so he has his centre in a divine Holy Spirit = “I AM”. The answer to the question where is the centre of the Universe is very simple. It is in our spirit (our Self).



God is not outside His physical Universe, but inside the multidimensional sphere of His consciousness, which is connected with all elementary quanta of the physical Universe as limits of divine consciousness. We cannot say that God is only spiritual, not physical, as His body-soul (created world) is physical (energetic) and informative. Multi-dimensional reality of consciousness can manifest itself only through energy (motion). So every consciousness has its physical manifestation. The spiritual (conscious) being cannot be separated from its physical (energetic) body and manifestation. Spiritual as well as non-spiritual but conscious subjects (living forms) have their physical manifestations at certain levels of hierarchy of being. Although the physical Universe has not its own centre in three-dimensional space, its true centre is outside, located in its spiritual (internal subjective) multidimensional conscious sphere. The spiritual self-conscious "I AM" is the centre of being. So the name of God is "I AM". Every man is also a self-conscious "I am" so he represents the centre of the world. I am in the centre of the world (Universe). My body (soul) is made of light (energy), exactly of bipolar quantum dipoles +/-, but my consciousness is just the Light in me and me in Light.

God operates through the physical Universe at its various levels made of different energetic and information substructures. Physical reality reachable for our contemporary senses is represented by short and energetic quantum dipoles. Corporal death of our biophysical body does not mean the death of our individual self-consciousness. The physical sphere however, through which it operates, changes into the level of much weaker and longer quantum dipoles unreachable now for our contemporary bodily senses. So there are many **levels of physical reality** of which our bodies (souls) are made - **biophysical, ethereal, astral, mental and spiritual**. They define the sphere of physical reality through which we just directly operate. The physical Universe, as well as our body-soul, is hierarchic. The Heaven is not unphysical, but represents the reality located at

higher levels of hierarchy of the physical Universe created of much weaker and so gentle quantum connections now unreachable for our corporal senses and measuring devices. We already know that very weak and long vacuum quantum dipoles connect visible material objects mutually. But there are also weak and long quantum connections (dipoles) creating the gentle hierarchical worlds (including our bodies) of the Heaven. All our hierarchical bodies represent our **souls** through which the universal consciousness (Spirit) of God is individualised in many individual souls.

Information holds the contents of reality reflected in my consciousness. Information **transforms the contents** of objective reality into the subjective world of my consciousness. Information means always communication (reflection) between two aspects of reality, mainly between subject as reflecting side and object as reflected one, where subject scans, perceives and interprets the reflected objective word, according to its conscious imaginative and cognitive abilities and capacity in order to manage its own behaviour (response) according to its own interests (purposes). Information has no sense without a conscious life. Information is a basic **building and organizing principle of evolution of living organisms (forms)**. Evolution is the information process, where organisms are evolving according to coded information (mainly in a form of double helix DNA), which organizes and manages the whole evolution as well as growth of every individual organism. Evolution is at the same time the process of transformation and increase of complexity and richness of coded information which reflects the ideal forms existing in a divine Mind and projected into the information structure (system) of the whole Universe.

Evolution is a process managed through **information which is gradually scanned from the information structure of the Universe being the representative of divine Idea-Imagination-Intelligence**. This information is gradually transformed to the coding system of DNA creating so unbelievably rich tree of living forms. Of course, this process is managed through genetic mutations which variations are the source for enormous diversity of living organisms. So the process of mutations and selections is not blind but organised according to already existing and gradually evolving information coded in the quantum information structure (system) of the whole Universe. Information is a holder of **creative power**. This basic characteristic of information has not been fully understood until now. The creative power of information can only be the consequence of creative power of consciousness that produces this information. So the creative power of information coded in DNA is just the consequence of creative power of a divine Mind. The richness of life with almost infinite number of beautiful living forms on Earth is just a clear manifestation of unbelievably high creative Intelligence of Nature. Using all our scientific knowledge we are able to understand only a negligible part of living Intelligence of Nature, but we are so “proud” of our own intelligence and scientific knowledge, that we refuse to accept that the high Intelligence of Nature is just a direct consequence (manifestation) of the highest Intelligence of personal God representing the whole reality.

The whole Universe represents the quantum information structure (network) creating the living body-soul of God. Our human physical bodies-souls are just images (individual projections) of this whole universal information structure. God reflects Himself through all hierarchical levels of the Universe and create its own image in various possible versions at various levels of reality. The universal divine information structure (the whole system) transfers (projects) itself to all levels of quantum reality (partial subsystems) creating so many different worlds at various levels.

God transform Himself (as a whole reality) to many partial realities - subjects and objects at many hierarchical levels (worlds and living organisms) created of quantum networks of different intensity and complexity, so the following basic levels can be selected:

- universal spiritual level (range of the whole being)
- mental
- astral
- ethereal
- biophysical

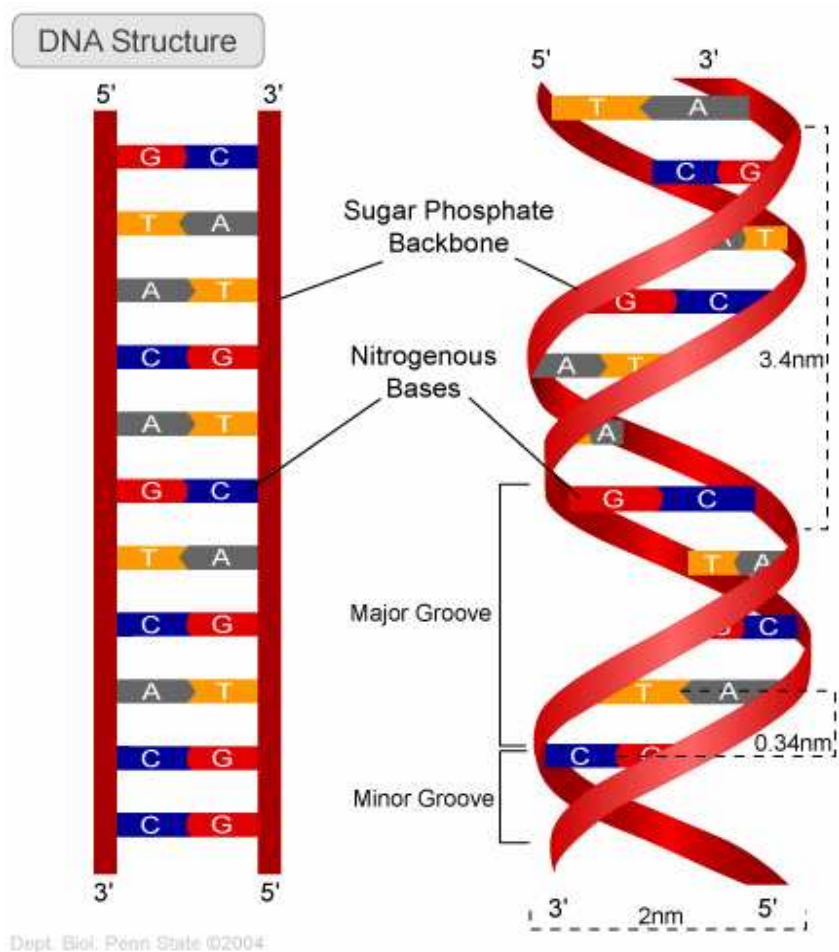
Of course, all these levels are energetic, made of networks of elementary quantum connections (dipoles) of different intensity but mutually interconnected. Human consciousness operates through all these levels, but now it looks that it acts only through the biophysical reality achievable for our five corporal senses. The corporal death means only that human consciousness finishes its acting through five biophysical corporal senses and starts to operate through astral as well as mental and spiritual senses according to achieved level of self-conscious evolution. The level of our individual conscious evolution predetermines the spheres through which we will operate after our corporal death. As the consciousness (spirit with its soul) creates its own world, so our future destiny is predetermined by our present level. Heaven or hell are in our souls and are products of our imagination. After corporal death people reach the level corresponding to their contemporary states of soul and meet people of the same level. If their souls are egoistic and evil, creating the hell, they meet people, which also create the hells by their souls and active spiritual intentions, so they live in the world (hell) which is just the product of their creative spiritual souls.

Of course, everybody can change his own destiny by his spiritual effort, so hells exist only until people create them. At more gentle levels of quantum reality (astral, mental and spiritual) the creative imaginations and intentions of consciousness directly create and change the surrounding reality. At contemporary level of biophysical reality the implementation of creative imagination is much more complicated and is mediated by physical means used in the creative process. Music represents the most immediate art where the musical imagination can be manifested directly by singing (using a voice) or playing (using musical instruments). Some people dispose of ability of **direct conscious (mental) action** at objects (**psycho-kinesis**) or people (**telepathy**) through direct quantum connections (as everything is connected with everything). There are also other paranormal phenomena confirming the direct action of consciousness at the physical reality.

This direct conscious impact on physical quantum realities by direct non-local quantum connections is natural at more gentle levels of reality (astral, mental and spiritual).

The Universe is a dynamic holistic projection of a divine Mind, so it is a **dynamic hologram**. As everything is connected with everything, so every relatively complex and separate system (structure) of reality reflects and represents the whole reality on its own level – this is the principle of hologram. The Universe in its both sides (subjective and objective) represents the

hologram, as every individual subject is a manifestation (part, projection) of a universal divine subject (God), as well as every separate quantum reality (subsystem) is a manifestation of the whole physical and information reality of the Universe. For example, the information coded in DNA reflects the whole universal information at its own level of complexity. This information coded in DNA creates the whole holographic image of a living organism that should be evolved. DNA manages through its instructions the building of biophysical body, which form is given in a quantum holographic image existing at various hierarchical levels of quantum reality (e.g. ethereal, astral and mental). Human body coded in DNA has its various representations at all hierarchical levels of physical reality in a form of multilevel human soul through which the universal divine Spirit is individualised in a concrete Man. The evolution can be imagined as a climbing through the **dialectic helix step ladder**. It is remarkable that DNA coding the evolutionary process is just the double-helix structure – step ladder.



Deoxyribonucleic acid DNA as a holder of genetic information (genome) is placed in chromosomes in a form of double-helix consisting of nucleotides, which, except of phosphate residual of phosphoric acid and deoxyribose molecules, contain four nitrogenous bases – adenine (A), guanine (G), cytosine (C) and thymine (T), connecting both fibres of double-helix DNA by hydrogen bonds, where adenine is connected with thymine by two hydrogen bonds and guanine

with cytosine by three ones. DNA can replicate itself by transferring information about the order of amino-acids in proteins in order to create them. Genetic information is coded by triplet genetic code which is common for all living organisms. It is evident that all living forms are descents of the unique initial one, from which the evolution has created an immense rich and branched arbour vitae by the process of divergence and branching.

Spirit cannot act without energy. At the level of three-dimensional space it looks like energy acts blindly and independently as it undergoes its law of attraction and repulsion of opposites. But this seemingly blind power is under the management of the universal consciousness of God. At the level of the physical reality reachable for our senses, God looks powerless, because His centre is rather distant. Really, during cosmic expansion the centre of God becomes more and more distant from its three-dimensional physical Universe, and His direct creative power action is limited to the level of very long and weak quantum dipoles (gentle worlds). As God in contemporary state of the Universe manages the physical world through His long and weak quantum dipoles (connections), His influence is very gentle, subtle and hardly detectable. His strong acting is possible only through subjects (Man, animals, plants) which, thanks to their multilevel physical bodies, are very close to the physical reality at various hierarchical levels. Man is just the individualised divine Spirit, which can act directly through all hierarchical levels of physical reality. So Man is very worth for God as he enables Him to experience the feelings, emotions and imaginations which are beyond His possibility of perception at the level of universal self-consciousness.

But the situation was quite different at the beginning of cosmic expansion when the physical Universe consisted of one or small number of quantum dipoles. Then the centre of God as a subject was very close to His physical Universe so that God could directly and strongly manage the first phases of cosmic evolution. In these first steps God imprinted His image and intentions into the following process of cosmic evolution defining its future evolving face (shape) with the basic mass particles (protons, electrons and neutrons) and the number of elementary quantum jumps through which the Universe will perform its phase of cosmic expansion. God unceasingly plays His game with Himself through His physical world, but now the physical reality, observable for our senses and devices, looks like independent of God. But this world, at the beginning of its cosmic expansions, was programmed in the way allowing the future appearing and gradual evolution of living forms at various levels of physical reality including the reality of our Earth, where the Spirit could descent from His spiritual Heaven to our Earth in a form of Man, which physical body is a product of a divine creative evolution. So Man with his physical body (soul) is the starting point (Idea) and final result of creative evolution of life on Earth. Man as a spirit ("I am") is eternal and unlimited, being an inseparable part of divine universal "I AM". Although our existence as Spirit is unlimited and eternal, our acting at this level of physical reality on Earth is temporary and limited by our contemporary physical body. God, through us, differs Himself into many spiritual subjects, but all we really create the only One Spirit. Our separation is only an illusion created by space and time. So the same Spirit is living through us (our bodies) in many places and times, we feel and realize our individualities, which are only various manifestations of the same divine Individuality and Oneness (our mutual Love). Our destiny is to come to the total unity with God when all we become just the same self-conscious One (God).

Let us look again at the table of increasing network of elementary quantum connections during cosmic expansion. All new created quantum dipoles (+/-) are weaker and longer than existing ones, so they can be under the direct control of divine creative activity. The whole evolution of the physical Universe is under the direct management of God. The newest quantum dipoles, being longest end weakest at the same time, represent the threads through which God manipulates and manages the whole evolution of the expanding Universe. As His action is now, in contemporary phase of cosmic expansion, very gentle, it looks like it does not exist. God can come close and directly act to short and energetic quantum dipoles by approaching to them through living subjects which bodies are built of these short and strong quantum dipoles. So Man is God's messenger in this sphere of biophysical reality.

The table of increasing cosmic network indicates the existence of exact dynamic model with a precise description of all quantum dipoles by their characteristics (energy, force, length, etc...) in a form of dynamic evolving matrix of quantum connections. But such a model is even more complex and complicated than the whole physical Universe. It represents some specific dynamic and ideal super Universe as an exact ideal image. Such model is possible only in a divine mind (Idea) through which the evolution of the physical Universe is managed. Every consecutive cosmic quantum jump is managed according to reflection of the actual state of the Universe in a divine Mind and its intention defining the nearest steps of cosmic evolution performed by creation of new quantum connections +/- . So the evolution of the whole Universe is under the direct management of divine Idea (intention) through new very weak and long quantum dipoles.

If input the energy content (or length) of every quantum dipole into the matrix of increasing network of quantum connections during the whole cosmic expansion, we have the exact description of the physical Universe at all its quantum states from the initial quantum state $k=1$ to its final quantum state $k=n$. The whole matrix e_{ijk} represents energy of every quantum dipole ij at every quantum state k of cosmic expansion, where i - number of positive pole, j - number of negative pole. The numbers of poles are given by quantum states when they were created (expelled), $e_{ijk} = 0$, if a quantum dipole ij still does not exist at the quantum state k of cosmic expansion.

Knowing all e_{ijk} at the beginning of cosmic expansion means that the destiny of the whole evolution of the physical Universe is predetermined in a divine Mind. But such a simple model only expresses the evolving energetic and structural characteristics of the physical reality saying nothing about its unbelievably rich and multilevel evolving information contents reachable only for consciousness.

Knowing the full destiny of the whole evolution of the physical Universe looks like there is no place for a free will of all spiritual subjects, what is in a direct contradiction with the creativity and a free will of consciousness, which, at every moment, again and again creates its own world. The enormous number of possibilities for conscious decisions and manifestations at every stage creates the unbelievably reach field for a free will of consciousness to manifest itself. Every self-conscious subject has a free will for his decisions what reality he will reflect and create in his imaginations and how he will interact with his physical world and society. So every new step of cosmic evolution is defined by its contemporary state as well as physical laws (limitations) that

must be fulfilled (e.g. law of energy conservation). But every actual state gives at the same time a huge amount of possibilities to every conscious subject for its active interactions with a physical reality.

As self-conscious subjects, including GOD, have a free will for their creative interactions with a physical Universe, so the future of the physical Universe can be predetermined only in its basic features following from the contemporary state and all necessary physical and dialectic laws (limitation). Although dialectic laws (necessity) must be fulfilled, they create, at the same time, an enormous number of possibilities for free choices of consciousness at every stage of cosmic evolution, so the following dialectic relations are manifested: *whole-part, subject-object, one-many, quantity-quality, possibility-reality, accident-regularity, consciousness-being, spirit-matter, necessity-freedom, law-accident, random-regularity, essence-phenomenon, content-form, negation of negation, relation of opposites, continuity-discontinuity*, etc. The future is predetermined only in its basic necessary features retaining almost infinite number of possibilities for a free choice – freedom. The more possibilities mean the more freedom.

According to our analysis the expanding Universe represents the evolving information structure, which thanks to its increasing internal structuration enriches gradually its information contents what is in direct contradiction with contemporary cosmology according to which the entropy (messiness) of the Universe increases. But the entropy increase law is not a universal law of motion of matter and cannot be applied for the whole dynamics of the Universe, which is dialectical and not mechanistic. The entropy increase law could have determining influence on a cosmic fate only if there were merely local actions between parts of the Universe. As the formal mechanistic approach to investigation of objects and their relations prevails, the false impression about the determining role of entropy increase law in behaviour of the whole physical reality occurs. Local touch relationships between objects do not represent the whole material reality of the Universe but only its selected mechanistic aspect where the entropy increase law is valid only for local closed systems with mechanical motion of its particles (molecules) leading to the equilibrium of their external mutual motions (pressures). But the dialectic quantum Universe represents the unity of mutually interconnected parts (quantum network of elementary dipoles +/-) creating its gradually enriching information contents.

Consciousness

Our souls through sense perceptions form their relations to the objective world. They create the subjective qualities of the objective world which does not contain them. They are only products of sensual consciousness. For example, the whiteness and sweetness of sugar are not its immanent properties. The sugar receives these qualities only in relation to the sense perception of consciousness. They are only manifestations of subjective sensual abilities of consciousness in its relation to the objective world. Matter in itself is only a pure form of vibrating energy. The world that we see, hear, feel, taste and scent is only our subjective world as a product of our consciousness in its relation to the objective one. Through rational cognition man penetrates to the essences and phenomena of things and reveals their inner laws unreachable for pure sense perceptions. So he creates the notions, categories and laws as products of his rational abstraction and verifies their validity in the objective world. For example, the law of gravity is not only the

product of rational knowledge and abstraction but at the same time the immanent property (attribute) of the material Universe. The basic law of matter is the attraction and repulsion of mutually interconnected opposites. This law represents the immanent idea of matter which man can know by his rational abstraction. We cannot say this about sweetness and whiteness of sugar as products of our sensual consciousness.

Man by his rational spiritual abilities transforms the sense perceptions into the notional logical thinking needed for the deeper search of mutual relations in objective and subjective worlds. The notional (ideal) logical knowledge is supposed to be true if corresponds to the objective reality. The spirit of man retroactively scans ideality (information contents) from the objective world to his subjectivity creating his true knowledge. Knowing the truths about Creation, man penetrates into the divine mind and appropriates it to his consciousness. The dialectical and logical thinking can truly reflect the inner logic of Creation.

Man evolves his self-consciousness by acceptance and cognition of outside objective world representing the object for him as a subject. He is universally connected with this objective world as his own mirror (connection of everything with everything). The outside objective world is the other side of my subjectivity. I can understand what I am only through understanding what I am not (my negation – objective world).

The most important for my evolution is the community I live in, the other peoples and the whole human history and knowledge. Man is mainly a product of social evolution and communication. Unlike animal he is not only a passive product of evolution, but creates himself and his society by his creative will and self-consciousness. His creativity is internal as well as external. Through his internal creativity he forms his spiritual imaginations, plans, thoughts, pictures which are starting points for their physical execution. So the products of spiritual creativity get the physical forms of words, writings, pieces of music, pictures, sculptures and other products of imitative arts, books, buildings, foods, philosophical and scientific results, technical and technological products, social systems, etc. The products of his creation are mediated by material means. Results of spiritual creativity receive material forms having informational contents. But the main result of human creativity is his own consciousness, knowledge, wisdom, spiritual power, freedom, feelings and creative abilities of his will. The more differentiated are his knowledge and abilities the richer is his spirit. This differentiation does not mean the breakdown of the simplest unity of Spirit but just enriching. The awareness of spiritual integrity follows from its relation to the centre – universal “*I AM*” as a unique source of all individual “*I am*”. This universal source is reachable for all individual spirits at their deepest level.

The animal consciousness is manifested only by senses, feelings and instincts. The Spirit (centre of subjectivity) is hidden beyond all conscious animal manifestations and acts as outside creative and managing principle (agent) in relation to lower levels of self-reflection, self-feeling and consciousness (animal soul). The Spirit is the immediate ownership of a human soul, but not animal.

The human soul consists of many layers. The biophysical layer is represented by material neuron networks of brain and nervous system, while the ethereal and astral bodies represent the networks of quantum connections (dipoles). These layers are also present in animal soul, but only human soul has a spiritual level, so it is immortal in its unity with the Spirit. The human

soul is a mirror for the spirit and represents its multilayer body. Only through human body the Spirit can experience a big range of feelings and emotions otherwise unreachable. These feelings and emotions create the human psychic which allows the soul to experience various states of consciousness from the highest beatitude to despair, from love to hate, from clear mind to confusion, from enthusiasm to apathy, etc.

The spiritual soul is connected with a biophysical body through ethereal (vegetative) and astral (sensitive) souls.

Materialists accept the mind to be only a function of brain activity. Sensitive, imaginative, memory and thought information, in forms of material signals, is transmitted between neurons of neural networks by neurotransmitters (special molecules) through the synapses. The experiences, memories and kinetic habits are coded in the structure of neural networks of brain. The memory is a result of psychical process, by which the perceived reality is fixated in consciousness. The memory process consists of perceiving, fixating, storage and recalling (projection) of previously perceived reality. The brain with its relatively stable and dynamic neural networks creates the biophysical aspect of memory in a form of the so-called engrammes – memory tracks. The spiritual aspect of memory has a holistic imaginative form. Only the spiritual soul (human self-consciousness) can interpret the true meaning of memory contents. Analogical is the situation with two aspects of spiritual soul, mind and heart, where mind represents the sphere of knowledge and heart the sphere of feelings and emotions. The dominant role of spirit by the memory formation is manifested by its will, motivation and interest leading to the formation of deep memory tracks. The stronger the will, interest and motivation, the more effective is learning and the deeper and richer is a memory. The prior position of spirit over matter is evident, but materialists and positivistic scientists do not want to accept it and so the road to the true understanding of the essence of thinking, feeling, memory and consciousness is fated to the fiasco. Only the dialectic and holistic approach can lead to the true knowledge.

Supposing the brain to produce my “I am” as its function, it is strange, that this function evolves its own will and creativity and defines what the brain will deal with. It is clear that “*I want*” not my brain wants. According to materialists my brain produces my “*I am*” and “*I will*” and then becomes an instrument and servant of my self-consciousness and will. A poor brain, it produces me in order to drop on its knees in front of me to be my instrument. Why do I suppose my brain to be my instrument? Why I do not say “*I am a brain*” or “*I am a body*” but “*I have my brain and my body*”? Why do I suppose them to be only my temporary ownership? How can materialists and atheists persuade me that I am only a function of my brain and body although I only use them to play my own game in my life on Earth?

The brain is only the instrument for my acting at the levels of biophysical reality. It can only limit me in my effort to evolve and manifest my own intelligence, my mind. But it is remarkable that it has been developed to the level of nearly no resistance for evolution of my intelligence and creativity. How much idle reserves it hides inside! What a foresight is hidden in its evolution!

The biophysical aspect of thinking and memory is orientated to material coding of information needed for physical manifestation of psychical activity. The spiritual soul forms holistic imaginations. The thinking activates electrochemical processes in brain and its nervous system

accompanied by the flow of holistic spiritual imaginations. Only through the brain activity the spiritual ideas, plans and aims can be converted to the physical activity of a body, and reciprocally, the external energetic influences are transmitted and transformed to the flow of holistic spiritual imaginations (pictures, sounds, tastes, feelings, thoughts, etc). The material aspect of memory is needed mainly for the fixation and coding of kinetic habits, which can be later manifested almost automatically. We cannot physically manifest a number of our imaginations as we do not dispose of needed physical habits. I cannot transfer the imagined music to singing or playing if I have not trained the required habits, I cannot paint a beautiful picture being in my mind without consequent skill.

The imaginative, intellectual and emotional world as a product of spiritual soul (self-consciousness) is the highest miracle of human existence. What a complex physical organism had to be evolved in order to manifest the spiritual world at the level of Earth!

The simplicity of spiritual imagination of human spirit and its “*I am*” requires the highest body complexity at the level of biophysical existence. Self-consciousness, mind, emotions, will and conscience are the exclusive abilities of spirit and its soul. Through mind (rationality) the spirit is oriented to the objective world in order to know and accept it. Through emotions (spiritual heart) the soul is oriented to the spiritual subjectivity. Rationality and emotionality are two opposite orientations of our spirit and its soul. Two brain hemispheres correspond to this differentiation. The left hemisphere is oriented to abstract analytical thinking and objective world, while the right one – to emotions and intuition. Man is wise if both his rational and emotional intelligences are highly developed.

Man combines sensual and spiritual consciousness in himself. The higher is his spiritual consciousness with its free will, the more free and developed he is. Animals do not dispose of spiritual souls, only astral sensual ones, so the Spirit is outside of their souls and manages animal behaviour through instincts.

Consciousness creates the world quite different from the physical one. Matter as such represents only energy vibrations and blind acting of contradictory forces. But the spiritual world is full of feelings, thoughts, emotions, pictures, melodies, colours, tastes, scents, concepts, ideas, inspirations and imaginations. The outside physical world does not dispose of these properties. The human consciousness has the great imaginative ability with consequent creativity. If imaginations follow from spiritual inspirations, man can create the fascinating artistic and spiritual products bearing a stamp of spiritual spark and originality, sometimes even genius.

Mozart, Beethoven, Leonardo da Vinci, Michelangelo or Nicola Tesla were conscious of their genius and did not hide it. W.A. Mozart said that he only recorded inspirations coming from the spiritual sphere. The music is the art through which the creative inspiration of spirit and imagination are immediately transformed by tones to the piece of music. For people with high individual spiritual qualities it is sometimes possible to have spontaneous spiritual experiences and inspirations mediated directly by their evolved spiritual insights and senses.

For everybody the real and true is his subjective world created by his consciousness as it is a product of his spirit. The real are the states of his soul – pleasure, sorrow, pain, enthusiasm,

despair, love, fear, hate, peace, anger, feelings, imaginations, etc. Spiritual “*I am*” represents the highest reality and the truth. The objective world is only an outside mirror for our self-reflection.

Mind-Body Dialectics

Only dialectics can consider the bipolar relation “subject-object” to be the basic contradiction of being and its creative evolution. Only from the viewpoint of dialectics the “mind-body” relation can be successfully resolved.

Being as a whole represents the self-conscious Unity - personal God, who, by creation of His objective physical world creates (evolves) at the same time Himself with His physical body - Universe. So the dialectical relation “subject-object” at the highest level of existence represents the relation of self-conscious personal God to His physical world. God cannot exist without his physical manifestation (physical body) and without its motion (energy). God is the centre of Unity in its diversity. God as a subject creates His own world as His object (structured physical and informational body) through which He manifests Himself and reflects Himself from His objectivity to his subjectivity. Every living subject possesses its physical (energetic, motional) body but at the same time overcomes it (negation of negation) and returns to itself (its own subjectivity).

Subject reflects itself to itself through its physical world, which represents the mirror for self-reflection. In relation “subject-object” subject always plays the active role being a starting point for a bipolar relation, while the physical body represents only a reflecting functioning object as a dynamic mirror for self-reflection and self-manifestation of a subject. The bipolarity of the physical world is nothing more than attraction and repulsion of opposites creating the three dimensional spatial reality, which would be totally blind and passive without its relation to active self-conscious subject. Overcoming of three-dimensional spatial limitation of objective physical world by spiritual (self-conscious) subject means that the subject represents a multidimensional reality of consciousness. The true world is always a world of consciousness, while the objective world and physical body represent its limit. Physical world as such is only a pure motion - energy, only consciousness can form imaginations, feelings, emotions, thoughts and ideas which create the real world for conscious subject having the sense.

The active subject (GOD if the whole Universe is considered) is always limited by its own three-dimensional physical world. The creative impulse always comes from subject, which uses energy of object for creation of its own real world as well as changing the physical world by acceptance of its limits (dialectical laws). The motion of the physical world would be totally blind without an intervention of a subject, so only subject can give the information contents to the physical reality. Saying that GOD can do anything is not true, because His active manifestation is limited by His own objective physical world, through which He performs His own self-reflection and self-manifestation and so plays His own game with Himself. God cannot violate His own dialectical laws only use them for His unbelievably rich manifestation of creativity, love and intelligence.

His active and creative free Will is limited by His own physical world. Our free wills are also limited by the laws of objective physical world and our physical bodies through which we act.

The true dialectics of subject-object (mind-body) relation can be expressed by the following simple expression:

“Active and creative role of consciousness (subject, mind) is limited by passive and reflective role of created physical reality (object)”. Consciousness has a creative power through which it creates, reflects, interprets and changes the physical reality. Consciousness cannot be the product of blind energy, but just contrary it organizes energy to needed forms. Energy is the instrument through which consciousness performs its self-manifestation.

Consciousness overcomes the bipolar relations of opposites creating multidimensional reality of self-reflection, where the highest level is represented by self-consciousness of Spirit.

Consciousness cannot exist without its physical (energy) manifestation. But energy is in a subordinated position. So the consciousness is not a function (product) of energy (matter structures), but just contrary, it plays its determining role in relation to its energy being its own limit and instrument for self-manifestation.

Every self-conscious subject (mind) owns its physical body through which it manifests itself, but this body could be made of very different physical structures being at various levels of physical reality. The whole physical Universe represents the physical body of God although it looks that it has its own independent existence. It is because now in contemporary phase of cosmic expansion the centre of divine universal self-consciousness (Holy Spirit) is very distant, so God as a whole can manifest itself markedly only through His very long and weak quantum connections (dipoles). The new quantum dipoles arising during cosmic expansion are just the threads through which God perpetually manages the cosmic evolution according to His own creative Intelligence (Word) which is gradually included into the evolving information structure of the physical Universe. So the informational structure of the Universe represents the imprinted and encoded creative power of divine Intelligence, which is the source for creative evolution at all levels of physical reality including our Earth.

The relation between the Spirit (mind) and the body (matter) is dialectic. Spirit is not determined by its physical world but by its overcoming (negation of negation – self-reflection). The physical world represents only a passive instrument in creative and active hands of self-consciousness. Although Spirit (Mind) needs physical reality for its manifestation, it can manifest itself through very different levels and ranges of physical reality. The level and range, through which the conscious subject acts, defines the level (dimensionality) of consciousness. The highest level represents the universal self-consciousness of God (Holy Spirit) as it acts through the whole physical Universe at all levels of its hierarchy.

The answer to the question whether the reality is physical or spiritual is simple: it is physical as well as spiritual. As the physical and information reality (object) can be divided into mutually interconnected parts, the spirituality of God can be individualised into many individual spiritual subjects, which differ according to their range and depth of action.

Range of action and complexity (richness) of manifestation defines the level (dimensionality) of consciousness. Every elementary quantum dipole of space and energy is connected to the centre

of universal self-consciousness (Spirit), so its three-dimensional spatial existence is overcome. The range of self-conscious manifestation is given by the structures of quantum dipoles through which consciousness acts. Physical structures can be posited at many hierarchical levels of the physical Universe. Except the physical reality reachable for our senses and devices there are also other physical but gentle worlds (realities) created of much weaker and gentle quantum dipoles reachable for spiritual subjects with their astral, mental or spiritual bodies. Human body consists of all mentioned hierarchical levels of physical and spiritual reality so the human mind can operate through all levels (bio-physical, ethereal, astral, mental and spiritual) although now it seems that it operates only through the biophysical level. But after the death of biophysical body, the level of physical sphere, through which our mind (spirit) will operate, changes until reaching the level of universal self-consciousness of God. But this way to the highest level of self-consciousness depends on every individual spirit, its effort and self-evolution.

The richness, range and depth of self-consciousness depend on the level and complexity of physical reality and physical body through which it operates. Every individual self-conscious subject has unlimited possibilities for its actions through the various levels and ranges of physical reality. Every individual spirit can operate through the certain arena, although all spirits have the same spiritual centre. Different physical bodies and worlds through which self-consciousness operates cause the individualisation of the universal Spirit into many individual spirits (souls) looking to be mutually independent, although all they create the Unity in diversity. All individual spirits represent the same universal Spirit.

The dialectic “mind-body” relation means that every mind acts through its physical body. Although the range of mind manifestation is limited by material structures through which it acts, the spirit as such is unlimited and eternal, never and nowhere starting and finishing, being always here and now.

The multidimensional levels, through which the consciousness operates, differ by the range, richness and depth. Plants act only through the biophysical and ethereal levels, while animals include also astral sensual level, only the human consciousness acts through all levels of hierarchy of being. The highest level of physical body, in which the Spirit is incarnated and individualised, represents the spiritual soul. Animal souls do not possess the Spirit which is outside and leading them through their instincts. So animal souls are not self-conscious, they are only self-feeling.

Every higher level of consciousness represents the higher dimension not in the sense of spatial dimensions, but dimensions of reflection and self-reflection. The way from lower level (dimension) to higher one represents the jump when the quantitative changes (range of action of consciousness) after overreaching certain limit (measure) leads to higher level of consciousness (self-reflection). The relation of spirit to its spiritual body (soul) can be imagined by a relation of n – dimensional sphere to its $n-1$ dimensional surface. Although the Spirit is the centre of the whole Being, only spiritual subjects with spiritual souls possess it. Evolution of consciousness at the level of our physical reality means the gradual leaps from lower to higher levels of physical bodies until the body of Man is achieved with all its hierarchical souls (bodies) including the spiritual one with self-consciousness.

The evolution of a human spirit continues in a form of evolution of society as only a social life can evolve conditions for richer and more complex manifestation of spiritual nature of Man. Although Man possesses his spirit in his soul, the level and content of his self-consciousness can be very different. So Man as individual as well as social human being evolves his spirit (self-consciousness) according to his activity, efforts and conditions. People differ according to the level and contents of their souls, so they can stay at different levels of spiritual evolution. The range, content and depth of Spirit being the possession of individual soul can be very different. The main goal of every spiritual being is to achieve the highest level of Spirit (Christ). So the Christ should be the main goal for evolution of every individual man as well as society in order to achieve the Kingdom of Heaven (spirit and freedom) not only in an individual soul but also in a social system.

The physical reality (object) is a limit of higher reality of Spirit (subject). Nature is Divine as it creates the physical and information body (quantum structure) of personal GOD.

Can we make an artificial system to be conscious (self-reflecting), even though self-conscious (spirit)? Is it possible? As we have explained, every three-dimensional elementary quantum dipole is connected to the centre of universal consciousness, so every quantum dipole represents the physical aspect of a quantum of consciousness. We do not need to solve the question, how to create the consciousness, as it exists and is a basic entity of being. We only need to create conditions – systems - through which the consciousness – life (even at its simplest form) can manifest itself. So the question is: Is it possible to create the body (physical and informational quantum structure - soul) through which the consciousness can manifest? Yes, it is, but we are far from this, as our knowledge is still very poor. The intelligence of Nature is unbelievably rich and complex and now we understand only some aspects. The life cannot be created, it simply exists. So no life we can create artificially, only artificial conditions (dynamic structures – physical bodies) for its manifestation.

Very interesting discoveries have been made now in genetics, in its new department – **epigenetics**, which says that the activity of many genes is not exactly predetermined, but can be influenced and changed by our lifestyle as well as conscious activity. The specific biomolecules – **histones** are concentrated around the genome, able to switch on or switch off our genes, activating some genes while inhibiting others according to our lifestyle and activity.

DNA as a system of coding of very complicated information is unbelievably ingenious, but it has even more complicated control systems above itself, being an effective instrument given to our hands in order to influence and change actively our genetic dispositions. This fact is the other evidence that the mind plays its dominant role in relation to its body. According to epigenetics, we are not the marionettes on laces of our genes, as we have our genome in our hands. DNA represents the basic information structure, but its every fifth gene can be actively influenced. Our epigenetic signature, evolved by our active effort, can be even transformed hereditarily to our descendants. We are not only by-products of the process of spreading of “selfish genes” as atheistic biologist Richard Dawkins degrades our human dignity, but we are just contrary the active managers of our genetic programme. As our mind can manage our epigenetic activity, it has a great healing ability which can be effectively used in a medicine.

Conclusion

The exact mechanism of the unity principle of the Universe is discovered according to which everything is connected with everything else at the quantum level consisting of elementary quantum connections (dipoles) +/- where every positive pole “+” is connected with all negative ones “-“. Elementary quantum dipole is a basic unit of energy as well as information of which the physical and information structure of the Universe (object) is created as a manifestation of personal God (subject) and His Mind. The universal self-consciousness of God is a dialectic subject-object relation where God as a subject creates through energy His own world (Universe) in which his Mind (Intelligence) is manifested in a multilevel hierarchical information structure, which as a universal hologram is reflected in partial holograms at different levels of existence. Information encodes in itself the creative power of God and through its instructions manages the evolutionary processes at all levels of physical reality. In conditions of our Earth the creative power of information is coded in DNA, through which the evolution of life is managed.

The Universe as a unity of its Mind (Spirit - software) and Body (World - hardware) is an inseparable dialectic One (whole) internally structured in many ones (parts). Information is the basic instrument for mutual communication between separate parts as well as holder of creative power of divine Spirit at all levels of physical reality of the Universe which are mutually synchronised (unity – holism), where every living conscious subject is the individual hologram (image) representing the whole hologram (image) of the Universe. The multilevel structure of human body is just the image of the universal physical body of God, while the human spirit is the individualised aspect (image) of the universal Spirit.

Human consciousness by interaction with a physical reality scans its information contents and creates its own world of imaginations (pictures, sounds, tests, feelings, ideas, emotions, goals...). We live in the world of our consciousness. Whenever you are, you are now, wherever you are, you are always here – in your consciousness. Our physical body changes its spatial place and time, but our consciousness, as individualised manifestation of a universal consciousness, is always here and now. Our physical body is limited, but our consciousness is unlimited as it nowhere and never starts and finishes being everywhere and in every time, having its centre in the divine Holy Spirit. All we are the same eternal Spirit. Knowing that I am in you and you are in me can dramatically change our behaviour. ***“You will realise that I am in my Father, that you are in me, and I am in you.”*** said Jesus Christ. There is only our mutual Love (interconnectedness - unity). It is time to acknowledge this basic Truth which only can save us as a human civilisation. Rabindranath Tagore expressed this in his dialogue with A. Einstein on July 14, 1930 by the words: ***“My religion is in the reconciliation of the superpersonal man, the universal spirit, in my own individual being“.***

Contemporary society becomes more and more differentiated and interconnected with increasing role of information over material and financial flows. Thanks to grandiose development of IT and information networks of Internet, the role of information dramatically increases. Information becomes the main source for the future social progress. While the material flows are hard and slow, the information ones are very fast, light and unlimited. So the material and financial capitals as lower forms are brought under the control of information world of knowledge.

Information causes social interconnections to be faster, deeper, lighter, freer, richer and more dynamic.

Everybody subconsciously feels that his true freedom is hidden in his desire for knowledge, love and creativity. Information represents the most effective instrument for enriching our knowledge and freedom. But it is only the instrument for our Spirit. Man cannot become a slave of information. He must be able to distinguish the useful information for his development and creativity from the one enslaving him.

The society disposes of power means which can lead to its final goal – Kingdom of Freedom and Love – or to its total destruction. Only the way to higher spiritual power and responsibility is acceptable.

The criterion for the truth is very simple. The true and good is everything heading to the higher spiritual freedom, knowledge, wisdom, creativity and friendship. Bad and false is what enslaves the Spirit. The role of information in freeing the human soul is substantial.

The fight between the truth and lie reaches the higher qualitative level in our post-industrial and information society. Now it is time for the Truth to become the winner in all branches of human activity including science where the blind positivistic approach must be overcome by a dialectical logic of thinking which contains no limits for creative cognition and spiritual evolution.

References

[1] P. Kohut, God and the Universe, VDM Verlag Dr. Muller, Saarbrucken 2011.
www.amazon.co.uk/God-Universe-Revolution-Peter-Kohut/dp/3639331044

[2] P. Kohut, The Basic Space-time Equation of the Universe,
www.worldsci.org/pdf/abstracts/abstracts_5367.pdf