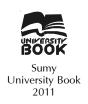
# Volodymyr Bekh

# PERSON AND UNIVERSE: COGNITIVE ANALYSIS

Monography



# $Translated\ by\ Olena\ Tytarenko$

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The attributive qualities of the person in the process of cognitive analysis of the correlation of a person and the universum are being consecutively revealed as the formation products of the first nature level, the agent of the second nature level and the basics of the third nature level. Simultaneously it is shown that the consecutive change of nature forms is nothing else but the mechanism of the universum's self-movement. This manuscript is addressed for all those who are interested in the problems of the system covering of the potential social world, society and the mechanism of self-development of the public life.

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The book is dedicated to my beloved daughter Yuliya and her generation, discovering the era of high morality (spirituality)

#### **ACKNOWLEDGMENTS**

If you don't explore life, there is no sense in it, and the question of the sense of planetary life is the only problem which I have been investigating seriously as a social philosopher during all my life. The reflection on this global problem was facilitated by my family — wife Natalia and daughter Julia, who grew up in love and strict conditions to free thought, diligence and integrity. She filled our lives with a special sense in which the whole Universe was concentrated. So this work is devoted to her generation in front of which a new eon of life is opened, that makes the world community much closer to the depths of Space and immortality.

This work was originally written in 1999 with the aim of the author's clarification of the human origin and the definition of his/her main function in space – the Renovation of the Universe. But the work unexpectedly became public. During the last ten years, it had 8 extra editions and was used as a basis for social scientists and managers training at Zaporizhye University and in 2003 at the National Pedagogical Dragomanov University. The contents of the book were discussed at the methodological seminar on space thinking in Moscow by invitation of the scientists of the Nicholas Roerich Fund in April 2011.

Publishing this work in English is a remarkable event for me because it opens my philosophical thought for a wide circle of colleagues who live, think and work in different paradigms. Such a breakthrough could not be possible without the support of my chief and colleague the President of National Pedagogical Dragomanov University – Professor Victor Andruschenko, the translator – Ph.D, Professor of my university Olena Titarenko and her chief, and my sincere friend – the Director of the Institute of Foreign Philology – Professor Volodymyr Goncharov.

The creative work was stimulated with the positive atmosphere at the Department of Management and European Integration at the Institute of Sociology, Psychology and Management that I led at the  $\label{thm:continuous} University since 2003 \ and \ the sincere \ enthusiasm \ of \ my \ assistants-associated \ Professor \ Alla \ Kravchenko \ and \ assistant \ Professor \ Irina \ Grygorenko.$ 

I wish to express my deepest gratitude to my colleague Professor Iryna Predborska who skillfully adapted my intricate philosophical text for English-speaking readers. This is the second work I present to the world community due to her enthusiasm. The first book was called "A Nooman of the Social Organism" and was published in 2010.

Finally, I want to express my thanks to sponsors and the to the editorial staff – the publisher – Rodion Kochubey, who heads the publishing house "University Book" in Sumy and his mother – Professor Natalia Kochubey.

#### INTRODUCTION

The history of the development of human thought gives powerful examples, showing the phenomenon of raising one more knotty problem of social development in the front line of the theory of knowledge at the turn of the century (or more exactly, on the verge of two centuries). Today's crisis demonstrates that at the joint of the 20th and the 21st centuries such problem is the optimization of our life on a planet scale. One cannot solve this problem without comprehension of the role and place of a man in the self-motion of the Universe. It is completely impossible. It is connected with the fact, that the process of actualization of the problem of fundamental rationalization of social life has been observed for a long time, and a man plays the main part in it. Here we can define at least three stages:

- the first one is connected with the substantiation of the primacy
  of the role of an individual in history and the terrestrial origin
  of society and state (Renaissance);
- the second stage is connected with the establishment of the social Marxism doctrine, which reveals the sense of the social life on the basis of the primacy of the material to the spiritual along with the increase of the role of the masses of people as the subject of social action (the end of the 17th the beginning of the 19th century and till the middle of the 20th century);
- the third stage is connected with the search of the "philosophical unity" of plurality relatively independent and mutually exclusive means of interpretation of the way of social world development theological, materialistic, technocratic, phenomenological, existentialistic and others (from the middle of the 20th century).

It means that to solve the problem of the optimization of social life of the planet humankind, the philosophy and the social science should explain its some basic aspects, namely:

- first, it is necessary to take a different view of the dialectic contradiction between matter and spirit, which underlies our world,

- to introduce the social form of motion as the stage of the Universe self-expansion, which, as the natural result, carries the planetary life to the Cosmos;
- second, it is indispensable to substantiate a new approach to the conceptual interpretation of social world, different in some respects from the philosophical and methodological approach, which is currently in use in practice of our country, for the reasons of the current crisis remains to be a closed book.

From whatever standpoint we look at the matter of the social life optimization, its headstone is the call to study the place and the role of a man in the process of the Universe self-expansion on micro- and macro- and mega-levels, and also, to state the specific character of his or her behavior in the planetary system.

As an indispensable condition, there appears the necessity to elaborate the basis of world-view, which would be more appropriate to the spirit of the 21st century and of the third millennium. It means that to understand and explain the essence of to-day's crisis of social development, we should refurbish the physical picture of the world, which is built on the principle of the Newtonian mechanics. We should see the Universe as the world of more sensitive and subtle, even fragile, elements.

For the assessment in the analysis of the unity of matter and mind we need to refer to the generic term of the universe. And we do it deliberately in order to spotlight only two points in the explanation of the place and the role of a man in the Universe self-expansion. The first one is connected with the fact, that on the planetary level, being in the state of active opposition, matter and mind are the source of both: the albumin-nucleic and the social life; the second one is connected with the fact, that in vertical position matter and mind transform as a whole and carry the planetary life to the Cosmos.

The ideological guideline, taken as the grounds of the given concept, is the idea, that on the planetary level the matter and the spirit (or spirit and matter) are part and parcel of the whole – of the substantive basis of the Universe.

The subject of our investigation is an extremely broad philosophical category "universum" (Lat. *universum* – the world entirely, including a man, as the complex cosmic entity, regarded as a complete system in itself. – *The translator's note*). We understand by it the gnoseological and ontological unity of the material and spiritual worlds or modality of the potential and reality. Hence, we see the

universum as an organic unity of spiritual (noumenal) and material (phenomenal) worlds. This substantive basis of the world is a quantum vacuum, which has two interconnected forms – a physical form and a semantic one.

We also proceeded from the fact, that the philosophical understanding of the universum is based on the gnoseological interpretation of modality "potential", which is referred to the worlds, viewed a priori. In this connection the assertion "world set" is considered by us as "the set of all possible worlds", i.e. facts, viewed noncontradictorily, or relations of things and ideas, without the reference to ontological realization of any of these potentials, but with the proviso that only one of them is realizable.

In the ontological aspect we see the universum as "the world as a whole" or "all in existence". In this case the given notion is a generalized notion of nonidentical logically, but equal ontologically worlds, i.e. such worlds to which one ontological modality is referred *pari passu* — reality<sup>1</sup>. In other words, the universum is a substance, which pulsates, realizes continuously, is self-permeated with all its parts, each of them is virtually something, that is involved in everything, that potentially and out of time has "its share" in the whole universe. To say picturesquely, in the universum "everything ingrows to everything".

The object of the investigation is a man as a natural product of the universum expansion process, who appears at its particular stage and realizes a special, available only to him, and to no other object, function in the mechanism of its self-motion.

However, since these regularities are not known to the humankind today, so the world seems to be hostile towards it, and it oppresses the nature of the social phenomenon. Therefore, the comprehension of these regularities raises qualitatively new horizons to our view, new horizons in the Universe development and in the destiny of the human race.

The fore-said implies that the **chief aim** of the given work is the philosophical comprehension of the place and the role of a man in the functioning and development of the Universe.

 $<sup>^{1}</sup>$  See: Философская энциклопедия: в 5 т. / гл. ред. Ф. В. Константинов. – М.: Советская энциклопедия, 1970. – Т. 5. – С. 279.

The main task of it is the more precise conceptual definition of the means, by which the phenomenon of noocosmogenesis rises to our view. It consists of three levels: *Prelife*, *Life*, *and Superlife*.

The key hypothesis of the investigation is the thesis, stating that a man has appeared and is functioning on the planetary level as an element of the universum self-motion mechanism, which implements its transition from the stage of materiality accumulation to the stage of extension of spirituality properties, which are inherent in the substantive basis of the Universe.

Hence, the explanatory hypothesis follows, stating that the today's crisis of social life should be regarded as the substitution of technical unity of the organization forms, in which contemporary life of the planetary humanity is running, to the organic forms, i.e. immanently inherent in the substantive basis of the Universe.

In other words, the essence of the matter is to reveal a man as the product of development of the first nature alias biosphere, the product, that has a unique independent being in the second nature (or noosphere) and as the natural result transforms to the third nature (or electromagnetic sphere) now as the element of cosmic environment.

Thus, today's crisis of social development brings us in earnest closer to the expose of V.I. Vernadsky's ideas about the excessively diverse forms of organized matter, based on varied field forms, which exist in different areas and on different levels of the Universe, and use different types of substantial flows of energy. It means, that in the conditions of our planet there is a specific form of a rational living being, bearing electromagnetic form field. The given working assumption though controversial is not at variance with the well known functional definitions of life, having been previously formulated by A.N. Kolmogorov and A.A. Lyapunov.

After invasion in quantity of UFOs in 1999-2000 the Chinese government officially recognized the presence of an alien mind on the Earth. The Pope did the same.

In 2000 International Registration Board of Intellectual and Informational Novelty granted Academician Vladimir Azhazha patent N 000360 for an invention, saying that Human Kind is not single in the Universe. The patent was signed by Academician A.G. Khariton.

The summary on the subject of the novelty formula runs: "It was shown empirically: the apparition on the planet Earth and in the near-Earth space, impact on the people, nature and machinery the OTHER than the human MIND, excelling in intelligence the technological level

of terrestrial civilization, manifesting itself in the so-called UFOs and relating to them phenomena, proves – Humankind is not single in the Universe".

To substantiate the suggested hypothesis, we need to proceed to definition of the origin, character, nature and intention of a human as an integrated part of the Universe by regarding the phenomena of the first, the second, the third etc. nature as stable phases of the Universum self-motion.

The concept of the human personality self-development must be a natural result of such a large-scale research project.

# Chapter 1

# Person as the product of virgine nature development

# 1.1 Cosmological premise of the person's earth appearance

To realize the place and the role of the human in the Universe self-development, it is necessary to explain his coming and functioning on the planetary arena and retirement from it as a natural forces or geological process. It becomes possible under the assumption that the basis of the Universe is quantum vacuum. The given hypothesis has lately assumed ever greater vision attractiveness and scientific weight in explanation of the Universe origin. The recognition of its relevance implies withal the legitimization of the idea concerning the existence of two kinds of quantum vacuum – physical and semantic. Having adopted the given idea, one can comprehend the mechanisms of the origin and existence of the two worlds in the domain of objective reality: physical and semantic, and in the domain of gnoseology – the dialectic contradiction between materialism and idealism as the means of human consciousness reflection.

The centuries-old practice and especially the crisis of contemporary social development drive us to take the world not through the lenses of mutual exclusion of the material and the spiritual, but through the lenses of their necessity to each other, i.e. interaction. The latter is topical among other reasons, because it is the man, in whom the material and the spiritual are inseparably connected, and indeed, result in qualitative effect in the stage of its stable functioning as the subject of the mega-evolutionary process.

In other words, in the process of substantiation of the place and the role of a man in the Universe self-development, it is necessary to proceed from the fact, that on the planetary level we deal with the two kinds of objective reality: physical and semantic. These two worlds are so large-scale, that they are even called the Physical Universe and the Semantic Universe in the contemporary science-philosophic literature. Thus, the observed Universe resembles by itself Mobius band or is a two-faced Janus. On the one hand it is a material world, on which the materialists insist, and on the other hand it is a spiritual world, at the interpretation of which the attention of the idealists is concentrated.

In this case, some total process must be the means of mediation of their interaction. In our opinion, it may be only *life*, in which some living material, organized in the form of biosphere, acts as an agent.

However, before the appearance of a man, biosphere had not been a whole compound: only starting from the moment of isolation from the organic world (geobios) a peculiar species of Homo sapiens, the process of conversion of natural pre-condition of his existence acquires a developed and stable form. However, the subject possessing the possibility to transform all conditions of its appearance into the means of his own development becomes a self-generating subject. After the formation phase, now he functions and develops as a self-sufficient subject. That is the reason for the uniqueness of a man.

Thus, the appearance of a man as an agent of the planetary and cosmic environment should be explained also as the resultant of some peculiar process, running with the involvement of physical and semantic elements of the Universe foundation into interaction. In other words, the genesis of a man should be explained, proceeding from the content of the first nature as a product of dialectical interaction of physical and semantic vacuum.

This approach to the foundation of the Universe makes us explain most logically the origin of a man as the kind of living substance (organized matter), seeing it as the result of a gigantic in gauge fluctuation of different kinds (physical and semantic) of vacuum, by which solely it becomes possible such profound interpenetration of the material and the spiritual into each other at the first nature level resulting in beginnings of life on Earth. So, it turns out, that even today our Universe keeps the traces of this gigantic fluctuation of vacuum, which synthesized the material and the spiritual into inseparable unity, and initiated life on Earth. The cosmological theory of "hot Universe" shows the presence of some peculiar reminiscences about the youth of the Universe – relic microwave radiation. In 1965 the relic radiation was observed by American astrophysicists A. Pensias and R. Wilson. The given hypothesis has received strong corroboration, and Pensias and Wilson – the Nobel Prize.

The precise measurement showed that in the frame of reference, related to the Solar system, intensity of radiation is not equal in different directions. Evidently, the vacuum fluctuation was directional, that is quite possible on the assumption of participation in it the semantic vacuum — maeon. Due to the phenomenon of anisotropy, the planet Earth became fertile in life thereby.

Thus, providing that life on the Earth appeared at the instant of the convulsion of nature, its formation was taking place under the influence of the same natural conditions. It is quite logical to assume, that from the part of micro-level the planetary life is fertilized with the intensive bombardment of our planet by micro-particles saturated with energy and information. At the macrolevel photosynthesis has been remaining the main factor.

Having created conditions for the formation of living material, the objective reality, which according to our hypothesis consists of physical and semantic vacuum and is borderless, necessitated a subjective or finite form. It needs the latter in order to appear in the phenomenon and gain conciliation, transforming into superior quality.

The finite form of the Universe (alias subjectivity) has gradually turned all conditions of its existence into organs and formed hereby a specific whole – living organism. So, in living material the organismic level is that whole, which fully provides appearance of fundamental qualities of the Universe substantive foundation.

Due to this clear reason all living (biological) organisms to the extent possible realize systemic reproduction of attributive qualities of source substance – the universum. Upon a closer view of conception of the physical Universe, it becomes clear in general terms in what way living organisms reproduced electromagnetic, gravitational strong and weak interactions etc. this part of the problem has been more or less described. Less described or may be less comprehended by us is the living material's reproduction of the spiritual component in the structure of its organs. Thus, it is no accident that Hegel (*Encyclopedia of the Philosophical Sciences*) complained, that organic, full of life, individualized water slips from the grasp of chemistry¹. In the other place he wrote about the spiritual function of the spiral vessel of plants².

 $<sup>^1 \</sup>mathrm{See}$ : Гегель Г. Энциклопедия философских наук : в 3 т. / Г. Гегель. – М. : Мысль, 1975. – Т. 2. – С. 421.

<sup>&</sup>lt;sup>2</sup> See ibid: - P. 430.

We have no doubt, that the hypothesis about the function, which is mediated by living material of the interaction of the material and the spiritual worlds, is productive, as far as the idea of organism and the idea of life are only static and dynamic expression of one and the same reality: any organism is always alive, and any life is always the manifestation of organism.

It is not important for us, that the integration of the material and the spiritual is actually present in all stratum of living material. For this purpose, living material has all necessary attributive features. We mean its occurring everywhere *activity*. In the history of philosophy, the activity of substance and of its manifestations was denoted as "vital power", "driving momentum" (Hegel); "stirring part", "active correlation" (Marx) between the poles of dialectic contradiction, as "a dynamic, intensive form, inducing to solve this contradiction" (Marx); "repulsion", "performance of activity" "independent reaction force" (Engels), "motivity" (Lenin).

Thus, organized matter activity is a moment of interaction of universum's material basis and spiritual basis. Types of organized matter may be distributed according to the degree of correlation of material and spiritual substrata in it with the degree of activity displayed. In spite of the fact, that the degree of circulation and correlation of the parts between each other — is a quite different question, and we have no opportunity to stick to it, we will cite some data concerning this angle of the problem. This will help us to understand better the role and the place of a man in the Universe in the sequel.

Some interesting facts, illustrating an immensely wide range of functioning of life forms, were published in 1999¹. We cite them in an abridged form, as far as they evince our hypothesis about origin of life as the means of mediation and disclosure of the process of physical and semantic worlds' interaction. It is also important to highlight the fact, that it was multilevel interpenetration of physical and semantic worlds, that resulted in the situation, when one part of the scientists considers intraplanetary processes to be the foundation of life, another part of them – planetary processes, and the third part – extraplanetary alias cosmic processes.

Thus, science-fiction writers have been pointing *the intraplane-tary origin of life* out for a long time. Under inexorable pressure from

<sup>&</sup>lt;sup>1</sup> See: Комсомольская правда. – 1999. – 11 марта.

astronomers, showing with the photos the lifelessness of surrounding planets, they had to hide space aliens under the surface of their native planets. Herbert Wells and Dante sent lunarians to live under the lunar surface. Dante, as we all know, populated the Moon with the souls of humans, who neglected their vow of chastity.

"Renegade" astronomers also stirred up the rumour: the son of great astronomer Gershel asserted in all seriousness, that he watched lunarians in a large-dimension telescope, who were escaping out of the craters onto the lunar surface. Even in 1928 V. Yazvitsky described undersurface inhabitants of Mars in his book "Astrogation to the Moon and Mars" and R. Bradbury established a kind of insidious martianhood, who laid ambushes for unlucky astronauts from the planet Earth. K. Phlammarion and Ph. Gremmer wrote about inhabitants of other planets only from time to time creeping out to the surface.

The Humanoids, leading a mole-like life, were found (in the books pages so far) under the lunar surface as well as under the surfaces of Mercury, Mars, Pluto and the satellites of big planets, but more often they were met inside asteroids. This is practically the list of extraterrestrial objects, regarded by present-day space scientists as the most available places for building our subsurface bases. Though for the majority of the citizens of our country the topic of undersurface extraterrestrial beings often brings up an association with the children's book "Donno on the Moon" by N. Nosov, in which the brave shorties from the Earth help the lunarians, who have never seen the real sky and the real communist relationships of the shorties.

Today the scientists, who assert the idea of intraplanetary foundation of life, have received a lot of evidences for confirmation of their rightness. The above-mentioned source contains the information about the recent discovery of the scientist Jed Clampet and the astronomy professor Thomas Gold, which dropped a bombshell on the meticulous monumental science, stating, that all living organisms on the Earth originated from oleum vivum, the extraction of which was formerly attributed to phytoplankton (the lower or simpler organism which lived in the ocean 300 000 million years ago).

Geologists and biologists have always believed that subgeocolous life is impossible due to the lack of sunlight and air, as well as extremely high temperature and pressure. But not long ago the scientists found the subgeocolus bacteria, which don't want any sunlight and are able to generate energy chemically. Thomas Gold reckons that

science has fallen pray to the doctrine, assuming that as we live on the earth surface, all began on the surface.

The professor believes that the first organisms appeared deep under the ground and only casually emerged onto the surface, and resulted in the occurrence of human being. Besides, he believes that the Earth core has contained almost limitless supply of "fossil fuel" since the Earth formation.

To prove this fact he drilled the well in Sweden, the country, where there has never been and could not be any oil, — and at the depth of 4 miles he found hydrocarbonaceous raw material. Oil is an excellent source of microorganisms, which in the judgment of contemporary scientists live at the immense depth during milliards of years. "As long as we keep thinking that life is possible only on the planetary surfaces, the terrestrial conditions may be well called unique. Though as for the life, existing deep under the ground, our planet is rather conventional in this respect, and just such form of life may be characteristic of all planets of the Universe", — David Noever, the research worker of the NASA institute of Astrobiology says.

Steve Jones, the professor of Genetics from London also endorses this idea: "There is an unknown Universe below, which has already generated organisms with the help of such extraordinary metabolism, that by the side of it the human being and the mushroom practically do not differ from each other".

According to the latest scientific reports, there are microorganisms on the Earth, which are called *Methanococcus Jannaschii*, they live in the ocean at the temperature minus 185 degrees Fahrenheit under the pressure 3700 lb and they don't want any sunlight. More than 500 varieties of such microorganisms have been found for the present, but it is possible that they are much more numerous.

The scientists from the American Human Genome Institute have found out, that two thirds of these organism's genes are not known to biological science. This means, that they compose "a separate line of life branch". Thus, this unknown form of life on our planet is up to 50% of all biomass of the Earth.

These inhabitants of the ocean may be used for creation of new clean source of energy and even purify contaminated territories: some of them can abide extremely high radiation level. In view of the fact that they live on the Earth more than 3 milliard years and do well even in the superconcentrated sulphuric acid solution, such resistant form may exist on other planets as well. "This scientific discovery is equivalent

to finding of a new Universe right under our nose, – Karl Voes, the researcher of the Indian University, says. – If Homo sapience disappears from the face of the earth, as a result of some catastrophe, these microorganisms will emerge on the shore to subjugate the planet".

The signs of life were found under the thick layer of ice in Antarctica. This finding gives the scientists the idea that any life under the ice may also exist on the other frozen planets. During 150 days the scientists were warming and lighting microscopic grains having existed under two-meter cap of ice for a million years, after this they transformed into seaweed, which even preserved their power of photosynthesis.

Ch. Darwin and his followers, as is generally known, vindicate the idea of *the planetary origin of life*. We shall only indicate that Ch. Darwin's theory about origin of species illustrates the qualitative and quantitative aspects of the process of universum movement in the direction of the subjective form.

The third group of scientists adheres to the idea of *cosmic origin* of life. The occurrence of live bacteria in the meteorite, found in Antarctica in 1996, also suggests these microorganisms may dwell on all the planets of Solar system today, and this signifies that life on the Earth could be carried over from without. Robert Pored, one of the authors of the epoch-making scientific report: "If a meteorite or a comet can carry over saved harmless unimpaired carbon atoms to the surface of the Earth, it is quite possible that other organic compound may endure similar hard exposure. This means that it was cosmos that provided our planet with the materials, from which afterwards life appeared", has dotted all 'it's and crossed all 't's here.

The vestiges of life, found by American scientist Mc Key in the meteorite fragment in 1996, appeared to be cyanobacteriae, known as blue-green algae, which are in great numbers in the earth's body of water. After this discovery, as is known, the President of the USA Bill Clinton gave orders in person to reorganize NASA activity to the biological aspect of space research.

Indeed, it turned out that even oil is formed of cyanobacteriae and their productivity is so high, that it will be sufficient to make all deposits of the world. Many ores are also bacteriogenous!

Though cyanobacteriae live where sunlight is available, they breathe. So, there must be atmosphere on their planets. Academician Ivanov from the Institute of Microbiology of Russia assumes that there is life on Mars: bacteria live there under the ground.

The expedition under the guidance of Sabid Abyzov, organized by the Institute of Microbiology, having drilled the ice of Antarctic, found bacteria, which "had been sleeping" for 300 000 thousand years. When they thawed out, they came to life right in the scientific laboratory! Thus, the bacteria are able to travel alive on the comet nucleus for millions of years, crossing the galaxies.

There are material evidences of our contemporaries' contacts with UFOs on the territory of the former CIS. Our home edition "Presidentskiy Vestnik" (Presidential Herald) (127) under date of the 3d of September 2002 writes the following: "the remains of the airplane on the river Vashka in Komi were found in 1976, and in 1984 there was a meeting with a UFO and the tragic death of the aircraft crew of the flight № 7074 "Leningrad – Tbilisi". Captain Gotsiridze and the second pilot Kabachnikov died as a result of irradiation by UFO. To top it all, there was the explosion of a UFO in Primorskiy region, not far from the town Dalnogorskoe. The metal balls found then, as well as the remains from the river Vashka, have the structure of metal and features that cannot be attained with the help of terrestrial technology".

And it is natural, for if to admit, that 1-2% of stars from approximately 400 milliard of them, functioning in our Galaxy, are able to initiate life, it makes from 4 to 8 milliard planets.

Though, the subjectivity of universum attained its most developed form in the Earth conditions in the human organism, which completely recreated in incredibly diminutive size not only all diversity of the content, but also the most complicated functions of macrocosmos. K. Marx indicates to the first nature ascent to the subjective condition in the form of individual, he writes that the individual himself, given by nature, represents not only organic body, but he is this neoorganic nature as the subject<sup>1</sup>.

Presumably, the rightness of the hypothesis about the unity of the material and the spiritual as related to the human organism as the higher species of living matter — the only means of mediation of material and spiritual worlds — is no longer a matter of speculation or conjecture. It becomes clear if we take an example of a developed human organism: the biological component is the unity of the material and spiritual appeared in existence, hidden before from the eyes of an observer.

<sup>&</sup>lt;sup>1</sup> See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. – 2-е изд. – Т. 46. – Ч. 1. – С. 477.

Thus, the human, having integrated in himself the material and the spiritual, which is in the form adequate to the first nature, is an immediate creature of nature. As the natural essence he being an active work of nature, obtains natural forces and vital power<sup>1</sup>.

Next, the need arises to examine the pattern of interaction of the material and the spiritual in human organism, where they arrive at the utmost harmony. The fact is that, for instance, to provide constant interaction of the spiritual and the material in the structure of human biological organism, two special elements with their particular arrangements have formed and function. From the part of the material component, it is the psychophysical and from the part of the spiritual component, it is the psychological. Besides, to our way of thinking, there is a liberal share of certainty in the fact that the psychophysical and the psychological converge and self-realize energywise in the structure of human body.

Human's microcosm not only contains everything existing in Cosmos, but also has the faculty of its re-creation in Gestalt. To prove it, it is necessary to reveal a certain process, in which the subjective form retreats itself and transfers "its own" re-produced anew content to the basis. In other words, the method needs to be found, by which human organism, sprung from the material and the spiritual, withdraws itself and again gains its freedom from the subjective form. Then it all will come back to where it had started and the circuit will be closed.

The evolution of living substance resulted in the qualitative leap in its development. *It became a rational organized matter*. For that matter, science has already advanced the hypothesis about the fact, that "in a stage, when the living substance has 5–20 milliard neurons, the biological evolvement gives place to the nonbiological ones"<sup>2</sup>.

Thus, at last we have found the motion and the material, which drive the living matter outside its limits and transforms it into the rational organized matter. The last-mentioned attains the specific feature (quality) to subjectify the first nature intensively and initiate the second nature and social world.

<sup>&</sup>lt;sup>1</sup> See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. – 2-е изд. – Т. 42. – С. 162–163.

 $<sup>^2</sup>$  Казначеев В. П. Феномен человека: космические и земные истоки / В. П. Казначеев. – Новосибирск : Новосибирское книжное издательство, 1991. – С. 8.

The researches have long ago noticed, that the living substance carries together inorganic, organic and supraorganic content. Thus, for instance, P. Sorokin (*Man. Civilization. Society*) states the fact, that supraorganic phenomena in expanded form are found only in the human kind and in civilization. Other forms of the living world reveal only rudimentary forms of supraorganic matter<sup>1</sup>. E. De-Roberty, who gave the best definition of supraorganic matter and determined the extent of its abundance, pointed out rightly that the transition from inorganic to organic and then to supraorganic matter is gradual. Rudimentary mental processes, similar to irritability, aesthesia, senses, emotions and image associations, are characteristic of the living nature.

The Man, as the most mature specimen of living matter attains quite new features, as far as each neuron possesses a field, all of them are coherent, organized by conductors. Thus, the field form of the living substance, having no mechanical limits, appears. "It may stay in albuminous-nucleic life, though it may withdraw from it"<sup>2</sup>, - V.P. Kaznacheev writes. The time, when the human attains the field form, is a principal skip to elucidation of the nature proper of social world. "In the combination of two kinds of the living substance of the Earth biosphere, - V.P. Kaznacheev proceeds, - (to the certain stage of evolution) the properties and functions of its albuminous-nucleic form had predominated. The field form united with the first one, constituted its integral part, but was not functionally dominant. Hominids' cerebral neuron mass grows. Further psychophysiological, mental cerebration cannot be exercised only at the expense of actual neuronal-synaptic bond. The field form of neuron link becomes indispensable. The species, whose functional dominant of forms of living substance gives place to the other forms, hominids turn to progenitors of a man, and then to a man (the second leap, according to Y.Y. Roginsky, about 40 thousand years ago)"3.

In other words, the man, as a Homo sapiens, not only mediates the interchange of the material and the spiritual in one plane, but also begins to exercise the function of the universum transition from

<sup>&</sup>lt;sup>1</sup> See: Сорокин П. Человек. Цивилизация. Общество / П. Сорокин. - М. : Политизлат. 1992. - С. 156.

<sup>&</sup>lt;sup>2</sup> Казначеев В. П. Феномен человека: космические и земные истоки / В. П. Казначеев. – Новосибирск : Новосибирское книжное издательство, 1991. – С. 8.

<sup>&</sup>lt;sup>3</sup> Ibid. – P. 74.

one phase of motion to the other in another plane. Thus, the man begins to act as an element of the Universe self-motion overall mechanism.

Therefore, the man became the summit of the evolution of living matter. Practically it has resulted in the addition of the third informational system, catering for the biological organisms, to the two earlier functioning ones. To the first two informational systems relate, as is known, spontaneous informational structures of inorganic nature and spontaneous informational structures of organic nature. The Man, remaining in the new capacity, created for himself artificial informational structures, based on the phenotypical information. Besides, according to G.A. Yugay, formation and development of social information is one of the most important mega-evolution regularities<sup>1</sup>. The Man does not only form this informational structure. but also constitutes himself with the two programs of nheritance – the biological and the social ones<sup>2</sup>, phenotypic control prevails over genetic evolution thereto, that results in genotype stabilization of human population (according to I.I. Shmalgauzen). The acceptance of involvement of human personality to artificial informational structure is recognition of the fact of formation by it the so-called second nature alias society (noosphere).

Thereby, we have found in biological sphere that particular subject, which, withdrawing the contradiction between inorganic and organic matter, initiates supraorganic alias social form of universum existence, and the latter we must consider to be the medium, linking living matter with Cosmos.

Next, it will be recalled, that whatever specific form may man take in the Universe, his most general behavior and properties will remain the same by the action of substantial unity of the world. Though for the thorough analysis of the origin of social reality as a spontaneous product of living matter vital activity, it is necessary in particular to vindicate the inherent unity of human organism and the universum. For this purpose its quantum-wave origin and its faculty to sustain lasting, or to be more precise, natural link with micro- and macrolevels must be demonstrated.

Numerous pilot researches, carried out at the laboratories of radio-electronic study of biological objects in the Radio Engineering

<sup>&</sup>lt;sup>1</sup> See: Югай Г. А. Общая теория жизни / Г. А. Югай. – М.: Мысль, 1985. – С. 225.

<sup>&</sup>lt;sup>2</sup> See ibid. - P. 241.

and Electronics Institute AS USSR indicate to the wave-corpuscle origin of man. It turned out that there is a force field round the man as a biological object; it consists of 8 physical fields:

- 1) heat emission in infrared electromagnetic waves, traversing the so-called atmospheric transparency window;
- thermal radio radiation, carrying the information about the temperature and temporal rhythms of inner organs;
- 3) low-frequency electric fields with frequencies from 0 to 1 thousand Hertz, intensively veiled by body tissues;
- 4) magnetic fields on the same frequencies, they are used as the cerebration study;
- 5) acoustic signals, appearing at the infrasonic functioning of inner organs, muscles etc., below the human ear threshold of audibility;
- 6) high-frequency acoustic signals of noise emission, related to possible sources at molecule and cell levels;
- near-infrared and near-ultraviolet bioluminescence signals of electromagnetic waves optical spectrum, conditioned by biochemical reactions in the organism;
- 8) change of the composition and physicochemical characteristics of the environment, appearing at the metabolism exchange between it and the organism on human movement<sup>1</sup>.

By recreating macroobjects' properties and behaviour in his own structure, human organism transforms in organic conditions of existence to self-motion process, thus solving the contradiction between him and his vital activity. This contradiction in particular urges the evolution of supraorganic world. Though the faculty of life to self-motion, and therefore to the change of substantional conditions of its functioning is expressed not only in the change of its specific states, but also in the rate of its self-reproduction.

In this connection, the organic subject is the starting point of the universal (in comparison to the direct predecessors) interaction formation and, thus, the prerequisite of initiation of the social form of macroscopic objects motion. Then he himself is only *a transient state*, and solving of its contradictions is anthropogenesis, resulting eventually in formation of the subject with the universal body organization, capable to become the cause of itself in reality.

<sup>&</sup>lt;sup>1</sup> See: Вестник АН СССР. – 1983. – № 8.

Thus, at qualitatively determined level of the Universe organization as the result of natural selection we observe evolving of organic species, becoming the starting point of a new, viz. social phase of universum motion. The given regularity is not only of "local" (e.g., global) importance though.

The relation of substance as the basis of all specifically-material to itself as the subject must derive its own revealment. So, we are inclined to consider the transition of the phenomenon of biosphere to noosphere via this fact. It is because substance is essence, reproducing itself as result of world evolution, which beginning basis it presents. Genus of thinking individuals in particular becomes requisite means of its self-substantiation. It becomes therefore possible to perceive what the human is as a natural result of development only after cognition of the substance itself as subject.

Thus, the relation of substance as the basis of the world to itself in the form of the essence of its development result presents a universal relation of reality itself, the subject of which the genus of thinking individuals becomes. But then both: quantum vacuum, being the embodiment of materiality, and the essence of individuals are the poles of the given substantial ratio. It is not only prerequisite of the genus existence, but also the law of its self-development, which is therefore universal: without stipulation by it the existence of individuals as thinking ones is impossible. Speaking figuratively, they are nothing, when apart from it, but in league with it they are everything. Therefore, to exist as thinking individuals is to "comprise" the universal relation, to be the subject of the universal "field".

Though it is insufficient to indicate to the dialectical correlation of a human, the first and the second nature, as far as this is only a part of the proving of living substance mediating role. It needs also showing the way of formation of the second nature due to participation in mediation of living substance. This is the main task at the analysis of mediation process.

Thereby not genus itself is an actual field, but allied with cosmological process of its foundation, in dialectical unity with the general structure of the Universe evolution and its quantum basis. Being a specifically-material object, thinking subjects reproduce in them self-contradictoriness of substantial ratio. In this regard genus comprises "cosmic code", which we need to identify.

But if to compare the evolution of organic world with the development spiral, which it intrinsically presents, it will be wide at the

bottom and very narrow at the top: with time it spreads becomes narrower, and the spiral is coiled even more tightly, up to a human, who appears to be its most "tightly curled" turn. For the definition of this process the convergent spiral of development, which R.F. Abdeev has recently introduced, is quite true<sup>1</sup>.

Hereby the top point of the convergent spiral development (point "omega" according to P. Teihard de Chardin) presumably denotes that a man, due to generation of an intense electromagnetic field overcomes gravitation force and begins to move freely in Space, by the law of divergent spiral development, the definition of which was given, as is known, by Hegel. Thus, the idea of the "radiant humanity", introduced by K.E. Tsiolkovskiy, is not such absurdity, as it may first seem.

Dialectical "turning" of condition into conditioned, cause into effect, general into particular, reason into result is a universal law of comprehensive whole formation from cosmologic systems to social ones. According to it, the transformation of aggregate of biological objects and forms of their interaction into relatively coherent self-contained world of social reality, developing according to its own laws, occurs. Though in real process of development, according to Hegel (*Science of Logic*), the universal elevates all the bulk of previous content and not only loses nothing by dialectical progress, not only leaves nothing behind, but carries with it all acquired and enriches itself and coagulates in itself<sup>2</sup>.

While extending the research of the given problem, it is necessary to find a special power in the human organism and analyze the means of initiating of specific self-motion form, which we could rightfully call social reality alias the second nature. Though the task of social philosophy consists in deconstructing the contradiction, mentioned above and thus perceive the nature of social world as a particular form of macroobjects life self-development.

<sup>&</sup>lt;sup>1</sup> See: Абдеев Р. Ф. Философия информационной цивилизации / Р. Ф. Абдеев. – М.: Владос, 1994. – С. 102–148.

 $<sup>^2</sup>$  See: Гегель Г. Наука логики : в 3 т. / Г. Гегель. – М. : Мысль, 1972. – Т. 3. – С. 306–307.

## 1.2 The form of person's organism formation

At this point before us there is the task to confirm the hypothesis that biological life of a man is not only the mediation process of the dialectical interference of material and spiritual worlds, but also generation of a special kind of energy, from which the second nature is formed. Moreover, here we are to show the mechanism of the above-named process and deconstruct the source of social reality production in the structure of human organism. It is possible to do on the basis of study human organism morphogenesis, in which formation processes, as Hegel indicates in his work *Encyclopedia of the Philosophical Sciences*, are revealed most thoroughly and definitely<sup>1</sup>.

The procedure of formation as applied to the human organism makes it possible to deconstruct the process under analysis at the geological level, as far as morphogenesis as any self-organizing process does not depend on the individual's consciousness, but, on the contrary, determines it as a whole. Simultaneously with the recreation of the morphogenetic process, the process of origination of prelogical and logical ingredients, composing human substance, becomes clear.

Man's formation is a multistage process, which develops successively on the macrolevel. There must be minimum *three stages* in it. Two of them are connected with material and spiritual worlds, and the third one is the mediating stage, in which not only material and spiritual worlds "meet", but also, according to our hypothesis, the social world originates. *Human organism as strongly structured self-developing system has morphological and functional aspects therewith*.

It should be recalled that the procedure of formation as a gnoseological mould of morphological processes, progressing in the universum, is well described in known works of Hegel. Here we only technologically shall apply it to human organism in order to see the succession of the stages and the products of its self-development.

At the first stage of formation of the human organism the self-development of physical component traditionally called *individual* occurs. It is represented by three formation processes and by three specific products. Here such specific products are concerned as: a) *physical agent*, representing the autonomous life support system;

 $<sup>^1</sup>$  Гегель Г. Энциклопедия философских наук : в 3 т. / Г. Гегель. – М. : Мысль, 1975. – Т. 2. – С. 468,

b) brain; c) genotype as a generic product, ejected to the ambient for reproduction.

There is no need to pause upon the description of the given formation stage of the object under consideration, as far as it has already been described by physiology, biology, medicine and other sciences about a man. But, we consider that some elucidation of our point of view should be done in order to make the conceptual approach to a human as a source and producer of social phenomenon more clear.

The leading function of the first stage of man's foundation consists in his integration with, on one hand, the material ingredient of the universum, which he gains morphologically, due to availability of metabolism mechanism, and on the other hand, withdrawal from his bounds for interaction with the spiritual ingredient of the universum. The latter is provided by generation of specific morphological formation traditionally called grey substance alias brain. The feeding of human organism from the material ingredient is provided by metabolic exchange between him and the material world, though the pass to the second stage of formation is provided by the individual's acquisition of attributive quality of thinking.

The spiritual component of the universum here is represented by the information, which is coherent or in structural form. As is known, the information composes the essence of genotype ejected to the ambient. Due to it the inheritance of attributive properties occurs in the family of material organisms.

The second stage of formation of the human organism is related to the maturing and structuring of brain substance, and also its acquisition of an attributive quality to exercise synthesis of material and spiritual components of the universum into converted form. We know it from the available philosophical literature as *spirit* (soul). It should be recalled, that at this stage the encounter of the material and the spiritual worlds occurs. It is here that they exist as some independent and specific whole, which is in question. Here the material world is represented by brain as a specific kind of substance – the grey one, and its opposite – the noumenal world – by knowledge as a specific version of semantic reality, filling the spiritual world.

Routinely at the given stage the procedure of formation develops in three specific processes, each of which produces "its own" specific products, namely: a) *mentality (mind)*; b) *reason* c) *intelligence (thinking)* as the generic neutral product, ejected into the ambient.

It is necessary here to adduce our wider understanding of the main products of formation at this stage of human organism self-development, for they carry an important meaning in the given research.

The term *mentality* covers the morphological structure, meant for providing the behaviour of the main process – the production of reason as the main attributive feature of human. So, in this research mentality is related to, as it was interpreted by I. Kant in his work *The Critique of Pure Reason*, i.e. as the product, generated by emotional cognition and bearing the final and restricted form. Hegel, as is known, defined mentality as the faculty, which recollected ideas processes into genes, species, laws, forces etc., into *categories* in general in the sense that the material of cognition for the first time gains the truth of its existence in these forms only<sup>1</sup>.

In foreign science such structure is well known. It received its development in Geshtalt psychology (from Germ. Gestalt – form, idea, image, configuration). It is one of the leading schools in West-European, especially in German psychology of 1920–30th, which in opposition to atomism of introspective psychology (V. Wundt, E.B. Titchener) highlighted integral and structural character of psychic formations. Its main representatives are: M. Vertheymer, V. Keller, K. Kafka, and also very close to them in many respects K. Levin, K. Golstain, H.Grule, K. Dunker and others.

Mental faculty of a man is characterized by the fact, that in its scope the notions are not in the process of conversion and retain the stable form; they act as the complete theoretical "criterion" for empiric material, for construction of the results. This implies the abstract character of mental operations and results, giving the basis for the cult of abstractions and formalisms, for assigning a dominating, constructive value to them. Equipped with mentality only a man makes his own life more and more rational – the scope of utilitarian rationality.

Thus, the mental activity (due to its place in human organism formation) is meant for formation of faculty to produce reason. We agree with I. Kant. He writes in above mentioned work that any our knowledge begins with sense, passes to mentality (mind) and ends in reason, higher of which there is nothing for processing the material of observation and for giving reasons for the highest unity of

 $<sup>^1 \</sup>mathrm{See}$ : Гегель Г. Энциклопедия философских наук : в 3 т. / Г. Гегель. – М. : Мысль, 1977. – Т. 3. – С. 308.

thinking<sup>1</sup>. It was he, who first drew the difference between mind (mentality) and reason.

*Human reason* is already the form of thinking, which permits him to process given observations and ideas (conceptions, stereotypes) to scientific notions, i.e. to reproduce comprehensively the system of internal links, generating the given certainty, to reveal its essence. Reason, as Hegel wrote in *Encyclopedia of the Philosophical Sciences*, revealed itself before us as the unity of the subjective and the objective – existing for itself notion and reality<sup>2</sup>.

Reason defines intelligence (thinking) from a perspective of identity of its laws and actual categorical forms of material world, which is assimilated by a man during sense perception object activity, reproducing and reforming the outer world. Reason is expressed in reflection as the human faculty to examine the character of his activity and to develop the purpose of his behaviour in the world. That is why the formation of reflection faculty is indispensable for a man, in fact, it is one of his fundamental needs.

The theoretical knowledge appears on the basis of reason by the analysis of the role and functions of some initial dialectical contradiction in respect of the objects within disjoint system. Real and specific relation of objects with the help of reason acts as universal form or the essence of imageable whole. In the plane of notions reason performs such transformations, which cannot be performed in direct perception and imagination. If such transformations reveal new properties of the object, then the latter are literally specific result of theoretical thinking and its own content. Having originated as a specific means of constructing universal relation, reason in notions makes to toe the line of concretization perceptional data also. It even forms additional images of perception and imagination, in case it is required by the logic of the development process of genetically initial relation of the notion into its theoretical form.

Therefore, the central notion of reason is pattern, system, reflecting some original – another system, its structure, functions, qualities, – by different means. In other words, reason produces a specific product – the sense, which is sent by it in the form of quantum to the

<sup>&</sup>lt;sup>1</sup> See: Кант И. Соч. / И. Кант. - М., 1964. - Т. 3. - С. 340.

<sup>&</sup>lt;sup>2</sup>See: Гегель Г. Энциклопедия философских наук: в 3 т. / Г. Гегель. – М.: Мысль, 1977. – Т. 3. – С. 252.

megalevel, i.e. Semantic Universe. I define reason, – N. Amosov writes, – as follows: mechanism of composite objects operation using criterion of optimality through the operations with models. The word "mechanism" presupposes both: the structure and the algorithm".

In virtue of its specificity, reason, as product of the main formation process at the second stage, obtains its self-realization at the third stage, the final stage of man formation. So, Hegel (*Encyclopedia of the Philosophical Sciences*) was absolutely right, asserting, that reason "is something being the basis of both: consciousness and self-consciousness, therefore it is that first, that by means of withdrawal of these both unilateral forms, reveals as their primary unity and truth"<sup>2</sup>. And this may be accepted.

Thus, mind and reason are notions, expressing two mutually requisite attributive sides of the human organism. Mind capacity is specified by the peculiarity, that in its scope notions are not in the process of transformation and are equiform; they act as completed theoretical "mould" (criterion) for empirical material, for construction of results. Reason capacity, on the contrary, is specified by the peculiarity that here notions are plunged into the process of transformation.

As P. Uspenskiy wrote, "there is an instant in brain evolution, when the intelligence, obtaining only ideas (conceptions, stereotypes) and only simpler consciousness capable, almost suddenly becomes the intelligence, obtaining notions, language, and self-consciousness".

Intelligence at the given stage of human formation is a generic product, ejected into the ambient. This point in time interests us most of all, as far as mutual transitions "material – spiritual" is an infinite process. It means that intelligence producing is a geological process. It is free of restrains in space and time. Its links with material and spiritual worlds have spontaneous (creative) character and cosmic scale coverage.

To our regret, the term "intelligence" does not appertain to the philosophical thought of our country, in view of the fact that the classics of Marxism did not use the above-named notion in their philosophical works on the problems of the theory and history of cognition

¹ Вопросы философии. – 1992. – № 6. – С. 51.

 $<sup>^2</sup>$  See: Гегель Г. Энциклопедия философских наук : в 3 т. / Г. Гегель. – М. : Мысль, 1977. – Т. 3. – С. 225.

 $<sup>^3</sup>$  Успенский П. Д. TERTRIUM ORGANUM. Ключ к загадкам мира / П. Д. Успенский. – СПб. : Андреев и сыновья, 1992. – С. 227.

and thinking. Dialectic materialism did not specify intelligence as a gnoseological category different from the notion of thinking either. It even proved that thinking is not an initial faculty of spirit (soul), but is the brain function, which emerged and developed as the result of the forming influence of socially necessary labor activity on a human. In terms of this theory, the origin and development of intellectual faculty acquired explanation. By that very fact thinking loses the characteristic of exceptionality, with which historical-philosophical and psychological tradition endowed it and which was reflected in the content of the notion "intelligence".

While surmounting the idealistic interpretation of thinking the dialectic materialism practically scrapped this term as a specific notion. Though presently this approach to the intelligence proved to be inviable.

In the given research, we proceed from the fact that intelligence originates from Latin intellectus - comprehension, cognition. In ancient Greek philosophy the term "nus", interpreted as the token enabling to distinguish between human soul and the soul of a beast, has the closest association with the notion "intelligence". Intelligence, according to Plato, is a creative force, individual in itself, introducing a man to divine overworld. Aristotle has almost the same view, being at variance with Plato in interpretation of the source and character of conceptual content of things. The forms perceptible by the "passive" intelligence correspond to the latter In Aristotle's philosophy. This intelligence is perishable, temporal. Though "active" intelligence is also characteristic of human soul – it is a spiritual force of form realization, the force of thinking, which actualizes the thoughts of the "passive" intelligence. These properties of the "active" intelligence draw it nearer to entelect and are hereby in absolute expression the attributive of God. The "active" intelligence is a permanent unfading basis of human soul. For Plato and Aristotle intelligence is a force, which defines a man. Considering the power of knowledge as creative force, they formulated the fundamentals of idealistic treatment of intelligence, the influence of which has been traced throughout the development of idealism.

In medieval philosophy, the notion of intelligence occupies one of the foreground positions. It may be explained by the fact that ideal-

 $<sup>^1</sup>$  Успенский П. Д. TERTRIUM ORGANUM. Ключ к загадкам мира / П. Д. Успенский. – СПб. : Андреев и сыновья, 1992. – С. 227.

istic theory about creative power of reason acquires almost literal theological interpretation in ecclesiastical philosophy. The same approach to it remained in the philosophy of Renaissance and New Times. The works of St. Thomas Aquinas, D. Scott, N. Kuzanskiy, G. Bruno, F. Bacon, P. Gassendi, B. Spinoza, Th. Hobbes, D. Lokk, D. Jum, I. Kant attest to it.

Only Hegel managed to reveal important theoretical characteristics of theoretical thinking, considering dialectics as the motion of the subject itself. He calls it "intelligence" and regards it in his "Philosophy of the Spirit" as a constituent part of subjective spirit viz as "theoretical spirit". As spirit for Hegel is reality, he differentiates the consciousness, to which the object remains outward, and the intelligence, which perceives "rational nature" of the object and transforms thereby simultaneously the subjectivity as well to the form of objective rationality.

Subsequently the problem of intelligence was analyzed, as is known, in irrational vein by A. *Schopenhauer*, A. Bergson, E. Hartman, W. Wundt, and other researchers. Biologically it was analyzed by G. Spencer and representatives of pragmatism.

As a problem of experimental psychology, the problem of intelligence was suggested by Ebbinhausen only at the end of the 19th century. According to Piaget the nature of intelligence is dual - biological and logical. It is the higher form of adaptation to the environment, for in it direct and instant accommodations are outdone by the way of organization of stable space and time logical structures. Structurally intelligence as structuring activity is a system of vital active logical operations. Therefore intelligence is viewed by us as the aggregate of all cognitive functions of individual. The form of its functioning is pulsation of above-named substructures, and high-energy fields of intellectual power - specific plasma - are its products. We observe it presently on the screens of modern devices in the form of "flame-coloured pictures" - the microwave region radiation. Outwardly observed, this energy reaction looks like hologram, flashing in the human mind. May be that is why Plato (K. Popper. The Open Society and its Enemies) says that soul is the alpha of all kinds of motion, more senior and more deific than all things?<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> See: Гегель Г. Сочинения / Г. Гегель. – М., 1956. – Т. 3. – С. 242.

 $<sup>^2</sup>$  See: Поппер К. Открытое общество и его враги / К. Поппер. – М. : Феникс ; Международный фонд «Культурная инициатива». – Т. 1. Чары Платона. – 1992. – С. 272.

In other words, a man, functioning as a configuration (Gestalt), mediates the transition of universum from one form of being to another. It is the hologram of the Universe. Presumably, these transient processes, behaving at the given phase in the form of plasma, don't have "pure" phenomenal or noumenal state of universum, but are their qualitatively new unity, from which *social reality* emerges. Hegel (*Philosophy of Religion*) wrote that nature sacrificed itself, burning itself, in order that Psyche should emerge from this altarfire, and the idea should rise to its own element, to its own ether<sup>1</sup>. This element, strictly speaking, attracts us as potential source of social form of motion. The latter statement proceeds from the fact that here the channel appears through which the extra energy for creation of the social world circulates.

The third stage of human organism formation is something different from the previous two stages, because it relates to spiritual world. We have every reason to call it mind, highlighting thereby its link with the continuum of Semantic Universe. The human mind thereto may be considered as an idealized simulation of his spiritual life, which dialectically interacts with the spiritual component of the Universe.

In addition, it is the sphere of self-development of human mind or conscious spirit into a consistent logical organism. At this stage, reason obtains finally an intelligent form, because, as K. Marx wrote, that reason had always existed, but not always in an intelligent form². The artificial continuum can be exemplified by the book, in which the consecutive events are arranged into one story-line.

The material world is represented here by weak-electromagnetic interferences, forming ontologically stable functional organs. The carrier signals are the means detecting such specific functional organs thereto. The spiritual world is represented here by the senses, being the specific form of the Reason units existence. Such interconnection of the material and the spiritual worlds in cybernetics found its expression due to dual understanding of information as the unity of signal and semantics. "Information – G. Klaus and M. Yankov emphasize – is the unity of signal and semantics, where signal is the

<sup>&</sup>lt;sup>1</sup> See: Гегель Г. Философия религии / Г. Гегель : в 2 т. – М. : Мысль, 1975. – Т. 1. – С. 288–280

<sup>&</sup>lt;sup>2</sup> See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. - Т. 1. - С. 380.

expression of substance, and semantics is the expression and the product of consciousness".

A separate minute particle of the spiritual world is a *noumenon*. The latter should not be confused with a phenomenon, which represents the material world in existence. It is especially timely to draw distinction between a phenomenon and a noumenon while analyzing the occurrences at the stage of mediation. Here we factually deal with the human noumenon. It certainly is connected with the human phenomenon, but differs in essential features from it. *The phenomenal and noumenal characteristics definitively represent a human as the occurrence of universum in the planetary arena*.

During the procedure of formation of this stage there occur again three formation processes and three specific products, this time as: a) the product obtained from the environmental material and intended for pure internal consumption is the *consciousness* of human personality; b) the product requiring external application is human *self-consciousness*; c) the product of the generic process, ejected to the ambient is *superconsciousness* of personality.

We understand *consciousness* as rational behaviour of human brain, which has made up the deficit in attributive properties of the universum, which have spiritual origin and which it lacks because of interaction with the first nature. In respect of the source of consciousness Hegel (*Encyclopedia of the Philosophical Sciences*) writes that consciousness attributed the prior stage – the natural soul – to its subject<sup>2</sup>. We shall draw attention to the fact that human consciousness coincides with the attributive property of universum. The Consciousness initiates and exists in the neurons of human brain, and comes out as the sounds of the spoken language, the sign system of writing, gestures, facial expression, behaviour. It is a well-known fact.

It acts as conscious existence, the subjective image of outness, subjective reality, and in terms of gnoseology — as the ideal as opposed to the material and in close unity with it. The conscious peculiarity, its qualitative definiteness consists in the fact that in gnosiological aspect consciousness is subjective images of knowable (cognoscible) world, and in ontological aspect it is the semantic information

<sup>&</sup>lt;sup>1</sup> Янков М. Материя и информация / М. Янков. – М.: Прогресс, 1979. – С. 289.

 $<sup>^2</sup>$  See: Гегель Г. Энциклопедия философских наук: в 3 т. / Г. Гегель. – М.: Мысль, 1977. – Т. 3. – С. 257.

about this world in the human brain, the content of its thinking process and communication. According to D.I. Dubrovskiy "consciousness is ideal taken in gnoseological aspect of consideration, but it is material in ontological aspect".

Many scientists define consciousness as the result of some constant comparison of something circulating in brain with something extraneous. In this case the term "extraneous" means that spiritual product is subjectified from the streams of cosmic consciousness.

Interpreting external inflow, brain invariably compares it with its content. This comparison in particular is, we think, "the flow of existence, life being". Thus, consciousness is the human knowledge about outward things. It is that common content of the Semantic Universe, which enters the composition of the information field of environment and personality. The more substantial this common part is, the more stable for the human is the outer world.

The unique and the innermost in the structure of not only this stage, but also of self-development of a man as an integrity is the central product – self-consciousness of human personality. We understand self-consciousness as the point of reflection, due to which a man, on the one hand, processes the products of consciousness into the products of the spiritual world, and, on the other hand, it provides the transition of the content of semantic reality to the products of thinking. It is important to lay emphasis to the fact that human self-consciousness is limitless alias infinite process of universum self-motion, which is in subjectified form or in the state of microcosm.

Here we touch the innermost chords of the problem under consideration, so we shall support this item with arguments. Hegel writes (*Aesthetics*) that in its verity, pure and simple, spirit was consciousness and reveals its moments. Action divides spirit into substance and sense of substance and divides both: substance and consciousness. Substance, as total essence and purpose, opposes itself as disconnected reality; infinite average term is self-consciousness, which, being in itself the unity of itself and substance, now becomes self-consciousness for itself, unites the universal essence and its disconnected reality, elevates the latter to the former and acts morally, — whereas it reduces the former to the latter and accomplishes the pur-

 $<sup>^{1}</sup>$ Дубровский Д. И. Проблема идеального / Д. И. Дубровский. — М., 1983. — С. 5.

pose alias the substance only mental, it creates the unity of its selfness and substance as its own creation, and thus – as the reality<sup>1</sup>.

According to its place in the formation process self-consciousness must receive and receives its further development beyond human organism. Such are the properties of all the products of the second formation process. The science defined it by the term "mentality" (frame of mind) of a man. The mentality of social communities, trans-personalitiness, societal psychic, collective consciousness and then some. L. Gumilev's works on ethnogenesis are good material for providing illustration of the given thesis.

It follows, in our opinion, that we can continue our formation process scrutiny beyond human personality, i. e. in human environment. The procedure of the formation process is also the reason for the latter. It must concern the morphogenesis of social environment alias socium (society). We have literally "found by feeling" in our self-consciousness the moment of that phenomenon, which obtained extensive elucidation in European idealistic tradition<sup>2</sup>. And it is logical. "for the reason, possessing beliefs, the way out consisted in the formation of notions, for the reason, possessing notions, there must be an appropriate way out" – P. Uspenskiy justly observed <sup>3</sup>.

The given thesis is of prime importance for the further analysis of the place and the role of the man in the universum self-motion that is why we make a point of it. The existence of intelligence, the elements of which are not notions, but intuition, is an established fact (verity), and the form of collective consciousness, belonging to collective intelligence, can be identified and has already been identified as cosmic consciousness. Admitting legitimacy of collective consciousness and collective intelligence, we must consider the human personality as a specific functional organ of the universum. In other words, here we deal with the social process as a phenomenon of geological origin and of total character. To put it differently, due to the presence of self-consciousness, a man transcends his extent, by creating a collective intelligence, and thus directs himself to the Cosmos.

At this stage *super-consciousness* acts as a generic product, *which as a neutral product is ejected to outside ambient*. Originally this ejection

<sup>&</sup>lt;sup>1</sup> See: Гегель Г. Эстетика: в 4-х т. / Г. Гегель. – М.: Искусство, 1973. – Т. 4. – С. 83.

 $<sup>^2</sup>$  Успенский П. Д. TERTRIUM ORGANUM. Ключ к загадкам мира / П. Д. Успенский. – СПб. : Андреев и сыновья, 1992. – С. 227.

<sup>&</sup>lt;sup>3</sup> Ibid. - P. 228.

occurs to the first nature, but subsequently – to the society alias the second nature. The given process is a historically transient form of man's objectification of his essential forces. It is studied thoroughly and is widely represented in the available literature under the name of alienation¹. Many scientists and philosophers studied the given problem. Though for objectivity's sake we must admit that a major contribution to the understanding of alienation process was made by K. Marx. In order to be convinced in the correctness of it, it is sufficient to get acquainted with such his works as "Economics and Philosophic Manuscripts of 1844", "Capital" and others. So *the social product* appears, which, being alienated from its producer, turns into an independent force, dominating it and antagonistic to it. The domination of the social product over its originator is known under the name of fetishism phenomenon.

The procedure of formation represents human organism self-development as a geological process independent of a separate individual and consisting of three stages, each of which was accorded its recognition and even its own name. *The first stage* is the existence of a perceptional human being, based on sensible matter. It is called physical human. Otherwise it is called somatic capsule alias soma.

The second stage is known under the name of our own independent world within us, which should be called **psychonautics**. Otherwise it is called a human soul (interior). The latter is intended to "warm" other people. I. Kant (*The Critique of Pure Reason*) writes that what we call soul, everything is in permanent motion and doesn't have in it anything stable, but for (if you like) Ego (alias self), so simple because this idea (alias notion) is quite empty of content<sup>2</sup>.

Finally, the third stage is based on intelligible matter and is known as human mind. It as though totalizes the world and the individual Reason. Due to it, a man, under certain conditions, reveals, transforms, and actualizes the content of spiritual world. The latter factually occurs only at the stage of maturity of reality, when, according to Hegel ( $Philosophy\ of\ Law$ ), the ideal acts alongside with the real and in the image if intellectual realm frames up for itself the same world, comprehended in its substance<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup> See: Философский энциклопедический словарь. – М.: Советская энциклопедия, 1989. – С. 456.

<sup>&</sup>lt;sup>2</sup> See: Кант И. Критика чистого разума / И. Кант. – М.: Мысль, 1994. – С. 539.

<sup>&</sup>lt;sup>3</sup> See: Гегель Г. Философия права / Г. Гегель. – М.: Мысль, 1990. – С. 56.

The ontological unity of these three stages in human organism is of organic character, for the given integrity provides their morphological and functional connection between themselves. This organic unity is attained due to transformation and interpenetration of the material and the spiritual substrata into each other. We shall remind that the material ingredient of human organism is represented by the sequence: <a href="mailto:physical agent-brain-functional organs system">physical agent-brain-functional organs system</a>, and the spiritual ingredient, in its turn, by the sequence: <a href="mailto:senses-knowledge-structural information">senses-knowledge-structural information</a>.

In view of the aforesaid, a man should be considered as monad formation, i. e. as the integrity, able to represent all the Universe, compressed within a certain individual. Not without reason in philosophical literature a man has long been called microcosm.

The Russian philosopher and legal scholar I.A. Ilyin, studying the conditions of ensuring economically viable functioning of a state, wrote that living individuals represent "bodily – mentally – spiritual organisms; they not only want freedom and require it, but they must deserve it ... A man participates in the life of his state – as a living organism, which itself becomes a living organ of the state organism".

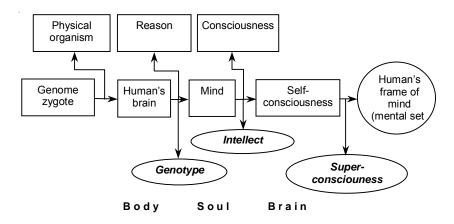
In view of the aforesaid the morphogenetic process (movement) of human organism may be presented as follows: (See scheme 1).

Contemporary philosophy has already given a meaning to and reflected the integrity of the given phenomenon. Thus, for instance, A.G. Spirkin writes: "A man represents an integral unity of the biological (organismal), mental and social levels, which are formed of the two levels: natural and social, inherited and acquired. And a human individual is not a mere arithmetical sum of the biological, mental and social, but their integral unity, resulting in the appearance of a new qualitative stage — human personality"<sup>2</sup>.

The Integrity of functioning of human's personality in environment is connected with the notion of human's *monad*. In 20th century social connections become more solid, thus the effect of monad is getting available not only for prophets and leaders (as it was the case in the past) but also for many people beyond the establishment

 $<sup>^1</sup>$  Ильин И. А. Собрание сочинений : в 10 т. / И. А. Ильин. – М. : Русская книга, 1993. – Т. 2, кн. 1. – С. 379.

 $<sup>^2</sup>$  Спиркин А. Г. Основы философии / А. Г. Спиркин. – М. : Политическая литература, 1988. – С. 457.



Scheme 1. The structure of human's organism

of modern civilization. The principle of pleiad (collective) is supplemented by principle of monad in holistic consciousness of people living in XX century. Such monad personalities as M. Ghandi, M. L. King, Y. Korchak, mother Theresa, A. Saharov, A. Solzhenitsyn, V. Tsoi, V. Listyev mean much more than even lots of political parties. The personality itself in its monad existence starts to function as a self-portrait of human community.

Meanwhile the scale of personality is measured only within the scale of those real tasks during the solving process of which it appears, and gets its certain shape, and expands in affairs that concern other people's interests, not only itself. The more people are involved, the more significant the personality is. Then the *power of personality*—is individually expressed energy of that ensemble of human relations which makes the group of accomplices and enemies of the individual, on the basis of which appears the given functional body, move. Therewith the personality preserves itself only if there is a constant growth of power and expending activities.

Hence, we see a human being as a summit of self-deployment of the first nature, its highest and unique product on the planetary arena. In other words, when the process of shaping for human body gets to the end the influence of the first nature on it becomes maximal. Unlimited universe gets finally a subjective image. Nevertheless, a human being having reached the top in development of the first nature, not only stops here but vice versa begins to live and act according to his own laws, giving life to the new so-called social reality. He himself becomes a locomotive of evolution in the Universe. Let's examine this process closer, because, as you know, a human being becomes a source of social form of the universum motion.

## Human body – the producer of the second nature

## 2.1 Personality – a functional organ in human body

In order to understand deeply the place and the role of human personality in self-deployment of the Universe we cannot limit ourselves to explanation of the reason of its appearance or algorithm of shaping of human's body. Here it's important to understand what its function in the mechanism of the Universe self-moving is. It means that in the Universe there should be a need for human as a biological object and result of self-deployment of the first nature in getting new skills. In other words, the personality appeared in the mechanism of its self-moving to have some special function. It can be only the function of raising the Universe on the new level of self-moving. The need of the Universe in such a function arose after it got the ideal subjective form in the human body and started to require getting back to objective form. If it's not so, then it shall be deprived of its most important attributive quality - movement. For such a qualitative leap the Universe has to pass from the biological phase of movement into social or from the first nature to the second. Let's remind that the latter appeared according to the laws of organic evolution of macro objects as well as beyond them; it exists according to regularities of organic processes, being at the same time beyond their limits. Otherwise transforming biological process into social shall be controversial, where the solution leads to arising of absolutely new form of the Universe movement.

Thus, considering all mentioned above we can make a hypothesis that it is this transfer of the Universe, which is a transfer into primary state, which a human personality shall ensure in the Uni-

verse. So far we don't see any other force of geological scale able to produce and ensure the stability of social form of movement, not only on the planet but also in the Universe. The first and the second nature having the same substantial base, the Universe only overflows from one phase to another, being all the time so-to-say "at home". Meanwhile, here we have a problem of explaining why its movement is "indestructible". But we won't concentrate here because we consider movement to be attributive quality of the Universe.

Everything that was mentioned above allows us to conclude that a personality is a procedural formation appearing during morphogenetic shaping of the human body. In other words, personality is a functional organ derivative from the human organism. In connection with this we can affirm that a personality as a functional human organ is of natural and not artificially brought from society origin.

This conclusion is extremely important for the further analysis of the problem because it does not coincide with the opinion on the origin, essence and thus, functions of the personality in the planetary system dominating in the local literature. Let's remember the fact that according to the leading attitude in materialistic literature "human essence" is not abstract proper for separate individual, but the totality of all relations in society¹. We can't but see that here there is no border between a human being and a personality. Nevertheless we emphasize that the idea of K.Marx of a man being a totality of social relations, was up-to-date and brilliant because it gave the possibility to regard actually this phenomenon as a function from social environment, eliminated the opposition of an individual to society. The world was no longer just a totality of "outer" things, but it became a human world, and human individual got social colouring.

Nowadays though the state of things in the sphere of cognition let us see the human from the other side and thus explain it in other way. As follows from everything mentioned above, the human being is biosocial and has biological substratum as a morphogenetic base, and personality is a moment of its functioning. Hence, we make an important conclusion that the essence of personality is functioning of human's own social essence that is produced through evolution from attributive qualities of the Universe by its subjecting. Otherwise

<sup>&</sup>lt;sup>1</sup> See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. – 2-е изд. – Т. 3. – С. 3.

how can society appear in general as a social product, if the man didn't have social appearing in natural way during self-deployment of the Universe? But we agree that this process is much intensified when the human's structure is being filled with available social content.

So long as the process of producing and accumulating of social content in different people goes different way, one man can differ from another by many parameters. Nevertheless, the most significant differences shall be those occurring during three individual gender processes of shaping that do not depend on consciousness or will. It's clear that we mean the differences originating from the content of genotype, intellect and super consciousness. Relatively independent functioning of these three gender products is actually a specific formation that we call *personality component of human organism*.

In its turn personality as an organ of human structure has the morphology able to provide its specific functioning in the mechanism of the Universe self-moving. This thesis has the right to exist because according to the laws of morphogenetic development of physical organisms, in case when there is a need in specific function in the body of human being a separate organ is formed to satisfy this need or any of the organs existing becomes multifunctional. E.V. Ilvenkov estimated this aspect of human self-deployment with the following words: "...the function set from outside creates (forms) an appropriate organ, "morphology" which is necessary for its existence certain connections between neurons, "drawings" of their direct and indirect connections. Thus, any "drawing" is possible depending on the type of function the human's body has to perform in outer world which is beyond its skull and skin. So there will be a certain "morphology" of brain (or rather cortex and its relations with other sections) which is required by outer need, condition of outer activity of a human, that totality of such individual's relations with other individuals inside of which this individual appeared to be immediately after coming to this world, that "ensemble of social connections" which immediately turned him into its "live organ" and put him into such a system of relations which makes him act this way and not another"1.

 $<sup>^1</sup>$  Ильенков Э. В. Философия и культура / Э. В. Ильенков. – М. : Политиздат, 1991. – С. 398–399.

So after shaping processes are finished the personality gets morphological shaping and steadily functions in the structure of human's organism as a relatively independent whole together with the physical body. It is a specific functional organ formed on the basis of biological substratum. Let's remind that functional organ shall be interpreted as any temporary combination of powers able to do work or ensure certain function in the system. So far as the personality is a functional organ, it is "spread" all over the human body and cannot be concentrated in one organ, for example, brain, intellect, consciousness, self-consciousness, ultra-consciousness, will, heart, soul etc.

The personality being created as a result of three shaping processes is absolutely new formation of procedural character. As a figurative example let's look at the guitar string which has one quality in calm state, and making sound it shows its wonderful qualities due to which it was put on the guitar. That's why here we can agree with the thesis of E.V. Ilyenkov saying that "personality in the body of individual fulfils itself, proceeds as a social formation totally different from its body and brain ("essence" or rather totality ("ensemble") of real, sensory and subjective relations of this individual to another individual (individuals) realized through objects".

Originally social content produced by human organism is in syncretic, not deployed form, but under favourable conditions it is incarnated in other people or stays still in materialized form due to the process of alienation and according to existing outer conditions. In other words, this is how *the new, functional organ of individuality appears*.

In order to cognize deeper the personality as a functional organ we have to examine processes or events happening inside individual's organics. In the "space" of social relations, in socially determined actions of people this quality only shows up, consolidates and accumulates. In other words, in cooperation with other people social content of a separate person only shows up and leads to animation effect. Other people are for a personality producing wealth of its social content into outer environment, a sort of canvas where it consolidates for others to view and use.

We explain this on the basis of the fact that this functional organ as well as everything else existing on the earth is determined by the

<sup>&</sup>lt;sup>1</sup> Ibid. - P. 399.

basis, i.e. the biological form of the Universe movement, and by conditions or outer social environment. Existence of the outer social environment results in the fact that content of inner social environment in order to get to outer environment shall have a certain quality, otherwise there is no sense in producing it. This is how the effect called culture appears.

Since personality as a functional organ is a force field, it is influenced by force fields produced by other people. Personality appears in human structure, then shows up and steadily functions in interpersonal space, forming the original sphere of accumulation of mind products. This is how *the noosphere* appears. This is a topological aspect of the problem.

In other words, we want to emphasize the statement that a personality being a functional organ is not caused by other human as it thought for example E.V. Ilyenkov, but vice versa it is directed on another personality and shows itself in the space of "real interaction of minimum two individuals connected through the things and materialized and corporal actions with these things". Here we remember K.Marx's words saying that a certain person is a "king" only if others behave as "servants". Meanwhile, the paradox is that they consider themselves "servants" because he is a "king". In order to understand natural origin of personality component of humans we have to analyze the phenomenon not only from the point of view of society, but following the nature way, i.e. to move the way the self-deployment of the Universe goes.

So, the personality is a system quality of human organism with the leading function of creating and maintaining in certain boarders the main characteristics of subjectified potential social world with its further transformation into a new quality – objectified social nature in order to let the universe flow freely from one phase of self-movement into another.

When the sub-structure of personality appears human organism gets a specific attributive property that never happened to be in any live organism so clearly – thinking. The latter appeared to support the vital activity of this functional organ in its norm. In order to ensure this we need constant production and reproduction, and in his case – reflexion of elements that form personality structure.

 $<sup>^1</sup>$  Ильенков Э. В. Философия и культура / Э. В. Ильенков. – М. : Политиздат, 1991. – С. 404.

Thinking is based on processing of information that functions in human's organism. As a result there is production and reproduction of personality's structure. We judge from the level of theoretical culture about the quality of the process. According to Hegel (*Philosophy of Law*), on the basis of diversity of interesting notions and subjects theoretical culture is developing, not only diversity of conceptions and knowledge, but also mobility and speed of conception and transfer from one conception to another, comprehension of complex and general relations etc., mind shaping in general, and also the language. Practical culture acquired by working consists in the need and habit of work in general, then in limiting of activity conforming partially to nature of material, partially and mainly to tyranny of others, and as a result of acquired due to this discipline habit for objective activity and generally significant skills¹.

Due to the mechanism of thinking human personality in its structure creates a specific hologram, i.e. it reproduces the Universe in whole. Philosophy is aware of its existence since long time ago. This is a well-known paradox of Lao-tzu "The greatest is in the smallest".

From this point of view the statement that a human is a microcosm shall be true. "From philosophic point of view it is interesting that adequate reproduction of outer world in human brain is done by encoding of sensor information according to principle "a part replaces a whole". It is this principle that underlies in symbolic representation of the world, due to this great amount of information can be stored in human's memory. Optical holograms are now well-known for their ability to get whole three-dimensional image of the object. This image differs greatly from the photo, since it is localized in the space and makes it possible to view the object from all the sides. Optical hologram is a result of interaction of interfering coherent radiations. Coherent accent light of hologram produces standing light wave. Interfering processes of such kind (holograms also) can be not only of optical nature. For holographic processes the most important is wave nature of interactions engendering hologram"<sup>2</sup>, -V.S. Polikarpov and V.A. Polikarpova write.

Nowadays the idea that the human is a universal space hologram is supported not only by physicists, neuropsychologists, but also by

<sup>&</sup>lt;sup>1</sup> See: Гегель Г. Философия права / Г. Гегель. – М.: Мысль, 1990. – С. 239.

<sup>&</sup>lt;sup>2</sup> Поликарпов В. С. Феномен человека – Вчера и завтра / В. С. Поликарпов, В. А. Поликарпова. – Ростов н/Д: Феникс, 1996. – С. 51.

philosophers<sup>1</sup>. In this connection the statement of Spinoza sounds in a new way: "Human's body is a particular case of endless extent", "human mind is one of the forms of endless thought".

Nevertheless western men can decipher or really understand such hologram or well-known paradox of Lao-tzu only after they perceive the notion "non-local information" in contemporary physics. In non-local compact order information cannot obtain locality, but it "permeates" and (or) "transcends" all the localities. Here we can't but pay attention to the words of R.A.Wilson affirming that "expression "information that does not have locality" resembles Hindu notion of Brahman, Chinese conception of Dao, "Big mind" of Oldos Haksli and "Consciousness of Buddha" in Mahayana Buddhism"<sup>2</sup>. Any of these conceptions shall imply, on his opinion, information without locality (if we acknowledge that they imply at least something).

Human brain as an organ of mediation enlarges the number of transfers from two in biological base (material – spiritual) to three mediations, adding the transfer "biological-social".

We conclude from here that human organism has *three signal systems*. Each of nature types that interact with it has its own specific channel of influence on it, so the person gets new degrees of freedom that enhance manifold the effect of his self-actualization in planetary and space systems. It's important to understand that the main essence of the vital process of human personality is not to accommodate to the environment but to create and implement inner programs of social assignment dictated by the basis, i.e. by the biological form of the Universe movement. Meanwhile active actions of individual directed at another individual returns in rebound to him, "reflects" from another individual as from an obstacle and thus transforming from the action directed at "other", into action directed (indirectly through "other") at itself.

However, now we are much more interested in natural aspect of the issue, i.e. morphology of the given functional organ. In the structure of personality as a functional organ four blocs are distinctly differentiated: material, spiritual, social and mental. This goes directly from what we mentioned above. Further we are interested not only in

 $<sup>^1</sup>$  See: Лешкевич Т. Г. Философия. Вводный курс / Т. Г. Лешкевич. — 2-е изд., доп. — М. : Контур, 1998. — С. 259—261.

<sup>&</sup>lt;sup>2</sup> Уилсон Р. А. Квантовая психология / Р. А. Уилсон ; пер. с англ. ; под ред. Я. Невструева. – К. : Янус, 1998. – С. 205.

their connections but also in their interaction. It's very difficult to explain, what is proved by discussions in modern scientific and philosophic literature. Not only wide polemics is here on the place and role of genetic and cultural programs in human's formation, but also there are deep examinations on separate aspects of this interaction.

Integration of three stages of human organism mentioned above into organic unity is ensured by weak electric interactions appearing on the basis of three types of informational systems. In human organism appear and function so-called standing waves that in myocardium muscles transfer substance and energy, and in structures of encephalon they bring information<sup>1</sup>. While each of three blocs – physical, spiritual and social – can communicate with others by mediating bloc, i.e. human psychics.

Depending on the incoming source we shall distinguish genetic (inner) and phenotypic (sometimes in literature called ecological), (outer) information. In totality they constitute information of human's organism as an open system.

Biological information is a print of inherited qualities and conditions of ontogenetic development of the organism in the structure of its informatidas, remembering devices of nervous system and probably other systematic and regulatory factors. Biological cybernetics allows on the basis of the law of informational conditionality of biological phenomena or the law of Waddington and the law of discrecity and continuity of biological information or the law of Morgan-Efrussi to imagine interaction of material and spiritual ingredients in the structure of human organism. Thus, concluding from the law of Waddington system and regulatory factors that determine development and vitality of the organism, factors that control the processes of metabolism and energy can be regarded as totality of controlling signals that bear the information on the present live system and environment. On the basis of genetic and biochemical researches certain substances were discovered - main carriers of biological information called informatidas or semantidas. There belong highly specific polymeric substances where in primary structure there is some information determining signs and features of the organism. Informatidas belong to nucleic acids (DNA, RNA) and proteins<sup>2</sup>.

 $<sup>^1</sup>$  See: Добронравова И. С. Синергетика: становление нелинейного мышления / И. С. Добронравова. – К. : Либідь, 1990. – С. 59.

 $<sup>^2</sup>$  See: Чернов Г. Н. Законы теоретической биологии / Г. Н. Чернов // Знание. – Биология. – 1990. – № 1. – С. 38–43.

Transfer of information with the help of informatidas is carried out by their reproduction on the basis of matrix synthesis and transfer from maternal cells to filial or through other communication channels. Transfer of information is possible from DNA to DNA (replication), from DNA to RNA (transcription), from RNA to proteins (translation). Reverse translation, i.e. transfer of structural information from proteins of RNA to DNA is most probably impossible, as well as the synthesis of protein in the body, out of translation process.

Initial program of organism development is set by genetic information encoded in DNA structure. It determines what we call determination of the base. In the development process this program is supplemented with ecological information that programs the further development within the boarders set by heredity. These boarders constitute a so-called norm of reaction which could be changing due to mutations touching the DNA structure. This is determination by conditions.

The law of Morgan-Efrussi shows the discreteness and continuity of biological information on molecular, cellular and organism level. Ruggedness of inherited base into genes combined into groups of cohesion – chromosomes, and genes – into nucleotide triplets, molecular discrete organization and qualitative predetermination of organism proteins being ultimate informatidas, conditionality of nervous activity by separate reflexes – all this expresses discreteness (discontinuity) of biological information.

Inner unity, integrity of biological information of any organism, impossibility to show this information as a simple sum of its elementary units show its continuity. In a certain expression (realization) of biological information its discreteness and continuity are revealed at the same time, conditioning unique process of informational determination of development and functioning of the organism.

A new science – wave genetics, created by P.P. Garyaiev, casts light on functioning mechanism of hereditary structure. This scientist supposed that "project of the building" is encoded in so-called main part of DNA, constituting 99% of its length. But it is encoded not in the chemical substances, but in physical fields which are formed around chromosomes and have holographic structure.

In wave genome there is compact information on all organism – its past, present and future. Moreover, molecules of DNA can exchange this information with the help of acoustic and electro-mag-

netic waves, including light. This hypothesis was brilliantly proved in many experiments. Researchers got to know how to fill DNA with energy of light and sound. They lightened and read unknown pages of genetic texts, starting ancestral programs that revived "dead" plants.

Scientists made a conclusion that *some human words have not energetic but informational influence on DNA*. Ancestral programs were damaged when researches were saying something horrible – or in other words cursed the plant. According to estimations of specialists words said with indifference – with loud or quite voice – caused mutagenic effect similar to the one produced by radioactive irradiation in 30 thousand Roentgen! We don't even want to think what would happen to a human after such word processing if 800 Roentgen is considered to be a lethal dose for him.

At the same time scientists proved that if processing wheat seeds killed by radioactive irradiation with special words, taken usually from prayers, there's a stunning effect: mixed genes, torn chromosomes and DNA spirals took their places and went together. Killed seeds became alive and sprouted. Scientists blessed through apparel, transferring human words into electro-magnetic waves, normal wheat seeds and they began to grow rapidly.

It seems that there is a huge distance between plants and people. But other researches showed that genetic apparels of all living creatures function according to universal laws. Scientists are persuaded that curses and blessings said through such apparel could provoke in human DNA changes similar to those happened in plants. We find confirmation of this thesis in collective monograph "Principles of organization of social systems". "One of the most specific features of substantial information, - as the authors write, - is considered to be its "non-power" character of influence. Non-power influence shows when the energy of signal carrying information is not significant, meanwhile the energy of reaction of receiving system is considerably higher. It is also supposed that transformation in the informed object is a result of influence of signal content, but not its energy. This lets some people speak about non-material character of information, while others affirm that information being material is not the matter itself, but it is its specific property".

<sup>&</sup>lt;sup>1</sup> Принципы организации социальных систем: теория и практика / под ред. М. И. Сетрова. – К.; Одесса: Выща школа. Головное изд-во, 1988. – С. 19.

The scientists made a striking conclusion that DNA hears human language. Its "ears" are adjusted to hear such acoustic and electromagnetic vibrations. Moreover, the molecules of inheritance get also light information: the human can read the text not aloud but mentally, and its content will reach the cell nucleus. But the main thing is that DNA is not indifferent to phenotypic information it gets. The prayers, tunings, good incantations, word charms are probably a sort of strictly selected vibration and energetic code with its specific "curing" structure, since they awoke healthy tendencies in genetic apparel's functioning, and bad incantations and curses, vice versa, engender opposite processes.

Nowadays the scientists went deeper into the DNA molecules and saw there the encoded information, which makes us similar to bio-computer with the complicated genetic programs. The Specialists from the institute of quantum genetics are trying to decipher mysterious text in the DNA molecules. Their discoveries persuade us more and more that first there was the Word, and we are the children of Super brain.

Recently the scientists made an amazing discovery that the DNA molecule consists not only from genes responsible for the shape of the face, ear, eye colour etc., but mainly from encoded texts. And these texts take 95-99 per cent of all chromosomes' content! And only 1-5 per cent take well-known genes which synthesize proteins. Main part of information carried by chromosomes is unknown for us.

On scientists' opinion the DNA is a text, the same as the text in the books. But it can be read not only letter after letter and word after word, but you can start from any point, because there is no space between words. Reading this text with every following letter we get the new texts.

It is also possible to read in opposite direction if the line is flat. If the chain is in 30 dimensional space like in cube, we can read in any direction. Text is not stable, it moves constantly because our chromosomes breathe, move and generate plenty of the texts. Working with the linguists and mathematicians of the Moscow state university we discovered that the structure of human language, text of the book and the DNA sequence structure are mathematically close, so those are really the texts in languages that we don't know so far. Cells are communicating among themselves like people – genetic apparel has an immense amount of the languages.

Our chromosomes implement the program of organism building, electromagnetic image of the future organism is created from an ovum

and its social program or what we call destiny is written there. It is another unstudied peculiarity of genetic apparel that is implemented, particularly, with the help of one of the type of bio-field – laser fields that are able to produce not only light, also sound. This way genetic apparel shows its potentials through the holographic memory. Depending on the light for holograms we can get different image. And we can read it also with the same light it was written. And our chromosomes radiate wide spectrum – from ultra-violet to infra-red, so they can read from each other different holograms. As a result there is light and acoustic image of the new future organism, and in progression – all the next generations.

Here we face the problem of reconsidering Darwin theory on origin of life on the Earth. Since the program written in the DNA couldn't appear as a result of Darwin theory – in order to write such amount of information the time needed is much more than the period of existence of the Universe. The genetic information could be transferred on the distance, as the DNA molecule can exist as a field. A simple example of transfer of genetic material – viruses getting inside our body. This principle of the "immaculate conception" can be used to create a device which is able to get inside the human's body and influence on it from inside.

Such comprehension of the essence and content of the DNA can use its new qualities in human's favor or to harm people. Using the DNA molecules scientists created a laser. This is a potentially dangerous thing, as well as scalpel: you can either cure or kill with it. We can say that it is the basis for creation of the psychotronic weapon. The principle of work is as follows: at the basis of such laser there are the simple atomic structures, and at the basis of molecules – DNA texts. This allow to introduce into the part of chromosome certain text and those DNA molecules shall be transferred in the state of laser, i.e. it's needed to effect on them so that the DNA molecules start not only shine but also produce sound – talk! In this moment the color and sound can penetrate into another human and introduce another genetic program to him. And the human changes, he gets other characteristics, starts to think and act otherwise.

So, the genetics discovered many things and got Nobel prizes, after they faced a stunning fact. So-called letters of genetic code considered to be the base of all the genetic programs before are indeed responsible only for synthesis of proteins. This fact proves that material and spiritual are closely connected also on genotype level. But

in order to build a huge building of the human body from those "life bricks", much more complicated programs containing major part of all the hereditary information are needed<sup>1</sup>.

Since long ago mankind is trying to consider the influence of the "outer" programs on the development of people with the help of astrology, dianetics and in some other ways. Here the most attractive is a hypothesis that we get them from Space due to sun and star rays that cause photosynthesis processes in living systems.

Meanwhile functional connections of stages between them is multiply dubbed on the level of material and spiritual, since they are formed from twofold substance origin – quant vacuum. On the physical level, as V.V. Nalimov is saying, "neuropeptides connect the nervous, endocrine and immune system in one "informational network of two directions". On the semantic level the qualitative specification of the processes of reflection in different levels of organization of universe depends on the quality (type) of correspondent information.

Meditative role of human psychic is interesting, especially when we explain the mechanism of interaction of material, spiritual and social in human's structure. This is caused by the presence of "soul" due to which a human is able not only function in physical and semantic space, but also to engender social world due to extra energy coming from inter-transfers "material-spiritual".

Mechanism of human's connection into three world mentioned above is known – it is reflection. As I. Kant wrote in his work The Critique of Pure Reason, reflection was such a state of soul where we first of all try to find subjective conditions due to which we are able to form notions<sup>3</sup>. If we transfer the Kant's words to the modern language, it appears that a human produces knowledge from which the second nature is being built afterwards. It is in the process of movement in one plane, and in the process of movement in another plane we get the eruption of free energy. Further we'll examine this aspect in more details.

¹ See: Доктор Нострадамус. – 1997. – № 7.

 $<sup>^2</sup>$  Налимов В. В. Спонтанность сознания / Н. Н. Налимов. – М. : Прометей, 1989. – Р. 103.

 $<sup>^3</sup>$  See: Кант И. Критика чистого разума / И. Кант. – М. : Мысль, 1994. – С. 196–197.

This is a very important circumstance, since given stage has a function of mediation. We cannot but see that on the first stage the process of shaping is running in phenomenological regime, and on the third one – in the noumenological. On the first stage its product is consumed as a material satisfying the human needs, substance or structural information, and on the third one – information in the form of meanings. On the second stage this information gets outside in the form of knowledge from which, according to hypothesis of V.I. Vernadskiy, is formed the reality we are interested in.

Specific character of the mediating stage is in the fact that the universe is here in such stage, in which it cannot be while it is neither in material, nor in spiritual world – it's *in energetic form*. Interaction of material and spiritual worlds is in the form of release or consumption of energy. Penetration of phenomenal substance into noumenal is a process of release of psychic energy. The mode of entry of these worlds – one into another – is called fluctuation. Teihard de Chardin writes in his work *Phenomenon of Man* that without any doubts material and spiritual energy are connected somehow with each other and continue each other. In the basis there should exist and act a single energy in the world. The first thing coming to mind is to imagine "soul" as a focus of transformation where coming from different nature channels power of bodies is concentrated in order to localize and transform into beauty and truth<sup>1</sup>.

This is the reason for another interaction of intellectual world with phenomenal and noumenological. During the transfer from the second to the third stage of shaping the division of spiritual into the unconscious (pre-logical) and the conscious (logical) takes place. We mean by this that mind is not identical to spirituality. And it is mentioned in literature. F. Shelling writes that the intellectuals are double-fold: blind and unconscious or free and conscious; it is unconscious in contemplation of the world, conscious – in creation of ideal world². Here the process is running as reasonable inner activity – thinking – and reasonable outer activity – labour. They blend into organic entity, producing activity of people as a result of thinking and labour.

 $<sup>^{1}</sup>$  See: Тейяр де Шарден П. Феномен человека / П. Тейяр де Шарден. – М. : Наука, 1987. – С. 60.

 $<sup>^2</sup>$  See: Шеллинг Ф. Сочинения : в 2 т. / Ф. Шеллинг. – М. : Мысль, 1987. – Т. 1. – С. 182.

Marx showed this moment during examination of production process on the example of differences between a worker and a bee.

Synthesis of physical and spiritual energy shall be regarded as intellectual energy of people, where the new reality appears – a social world. Its gnoseological analogue – entelechy which is activity or ability of noumenological or phenomenological substances to act during the change of states $^1$ .

Our understanding of essence and understanding of this notion, mystical for our social philosophy, – entelechy – the same as it is presented in Aristotle's philosophy and monads of Leibnitz. In other words, entelechy expresses unity of material, formal, valid and target reasons<sup>2</sup>.

When material world goes out to the objective reality through the second stage, a human is functioning as ontological organ able to do physical work. If spiritual world goes outside, his qualities called spirituality are shown. Altogether they form the system of attributive qualities, known to us as abilities. Abilities have creative functions which coming to outer environment as a neutral product "freeze" there and exist as a second outer nature of human. Here we admire the workouts of philosophers- existentialists who stand up for the idea of transcending of social world from the inner content of personality.

In such a way, energy circulating in the structure of human biological organism and getting intellectual takes cultural form, is a base for producing social world. In connection to this we need to divulge the sense and the content of category "intellectual", since intellectual, to our mind, is that clot of energy in the structure of human body that after being untangled let us estimate energetic potential of subjectified social world.

In order to solve this problem we need to examine the sense of notion "intellectual". Algorithm of self-deployment of any notion as a whole is described in Hegel's *Science of Logic*. Judging from this guideline we shall try to divulge the essence of notion "intellectual" according to Hegel's scheme: existence – phenomenon or objective reality – reality. Let's pass to brief characteristics of the above mentioned stages of self-deployment of notion "intellectual".

 $<sup>^{1}</sup>$  See: Философская энциклопедия: в 5 т. / гл. ред. Ф. В. Константинов. – М.: Сов. энциклопедия, 1970. – Т. 5. – С. 563.

<sup>&</sup>lt;sup>2</sup> See ibid. – P. 564.

We start with looking at the essence of intellectual as a reflection of the universe in itself. The essence of intellectual shall be regarded as original form of the universe that is subjectified in living substance and thus opposes it as substantial. According to our hypothesis a new quality appearing on the base of organic synthesis of physical and spiritual origins in people engenders *entelechy*. Hegel characterizing it writes that to expose itself is its own activity<sup>1</sup>.

Further movement of intellectual from existence to phenomenon is a transfer into something absolutely opposite. In order to ensure constant interaction of material and spiritual sources two special organs with their original mechanisms are formed and are acting in the structure of human personality. From the side of material component – it's psychophysical, from spiritual one – psychological. In the structure of human body psychophysical and psychological meet together in the form of energy. Energetic impulse is as Morse alphabet in nature when each splash of energy - no matter in what form it is light or sound – is followed by a certain quant of informational message – meaning creating according to holographic principle images in human's brain and running processes of assimilation or dissimilation in physical ingredient of human's body. Transfer of chemical autocatalysis into biological self-organization and self-reproduction (self-renovation) is connected with information as a measure of "heterogeneity in energy (or substance) distribution in space and in time". - V.M.Glushkov wrote<sup>2</sup>. This transfer is in form of weak electromagnetic interaction. Electromagnetic field is governed by human will. Human being a creature able to create new things, having consciousness and will is the only living creature who, according to Marx, makes his vital activity a subject of his will and his consciousness<sup>3</sup>.

So we finally found the movement able to lead the products o social origin and assignment out of human organism. The latter gets specific quality of subjectifying of the first nature and engendering of society. Living substance, especially clever one, getting into contact with space environment can get out of it different products, among which, in the first place, is coming active stream of protons, gathers and distributes in biosphere the energy in the form of irradiations,

<sup>&</sup>lt;sup>1</sup> See: Гегель Г. Наука логики: в 3 т. / Г. Гегель. – М.: Мысль, 1971. – Т. 2. – С. 184.

<sup>&</sup>lt;sup>2</sup> Глушков В. М. О кибернетике как науке, Кибернетика, мышление, жизнь / В. М. Глушков. – М., 1964. – С. 53.

<sup>&</sup>lt;sup>3</sup> See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. – 2-е изд. – Т. 42. – С. 93.

which it transforms in the earth environment into free energy, able to work.

It means that a human getting in touch with outer environment filters space flows of material-energy-information, the same as jelly-fish filters sea water getting the most necessary for it things out of it and at the same time cleans the sea. In such a way, F.Engels was right when he says that power is something put into organism from outside, and not inherent in it, inseparable from it<sup>1</sup>.

Further we'll look at the process of mediation in clever living substance – human body. From physical side interaction looks as heaving of inner force field of a separate human and waving of outer energetic informational field of social community – group, collective, ethnos, people and humanity.

Here it's important to remember that all the genetic information of bio system is concentrated in macromolecular package, and getting out necessary information, its structuring in sequence of metabolic processes is determined by dynamic function of the field. In modern biochemistry there is a hypothesis that sodium-and-potassium penetrability of membranes shall be regarded as material expression of human's thinking<sup>2</sup>.

From the above given model of the Universe self-deployment on different levels we make conclusion that after impulse from space consciousness macro level enriches itself, and after impulse to the basement of space consciousness macro level enriches with its content the Universe. In such a way we can suppose that macro level where biot of living substance is deployed as an organic unity of reasonable and unreasonable is giant quant-and-vacuum pump of membrane type in the Universe organism that transfers the Universe material ensuring at the same time its modification. The process of modification is a transfer of universe from phase of materialization to phase of dematerialization.

Since macro level as universe in total has quant-wavy nature, everything appearing here shall have quant origin and pulse in the rhythm of living construction described here above.

In such a way the solution to dialectical contradiction between psychophysical and psychological or sensory consciousness and

<sup>&</sup>lt;sup>1</sup> See: Ibid. - T. 1. - C. 597-598.

 $<sup>^2</sup>$  Донченко Е. А. Социетальная психика / Е. А. Донченко. – К. : Наукова думка, 1994. – С. 32.

rational process of experience and realization is an inexhaustible source of material for building social world. Human bio field coming from thoughts, feelings, desires of million and billiard people and functioning in the form of weak biological currents in nerve cells and also in weak and extra weak lepton electromagnetic impulses irradiated by cells forms specific space called *noosphere*.

Further development of the essence of intellectual happens on the third stage of movement —reality. Attribute of "intellectual" is *egregore* which we comprehend as a pulsing force field. Meanwhile we can't but mention that scientific thought of mankind is its most rational variety.

A thought is a totality of neuron interactions in human brain that are available for examination by quant bio-energy-informatics that studies processes of exchange of weak and extra weak energy-informational signals. By the way, it helps to throw a new look on phenomena of telepathy, telekinesis, clairvoyance, bio-location, poltergeist, levitation, reincarnation etc. For electron neutron processes are an energetic cloud, stain with individual picture and weight. And, naturally, with its magnetic, gravitational, photon copies that inimitably fill in the noosphere.

A thought being materialized goes out of head. In physical meaning this phenomenon comes before us as a social world, naturalized by a human in subject-thing and process-informational form. In such a way egregore is the energetic force field from which is created a pattern of social organism due to the forces of space compression.

As we see, notion "intellectual" is quite complicated formation. It appears as a result of logical movement of certain original notions, i.e. phenomena in human's organism. That's why we show its model, since it will help to fix this logical construction in mind faster and stronger. (See scheme 2).



Scheme 2. Structure of category "Intellectual"

Now we can offer a work definition of the category "intellectual" which should be understood, at our mind, as the way of liberating by a human in the process of mediating of dialectic interaction of material and spiritual origins of universe of free energy, which from the beginning comes as strained inside entelechic form and then deploys in phenomenon as a total reflexive process which reveals itself in reality by pulsation of specific force field – egregore.

Now that we look at functional aspect of human body from the point of view of social world, it appears that the mind or rather human intellect comes into the first plan representing both physical and spiritual components of universe. That's why from this point of view P.D. Yurkevich was right when he wrote: "Mind is a summit, and not the root of spiritual life of a human. Mind is a master of soul, but it's not the power which engenders love for beauty and

good: love grows from the depth of the heart. Spiritual life appears before the light of mind".

Thus, from intellectual material of quant-wave origin a specific form of clever living creature is created, i.e. social life. Obviously in some little time scientists-biochemists will show us substantial base of social life in the form of family of social organisms. It's possible that elementary particle of social field shall be a *nooman*.

"Qualitative nodosity" of universe that we examined in the structure of clever living substance is integrally captured by the term "vital activity", in this case – that of human body. And ingredient "life" reflects interaction of material and spiritual, and "activity" – production of free energy able to form social environment.

So, during analysis of shaping of human personality we found mechanism creating products that go beyond the limits of human's organism. We also showed three types of products of the Universe self-deployment where human life takes place. *One* of them is unity of Physical organisms, *another* – unity of logical organisms – senses of spiritual life, and the *third* – unity of social organisms.

Herein, natural forces are meant for organization of interaction between subjects *horizontally*, i. e. on macro level, and informational products or semantic quanta – for communication with other courses of similar irradiations *vertically*, i.e. on mega and micro levels. At the same time, presence of *two circles or types of communication* 

<sup>&</sup>lt;sup>1</sup> Юркевич П. Д. Чтения о воспитании / П. Д. Юркевич. – М., 1965. – С. 198.

means presence of  $two\ types\ of\ backlink$  in this system. Material human construction has planetary purpose, this is why human stops his physical existence when exhausting his material resources.

Our analysis of social world shows that it exists as a functional or derivative variable from the first nature. Herein functionalism as a stream of world philosophic thought proves to be able to disclose many of its features.

Herein it is understood that primarily second nature exists in the structure of human body as virtual reality, i. e. social world in potential form takes place. Special conditions are required to express social potential of human. Individual has to be able to drink, eat, sleep, breathe, reflect, communicate etc., i. e. to satisfy his primary vital needs. They form a specific environment outside the human, which we call social, because it is a product of integration of many individual rejection products.

Thus it is possible to consider proved that molding of human personality, viewed by us as a process of subjectivation of the first nature, leads to explanation of the process of appearance of social form of the universe. Herein we clearly see how the molding scheme transforms original form of substance towards the second nature from the first one. Here lies the lower boundary of the social world. Original substance — material-spiritual substrate transformed into intellectual form by human organism is the material subject to changes during transformation procedure. Morphologically it is a procedural formation or a functional organ in human body.

Herein human personality is presented as an absolute base for social world where *first* the essence of the social is primarily given as general basis for grounds; precisely, *human personality identifies itself as a social form and a social matter and contains in it a social contents*.

Second, human personality is a certain basis for ground of specific i. e. social contents; because relationship of grounds by realizing itself becomes outer to itself, it passes to conditioning mediation. Thus its vital activity is a dynamic process of self-realization. That is why, as any change, its life is born in logic categories of action and reflection.

Third, human personality suggests a specific conditions of vital activity for production of social world – free exchange with environment by substance, energy, and information; but condition of vital activity as well suggests it as a base; unconditioned is their unity,

the core of the subject, which through mediation of conditioning relationship passes to existence.

Fourth, volume and intensity of production of social reality is wholly dependent on the level of human's development and richness of inner contents, fed by material and spiritual components of the universe and practically unlimited. Form of production and level of development of social phenomenon depend only on conditions of human.

Fifth, and most important, personality mustn't be connected to brain, reason, intellect, conscience or self-conscience. It is an attributive feature of human body. Its structure is "spread" through all human body, and its elements are functional organs, appearing during self-movement of human body as a whole.

Finally it is possible to analyze morphology of personality as a functional organ in the structure of human body. Reminding that it appears because of the basis – biological form of movement of the universe.

## 2.2 Morphology of human personality

The key to exploration of morphology of human personality is the idea of possibility of creation of an informational double of human body. Herein we proceed from human body being three inseparable components: physical body (material world); semantic construction – senses (spiritual world); and knowledge as a product of human intellect (social world). In other words, the task here is to imagine a human personality as an integral system. It can be done by creating its informational copy. Such approach to human in science is still not realized though planned.

The informational structure proceeding from its specific function is a unity of stable connections between its elements and laws of these connections. It is an indispensable attribute of all existing objects and systems, let alone intelligent living systems where it predominates. That is why morphology of human personality is a complicated system of construction and inner form of its organization, i. e. structure where at the same time exist at least several forms of the universe. Personality component is only one of the elements of such an integrative system, built on cultured information or knowledge.

The morphology of human personality as a product of natural process appears out of human need to perform a specific function in the structure of social organism. It the law of all nature: at first there appears a need in a function, and then a morphological organ is formed.

Without long keeping reader's attention, let's give an heuristic model of human body, proved by us during a separate theoretical analysis. Herein we proceed from the fact that natural basis of human is the *biological component* as a genetic factor determining establishing of functioning and further self-deployment of the personality ingredient. Constructively such a base is, according to our hypothesis, two main blocks – physical and spiritual. Third block is psychic. Physical block mediated connection of human with the Physical Universe. Its self-regulation life is *feeling*. It can also be called pre-logic. Spiritual block is an expression of Semantic Universe in human structure. In its turn, its self-regulation life is *consciousness*. It should already be called logic. Psychic block mediates reactions of pre-logic and logic in human structure.

Let's pass to review of their mechanism. *Physical block* has *three substructures* known as *genotypic* (hereditary), metabolic and subconscious.

**Genotypic (hereditary) structure** of human should be understood as a system of his attributive features inherited from parents. *Its main function* is to ensure succession of physical development of human as a representative of a certain kind.

**Metabolic substructure** of human should be understood as system of his attributive features, appearing under action of objective natural factors. *Its main function* is to ensure the process of functioning and development of physical body in the way of active adjustment to dynamic natural environment by improving of attributive features of physical body.

**Psychophysical substructure** of human should be understood as a system of his attributive features appearing during dialectic cooperation of genotypic and metabolic substructures of human. Its main function is to ensure integration of process of cooperation of genotypic and metabolic substructures in the process of development.

Correspondingly, *hereditary mechanism*, *metabolic mechanism* and *perception mechanism* appear and operate there. Operation of three above-mentioned substructures of physical component is united, as it was already noted, by a common function of feeling. Functioning as an organic system, they form a *poly-mechanism of feeling*.

**Spiritual block** is a logic continuation of physical principality of human, but has an own unique functional independent life. Constructively it consists out of **three substructures**: *psychological*, *sociological* and *voleological*.

**Psychological substructure** of human should be understood as a system of his attributive features of reflection, appearing under action of objective natural factors. *Its main function* is ensuring adjustment of human to conditions of spiritual environment and ensuring ontogeny.

**Sociological substructure** of human should be understood as a system of his attributive features, appearing under action of objective social relationships. *Its main function* is ensuring the process of adapting, active adjustment to dynamic social environment with different social means, in other words, ensuring the homeostasis.

Voleological substructure of human should be understood as a system of his attributive features, appearing during dialectic cooperation of psychological and sociological substructures. Its main function is ensuring integration as a process of establishing, maintaining, and, where necessary, creation of optimal connections inside the system called spiritual human life. Activity of this block is known as poly-mechanism of consciousness, containing mechanisms of motivation, socialization and volition in its structure. Thus, in the process of formation of morphology of human personality six specific substructures are formed, genetically belonging to two blocks - physical and spiritual, having their morphological elements. Psychical component which can also be considered as a specific block, consisting of psychophysical and psychological substructures, is a functional organ with a structure we do not know yet. Thus the last shall be considered as a process of *mediation*. During cooperation of material and spiritual blocks thanks to psychic activity a new quality appears, called biological organism. Information which ensures vital activity of this temporary formation in biocoenosis is called biological.

Herein every aforementioned substructure of human has a relative independence not only when forming but also on the stage of mature functioning because it has a specific mechanism for self-movement.

During a separate research it was proved that these mechanisms are homogeneous, because its elements are pre-logic (archetypes) and logic (categories) sub-products or clots of the Semantic Universe. Concepts or driven thereof weak electromagnetic waves, popularly

called magnetic storms, are the middle term mediating appearance of pre-logic and logic origin products. In both cases corporality attributable to all three stages of molding of the human body, whose material particularity was described above, is only an instrument of spirituality.

All factual material of specific history of living organisms i. e. their genealogy shows that evolution and namely most typical morphological process generally follows the way of amplification of organization. Main principle of this progressive amplification of organization is a proved by Miln-Edwardson principle of differentiation, based on division of labor. The whole, carrying only general functions, is divided in parts with different more specific functions. The whole differentiates, and parts specialize. Separate parts receive their independent functions. As though they autonomise. But such autonomization expresses itself only in separation of its specific function. Life of any part if ensured by a number of common functions, especially by exchange functions, essential for life. In these functions any specialized part even in the family of physical organisms is always connected to the main organism, and the more it is specialized, the more it depends on other parts of the organism, which ensure vital functions of all the organism (nourishing, breathing, excretion etc.)<sup>1</sup>.

We only want to say that the human body is universal as a form of existence of a living creature, and here regularities are the same as with any living organisms, the only difference being the fact of predomination of spiritual component. It means that as the reason in the human body progresses, informational structure is formed by the same laws of morphogenesis as described above for division of labor in human body. Only in this case it is possible to apply to a social organism a theoretical provision of A. Comte, saying that the aforementioned organism generally follows the laws of biology and inconceivable without them, but has "above that something in its kind, changing the influence of these laws and emanating from mutual action of individuals upon each other. This mutual action is especially complicated in human kind because of influence of every other generation upon the next". The way one generation may put pressure over

<sup>&</sup>lt;sup>1</sup> See: Шмальгаузен И. И. Организм как целое в индивидуальном и историческом развитии / И. И. Шмальгаузен. Избранные труды. – М.: Наука, 1982. – С. 21.

<sup>&</sup>lt;sup>2</sup> See: Современная западная социология: словарь. – М.: Политиздат, 1990. – С. 138.

another is known. It is production, accumulation and transmission of scientific knowledges about the world, nature, society and human.

System of specific substructures for organization of efficient vital activity of human body as an intelligent living creature maturates and steadily operates on the basis of the aforementioned features of morphogenesis. Original functional elements, in psychological literature called functional organs, in their turn appear, develop and steadily operate in these specific substructures. They appear on the basis of anatomic-morphologic organs of human under determining influence of activity and communication. Though there is a disagreement in the interpretation of the aforementioned. Psychological science proves that it is truly so. Thus, for example, V.P. Zinchenko and Y.B. Morgunov on this matter write the following: "In our domestic tradition A.A. Ukhtomsky, N.A. Bernstein, A.N. Leontiev, A.V. Zaporozhets have classified living movement, objective action, integral image of the world, attitude, emotion etc. as functional and not anatomic-morphologic organs". In other case human abilities understood as ways of his activity are classified as such<sup>2</sup>.

Here let us once again highlight the words of E. Ilyenkov about "as human body organs turn to human living activity organs, personality appears as individual totality of human functional organs (marked by V.B.). In this sense the process of emerging of human personality is a process of transformation of biologically preset material by forces of social reality existing before, beyond and independently from this material<sup>3</sup>.

Theoretical base of separation of these constructions as functional organs of nervous system or mobile organs of cerebrum are works on physiology by A.A. Ukhtomsky, later reconsidered for psychology by A.V. Zaporozhets, A.N. Leontiev, A.R. Luria and others. As such organs A.A. Ukhtomsky named, as it is known, parabiosis an dominance, that is, certain fluidities of organism, and characterized them as some "integral whole", "complicated symptom-complex".

<sup>&</sup>lt;sup>1</sup> Зинченко В. П. Человек развивающийся. Очерки российской психологии / В. П. Зинченко, Е. Б. Моргунов. - М.: Тривола, 1994. - С. 170.

<sup>&</sup>lt;sup>2</sup> Ibid. – P. 175.

 $<sup>^3</sup>$  Ильенков Э. В. Философия и культура / Э. В. Ильенков. – М. : Политиздат, 1991. – С. 397.

The fact that in genome of nerve cells, by information of N.M. Amosov, there are  $100\,000$  of genes, and in cerebral there are  $10^{10}$  neurons,  $10^{11}$  or even  $10^{12}$  connections, promising an immense quantity of ensembles – models, whereof functional organs appear in a natural way, witnesses on variability of this super-system, and on complication of reproduction of system of functional elements in human body structure<sup>1</sup>.

The human body consists of semantic material, and because of its attributive features it is able to last long as a functional organ. Our brain consists of 20 billion nerve cells and is ready to remember 86 million bits of information every day. To the end of our life our memory may keep about 100 trillion bits of information – number IT men don't even dream about vet.

The reason for appearance of functional organs in human structure is action. This is why it is definitely a basic category of analysis for psychological science. "Many researches of action carried out within the framework of psychological theory of activity have led to a conclusion that it has generating abilities. Action is a living form similar to an organic system, in which not only typical to it features develop, but also lacking for this system organs compose and mold"<sup>2</sup>.

When justifying elemental base of personality we proceed from the fact that modern psychological science has already accumulated enough material for reproduction of system of such steadily functioning new growth in the structure of human. For this purpose it is necessary at first to receive cots of semantic substance operating in human body as ideas-senses, and then place them in the said substructures, determining thereby a principle of forming of inner-substructural mechanisms. And we shall receive an informational double of human. Ideas-senses are seen as subjects in the studied process of morphogenesis. Attribution to motive, ideal, attitude, many, but let us remind that in works of A.N. Leontiev there is also a full identification: motive is subject<sup>3</sup>.

 $<sup>^1</sup>$  See: Амосов Н. М. Разум. Человек. Общество. Будущее / Н. М. Амосов. – К. : Байда, 1994. – С. 34.

<sup>&</sup>lt;sup>2</sup> Зинченко В. П. Человек развивающийся. Очерки российской психологии / В. П. Зинченко, Е. Б. Моргунов. – М.: Тривола, 1994. – С. 94.

<sup>&</sup>lt;sup>3</sup> See ibid. – P. 151.

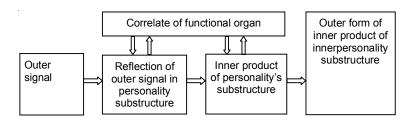
But just naming concepts we classify as the aforementioned functional organs is not enough. New growth expressed in the concept without a place in a certain substructure doesn't mean a thing. Herein specifics, role of every new growth in vital human activity should be defined. Function of new growth is a physical action with sense which makes a real change in other functional organs-senses. In semantic world relationships between semantic units prove to be the same as in physical world where every action has its original meaning and where one action influences another and by this changes sense of the ongoing. The only difference is, these functional organs have practically unlimited degree of freedom. Latter is especially vividly proved by human ability to fantasize. Free causality rules here.

Meaning of action of functional organs is quality transformation of semantic material which thereby passes from one substructure to another and moves from enter to exit in it. That is why if one follows the changes of semantic field, one can see a final product of their operation and understand the purpose of mechanisms in human life. Though physics and chemistry of this process will remain outside our range of vision. They may be discovered only as a result of a separate special research.

Thus, in research we come to understand the necessity to describe vital activity of substructures of human personality as a system of operating organs, or more precisely as a system of inner-substructural mechanisms. Herein let us remind that mechanism in this research means a somehow organized and arranged mutual transformation of elements of the universe in the structure of human body, when depending on preset properties on the enter result with preset characteristics surely appears.

The essence of these transformations is the following: outer element not belonging to this very substructure turns to an inner one, then based on it a strictly inner product appears typical substructure, thereof a product is formed, going beyond this substructure and having an "independent" live outside it.

Herein any substructure mechanism product is specific functions or actions supplied thereby to another substructure or environment. They are expressed as specific functions of human body. The latter step outside as attributive features of human body (See scheme 3). Now we can describe how the functional organs, consisting of semantic new growths, born from the main psychological act - intellectual action, - operate. Unlike an instinctive physical action, as psychology



Scheme 3. Heuristic model inside substructural mechanisms

specialists testify, it is two-act, which is an important feature of the latter. A.V. Zaporozhets in particular writes on this matter: "Intellectual action even in the simplest cases is two-act in the sense that one action becomes a purpose for another. Changing the structure of activity because of its new contents is conducted through changing of operations" As we consider, it most likely has eve multi-act nature, that is, acts under the principle of chain reaction, as every element of morphological structure is at the same time connected to several elements and connection between them is not strictly lineal. Herein field of action, as we have just highlighted, of determination of a specific kind – so called free causality.

Functional aspect of description of human personality lies within disclosure of mechanisms of dual kind, i.e. of pre-logic and logic origin. Constructively, these are two relatively independent subsystems. One of them guarantees vital activity of genotype, and the other – of phenotype. Phenotype here is understood as a magnitude, opposite by origin to genotype. In other words, phenotype is what human inherits from the society. It means that it can be imagined as a totality of ideas or social relationships passes from elder generation to the younger. Contents of phenotype is reflected in phenotypic information.

Now we can go to analyzing these subsystems. At the beginning let us consider *poly-mechanism of feeling* which appears and operates in physical sector of human organism, consisting, as it was shown

 $<sup>^1</sup>$  Запорожец А. В. Избранные психологические труды / А. В. Запорожец. — М., 1986. — Вып. 1. — С. 188.

above, of the mechanism of inheritance, mechanism of metabolism and mechanism of perception.

Inheritance mechanism. Basic informational potential in polymechanism of experience, of course, is concentrated in hereditary substructure or in the genome of the zygote. We are still not sure about its structure and operation, but it is the genome of the zygote which identifies many in social organism, if not all. The scope of information available here couldn't be compared with the scope of phenotypic information.

Bio-cybernetics allows to define the initial element of informational copy of the personality based on the law of informational conditionalism (Waddington law), and the law of discretisation and continuality of biological information (Morgan-Efrussy). It will be enough for us to set the basis of the semantic model of human being. We have already expressed sufficiently detailed information on the relationship between genotypic and phenotypic information, and it means that we can take genotypic information as a basis for the semantic structure of human being.

The metabolic mechanism. The metabolic mechanism is the implication of structural information, concentrated in the first nature of the human body, into the human organism. It is this mechanism that provides the substance exchange between human organism and environment. Today it is well known that even water is has informational structure<sup>1</sup>. And as the transfer of social information into structural<sup>2</sup> and vice versa is confirmed, the metabolic mechanism as an intermediate functional unit must be included into the semantic structure of a human being.

Here's how the metabolic processes and their relationships with social ones are described in literature. In informational aspect levels of the matter structure allow to understand relations between animated and unanimated nature through the open systems theory. According to it, lower level informational structures – stages of formation of the human body, as the human body is the nutrient solution

<sup>&</sup>lt;sup>1</sup> See: Комсомольская правда. – 1996. – 6 июня.

 $<sup>^2</sup>$  See: Абдеев Р. Ф. Философия информационной цивилизации / Р. Ф. Абдеев. – М.: ВЛАДОС, 1994. – С. 167–168; Хаббарт Л. Дианетика. Современная наука душевного здоровья / Л. Хаббарт. – М.: НьЮ ЭР, 1995. – С. 57–106.

("information providers") for the structures of higher levels. Let us provide you with an example. Every process, event, phenomenon in nature are connected primarily with an increase of an entropy in that particular part of the world where it happens. The same with a living organism, it permanently increases its entropy and thus has a tendency of approaching the dangerous state, which is death.

How can a living organism avoid the transition to disbalance (entropy)? The answer seemed to be simple: thanks to food, drink, breath or (in the case of plants) of assimilation, i.e. metabolism (metabolism). When this statement was admitted as unsatisfactory, another one appeared – due to energy flush. Having proved the failure (imperfection) of both explanations, E. Schrudinger concluded that the organism can preserve its order "only by permanent removal of negative entropy from the environment", i.e. information. «The negative entropy – that is what the organism uses," – he wrote<sup>1</sup>.

The scientists developing the socio-biological direction in social science try to find out what the mechanism of informational refeeding from the society is. To study this aspect of the investigated problems the following national traditions are important as a mechanism of transmission of hereditary programs, which bear a set of semantic charge: congratulations, swears, oaths, prayers and other ritual wishes, warnings etc. Knowing this or not, but stopping keeping up traditions of ancestors, a person seems to be pulling out parts of the DNA wave structures and rearranges them from place to place, and as a result – a person is experiencing severe stress, equal to radiation exposure. This causes mutation of the body and soul – degeneration begins, which can lead to extinction of, for example, race cursed by someone.

Rational living organism not only "feeds" with negative entropy, i.e., derives structural information from the environment, but also reproduces it in itself. Connection of information and life is so close that some researchers add it into their definition of life, "Life, – says N.S. Kardashev – begins from the possibility of synthesis of specific types of molecules able to remember and use first the most simple information about the environment and its own structure, which they

 $<sup>^1</sup>$  Шредингер Э. Что такое жизнь с точки зрения физики? / Э. Шредингер. – М. : Изд-во иностр. лит., 1947. – С. 105, 106.

use for self-preservation, for the perception and what is especially important for us, obtaining even more information".

In a number of modern studies it is mentioned that in living system, in its metabolic cycle entropy and negative tendency are originally presented, and their interaction determines the development process. The most common content of evolution is in the purposeful accumulation of information and increasing the extent of its use. Living organisms and social institutions tend to obtain and use the maximum information about the world and about themselves. If the catabolic phase is typically entropic process, leading the system to equilibrium, the anabolic phase, caused by the activity of a living system, not only returns the last to its initial state, closing the metabolic ring (or cycle, that would mean termination of growth and development of an organism), but also creates certain (no entropy) conditions for an excessive recovery of the living system and its transfer to new, higher level of organization.

In the redundancy the peculiarity of the nonlinearity characterized and supported by self-oscillations, sequential course of metabolic cycles in the living developing system are coming out. "Only negative-entropy value of redundancy makes the system nonlinear, non-equilibrium and non-entropy," – said Y.D. Arshavskiy².

Due to the nature of non-entropy of anabolism, living system acquires the thing that is called memory. As a result of excessive formation of interneurons, synaptic structures increased the level of functional organization of the system (adaptive modification) increases, further streamlining of the structure takes place, its reliability and survivability increases. Carrying out the entropy, living systems become non-entropy.

In general, the fact that the proteinic-nucleic acid structures in cells co-exist in unity because, according to V.P. Kaznacheev, the relations based on photonic constellation. The latter is the information and regulatory system of cells. Quantum information is stored in molecular compounds of cellular structures. This information can be retrieved from the biochemical, i.e. metabolic transformations. Running of these reactions is carried out by information flow that exists within the cell, or, and this is of particular interest, passed

¹ Вопросы философии. – 1977. – № 2. – С. 45.

<sup>&</sup>lt;sup>2</sup> See: Вопросы философии. – 1986. – № 11. – С. 95–104.

into the cell from the outside, that means, from other cells, biosystems, from the environment, etc.

Thus, the informational aspect, not real or energetic, is more significant in metabolism, because the organism can assimilate the ordered structures and free itself from all that entropy that has to perform while living. The last operation he performs through natural property to ensure homeostatic balance of instinct. The product of metabolism is the acid-alkaline balance in the human body. The violation of the mechanism is determined by us as vitamin deficiency disease.

In the mechanism of metabolism instincts serve as a correlate that arise through the integration of irritability and sensitivity in the human body. In particular, F. Schelling underlines that if we combine the irritability and sensitivity in one concept, the concept of instinct will appear (for the desire to move, defined by sensibility, is an instinct)<sup>1</sup>.

Modern authors who define instinct as formed by natural selection and genetically inherited mechanism of targeted regulation of human behavior take the same position in terms of instinct definition as Schelling. It refers, according to F. Engels, to the social instinct, which was one of the most important levers of human development from a monkey<sup>2</sup>. "At the heart of the "publicity" of animals a form of adaptation to environmental conditions – the appropriate instincts is laying – formed by natural selection and genetically inherited mechanisms of targeted regulation of behavioral interactions. During the interaction between animals "start" of an instinctive mechanism regulating the behavior of one of them usually does not require from the other significant efforts. The inclusion of such mechanism is usually carried out not through material-energy (the substantial) impact, but through informational, signaling impacts, i.e., represents an elementary act of process of mutual behavior control among animals<sup>3</sup>.

 $<sup>^1</sup>$  Шеллинг Ф. В. Й. Сочинения в 2 т. / Ф. В. Й. Шеллинг ; пер. с нем. – М. : Мысль. – Т. 1. – 1987. – С. 175.

<sup>&</sup>lt;sup>2</sup> Маркс К. Соч. / К. Маркс, Ф. Энгельс. – 2-е изд. – Т. 34. – С. 138.

<sup>&</sup>lt;sup>3</sup> See: Коммунистическая партия и научное управлениею. – К. : Политиздат Украины, 1984. – С. 106.

So, the instinct in metabolic mechanism has correlate function, through which a person directs the process of interaction with the environment through the exchange of structural information.

Next, we will proceed with the analysis of the forerunner of the phenotypic mechanism to the perception mechanism, which is sometimes called the mechanism of sensual consciousness. It is located in the psychophysical substructure, i.e. on prelogical level.

Here we must make a little excursus in order to protect ourselves from possible criticism in inconsistency in future. The point is that the detailed description of this and other innersole structured mechanisms requires thorough analysis and detailed argumentation. Here we have to reduce the explanation to such a minimum, to make it sufficient for designing functional heuristic model of human being which we call personality. So we will just name the new elements, of which, in our opinion, the relevant mechanisms consist and indicate their function in human being structure, reserving the right to change the description of structure and functions. The complete model may and shall be different from the heuristic. This is standard thing during the transition from philosophical concept to the theory.

The mechanism of perception. Perception is invariant part of stimulating substances coming from different sensory modalities. Defining perception mechanism from this point of view, we can admit such source elements of it: perceptions, intuition, feelings and the product – emotions.

Talking about *perceptions*, we mean the initial level of the reflection process, the result of the impact of the objective reality of the organism, physical and spiritual senses of human being. Feeling is a psychic phenomenon, as it possess properties of the entire. External stimulating substance should be moulded into the quality "for itself". "This quality should be completed, accomplished: an external stimulating substance is presented in the form of the denomination – "see", "hear", he stands out and gets the name. This is the beginning of formation of quality "for itself." Sensation is a level of naming with indicating the restriction. Such name will be different for each analyzer, according to the difference of their nature and this fact was reflected in the Mbller's law of specific energy of sense substances.

At the same time *feelings* – one of the main forms of human being's experiencing its attitude to objects and phenomena of reality, characterized by their relative stability. Based on the human percep-

tion of the outside world (as the initial element), feelings are coherent-subjective form of existence of objects that satisfying its needs already in biological organism structure<sup>1</sup>.

The totality of sensations creates the sensual structure of substantive reality images, acts as a source and supposition of cognitive attitude. Under the information influence on sensible matter parts matter the totality of sensations arises from the external stimulating substances, and when exposing the same signal to the intelligible matter parts taking place in different plane, an image of objective reality is being created. Intertransitions of the signals between planes can be the reason for words of Karl Marx: feelings of social man are different from the senses of non-social man. Only by objectively unfolded richness of the human being, the plentifulness of feelings are generated and developed<sup>2</sup>.

*Intuition* as a hidden, deep-seated and unconscious initial principle of creativity enacts as a correlate to such mechanism. Such theory of the subconscious and organizing creativity intuition was put forward, as is known, by L. Bergson and Z. Freud<sup>3</sup>. This theory will be applied in such meaning it in this work.

*Emotions* as a production of the perceptual process are "elements of the experience appearing under the influence of the general organism condition and of the process of satisfying current needs"<sup>4</sup>.

Naturally, if, for each of the abovementioned items, there are discrepancies, then it will be inherent to the functions, and, consequently, to the place of semantic unit in the structure of human being.

For example, informational emotion theory states that "the concept "emotion" should be distinguished from the concept "feeling", meaning more complex form of mental reflection, in which emotions are only a constitutive part. In ontogenesis feelings appear later than emotions and affections"<sup>5</sup>.

<sup>&</sup>lt;sup>1</sup> See: Психология: словарь. – 2-е изд., испр. и доп. – М.: Политиздат, 1990. – С. 445.

 $<sup>^2</sup>$  See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. – 2 изд. – Т. 42. – С. 122.

 $<sup>^3</sup>$  See: Философская энциклопедия : в 5 т. – М. : Советская энциклопедия, 1962. – Т. 2. – С. 303.

 $<sup>^4</sup>$  Немцов Р. С. Психология / Р. С. Немцов. – М. : Просвещение – ВЛАДОС, 1995. – С. 573.

 $<sup>^{5}</sup>$  See: Еромеев В. Е. Чертеж антропокосмоса / В. Е. Еромеев. – М. : ACM, 1993. – С. 307.

# Perception mechanism model



We presume that feeling is internal product of this substructure, and emotions are the external manifestation of experienced feelings.

Concluding the review of informational aspect of the physical unit of the human body, we must emphasize that polymechanism are dissolved by psychophysical product that psychologists, when assessing the pulse of the genotype in the direction of the phenotype, treat as a cognitive reflex, and psychologists assessing the part of the phenotype in the direction of the genotype — as cognitive activity. In this case mental activity is a common characteristic of complex biological systems, which is certainly a human being, their own dynamics as a source of maintaining the integrity of the life.

Now we can proceed with the analysis of informational aspect of polymechanism of perception arising and functioning in the spiritual unit of the human body, which plays an important role of integrator into the second nature. Let us remind that human brain is considered as its material substrate. Structurally the polymechanism of perception consists of the mechanism of motivation, socialization, and volition. Their specifics is that they consist of elements belonging to different, but same-named, relevant to "their own" morphological level, substructures of the human organism. Now we pass to their serial representation, which we used when describing the mechanism of perception.

Motivation mechanism. Motivation mechanism of human activity consists of *the concepts, the image*. The *motive* acts as correlate here. The *set (attitude)* is the product of the mechanism.

Let's briefly describe each of the abovementioned functional units. **Concept** as a functional unit is remarkably described by E. Durkheim (*The Division of Labor in Society*), who believed that concept was not the simple image of the reality, not an inert shadow of things cast upon us, inducing a vortex of organic and psychic phenomena around itself. Neurotic flow accompanying the formation of ideas, runs through not only cortical centers around the point where it has been originated,

passes from one clutch to another, but is reflected in the motor centers, which causes the movement of sensitive centers, where images evoke, sometimes causing the beginning of illusion and even affecting the autonomic functions<sup>1</sup>. Concept – is an invariant part of information extracted from memory storages, corresponding to different subjects or different projections of the same object, phenomenon. While perception, images are created only of those objects that exist in reality. Imagination in contrast to the concept – is a process of combining concepts, and for this reason it results only the image of an object, phenomenon that does not exist in reality.

Further, we should notice that under *image* in current research we mean subjective phenomenon appeared as a result of objective-practical, sensory-perceptual, cognitive activity, which is a complete integral reflection of reality, in which the main perceptual categories are simultaneously presented. V.V. Nalimov commented this: "Consciousness manifests itself in different ways. One of its tasks is to organize our sensory perceptions in a way that the world could be accepted like a system of images.

Already from Kant's criticism of Pure Reason it was clear that contemplated image of the world is not a mechanical mapping of the reality, but its reconstruction. A person is not a passive observer, but a great architect, designing a building of the Universe, based on his sensual experience of interaction with the external world, revised by filters of his consciousness"<sup>2</sup>.

Motive acts as correlate in psychological substructure. This functional element in the semantic structure of human being is considered to be counterpart of the object of needs, acquiring in the system "subject – world" the property to encourage and direct the activity of the subject. Motivational aspect relates to attributive characteristics of human being, which is associated with more "energy", necessary for satisfying specific needs. Therefore, the "motivation", according to T. Parsons, – is a cultural analogue of the notion of "natural" energy. Confirmation of the fact that motive has an informational nature, can be found in "General Theory of Life" by G.A. Yugay: "The realization of the need of living system in substance and energy is organized by

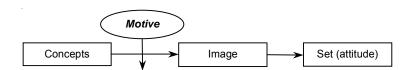
<sup>&</sup>lt;sup>1</sup> See: Дюркгейм Э. О разделении общественного труда. Метод социологии / Э. Дюркгейм. – М.: Наука, 1991. – С. 96–97.

<sup>&</sup>lt;sup>2</sup> Налимов В. В. В поисках иных смыслов / В. В. Налимов. – М. : Прогресс, 1993. – С. 105.

information. Consequently, the need is a way of adaptation, and information carries an essential function here. Information on needs creates motives of behaviour. However, only motives are not enough to satisfy all needs. Additional is required on the presence of certain external factors able to satisfy raised demands." In the external social environment personal interest is the analogue of motive of a person.

Set (attitude), as a readiness condition, as a particular activity in a particular situation becomes the integrative product of person's activity. The most theoretically justified, the product of the mechanism of motivation activity is, as known, the concept of setting Uznadze Self-perception theory. It explains its genesis and functioning in this substructure.

### Motivation mechanism model



Socialization mechanism. The socialization mechanism in this research is understood as organized in certain way intertransition of objective public "bearings in particular internal products of a human being, which further, in reverse motion, ensure its inclusion into status of personality in social environment. Here we must pay attention to the fact that this interaction system in literature is called mechanism of "personality socialization." However, it should not be done. Here we are fully agreed with E.V. Ilyenkov, who wrote that "this name is unsuccessful, because it already assumes that person somehow exists before its socialization. In fact not a person but a natural body of a newborn is being socialized, ready to become a personality in the process of "socialization," i.e. the identity must occur. And the act of its birth does not coincide in time, or in fact with the act of birth of a human being, with the day of the person's physical birth"<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> Югай Г. А. Общая теория жизни / Г. А. Югай. – М.: Мысль, 1985. – С. 87.

 $<sup>^2</sup>$  Ильенков Э. В. Философия и культура / Э. В. Ильенков. – М. : Политиздат, 1991. – С. 398.

Elements of this mechanism are the following: *knowledge*, *the ideal (correlate)*, *the essential forces*, and the product of its operation is *the activity* of a human.

The element of *knowledge* is the ideal expression in a symbolic form objective properties and relations of the world, the result of individual cognitive activity and experience. The transfer of separate concepts into a theoretical system is performed inside the knowledge. Knowledge is one of the forms of information, so it s main function – to represent whole perceivable social world in a particular a human mind. The most effective knowledge form is, of course, scientific knowledge. It is appropriate to provide a link for a well-known thesis of Marxism that everything the man does and what he is connected to, must pass through his head and be reflected in it in the form of knowledge.

Under *ideal* we mean the perfect image defining a way of thinking and human activity. It is represented by dialectical unity of subjective and objective, in other words, the ideal – is the realization of an idea in the image. Its objectiveness is in the fact that it emerges as an objective necessity in progressive development, reflects objective needs of human being and objectively existing social relations. The subjective aspect of the ideal is expressed in the fact that it arises in the mind of the subject and therefore is subjective and ideal by form.

The ideal appears on the basis of the functioning of the psychological substructure and provides material for the formation of political component, so it can otherwise be considered as a particular form of creation the image of goals. The mind is managing the world, the first and last of its creation – the ideal. The whole history, that is, all reasonable actions are undertaken in the name of the ideal. Ideal – is an abstract system, the truth, independent from events, from the fact of adjacent people or public opinion of humanity. Ideal performs the function of correlate in the mechanism of socialization.

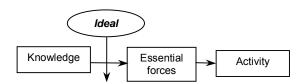
Essential forces — are the product of the mechanism of human socialization activity. They exist in the form of individual force fields, being a potential social world. Earlier they were identified with the abilities of a human, his activity. In this regard, Hegel in his Science of Logic, for example, underlines that mental strength is a direct activity, performed by itself in accordance with its own specific. Essential forces as the internal product of socialization mechanism represent cultivated human's abilities¹. The original form of their

<sup>&</sup>lt;sup>1</sup> See: Гегель Г. Наука логики: в 3 т. – М.: Мысль, 1971. – Т. 2. – С. 132–133.

existence in current mechanism, as they represent energy fields generated by a person in the process of thinking.

Being transferred to the external existence the essential forces are manifested as a fundamental property of human mind – the *activity*, which is the basis for self-development, satisfying needs of the subject. The transition of essential forces into the external existence in the structure of human is a partial alienation from own source, and at the direction on external object the complete alienation happens. This process is deeply investigated and presented in works of psychologists and sociologists. We have already described the role of action in the human mind."

### Socialization mechanism model



In consequence of the availability of natural essential forces, the person can form and maintain social ties with other people.

In the process of practical establishing and maintaining sustainable social connections in personal meanings and physical skills of the human being are equally involved.

The mechanism of volition. Elements of the mechanism of self-regulation are the following: *values*, correlate – the *will* and the internal product – *beliefs*. The product, rejected into the environment, is a *norm of social reactions* of the personality.

The mechanism of volition — is a self-regulation of human activity that occurred during the interaction of psychological and social substructures. It ensures their integration into a complete self-developing system. Mature operation of the mechanism of volition occurs as self-determination of the mind functioning.

The mechanism of self-determination is a higher level of self-regulation, which means, a higher level of causal relationships determining human behaviour. Self-determination does not resolve to voluntary regulation of its own behaviour. It is essential that at certain

stages of development a human being begins to organize his life consciously thereby determining its own development. For the first time we are confronted with the phenomenon of self-determination when a child sais the famous "Myself!" and processes of self-determination manifest themselves with the transition to independent living when a person becomes a "master of its destiny."

As a starting point in this mechanism *the values* are possessed, as passed through the selection human values. It means that person in its everyday form of vital activity operates the most powerful, from his point of view, values, and the rest are presented as well, but for the time being in the shadow of consciousness. Herein, according to T. Parsons, a value orientation "refers to those aspects of the orientation of the actors that oblige to comply with certain norms, standards, criteria for selection whenever he finds himself in an uncertain situation, allowing (and requiring) to make a choice."<sup>1</sup>.

The will is considered to be as a person's ability to choose activity purposes and generation of internal efforts required for its implementation. Will is a specific act, which does not resolve to the consciousness and proper activity. Not every conscious action, even associated with forcing an obstacle on the way towards the goal, is a strong-willed: the most important thing in the volitional act lies in the realization of the value characteristics of the goal of action and its conformity with the principles and moral standards of a human.

For the will practitioner experiencing not "I want", but "I have to, I must" is typical. Carrying out a volitional act, a man confronts the power of actual needs, impulsive actions. According to its structure, the volitional behaviour is divided to the decision taking and its implementation. If objective of volitional act and the actual needs do not coincide, decision-making is often accompanied by a struggle of motives (choosing act). The will as a functional element in the structure of this mechanism serves as a correlate.

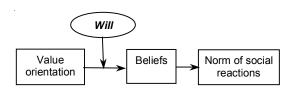
*Beliefs* in this research refer to cancelled representations, person's knowledge about the real world, defining its internal relation to the latter.

The norm of social reactions, of which a person is guided organizing behaviour in a social environment, is defined here as the external product. It is from here the collective response, or mentality

<sup>&</sup>lt;sup>1</sup> Очерки по истории теоретической социологии XX столетия. - М. : Наука, 1994. - С. 83.

of social community is formed. It is clear that it differs from the norm of reaction of the physical body, laid in the genotype of a human. In this case, we assume that social norm of reaction — is a specific state of values, lost their connection with needs and aspirations of a person, having become an outside frame, model, behaviour pattern, as well as debt dictated and controlled by external sanctions.

### Volition mechanism model



The norm – it is always a range of meanings not fixed value. The process of self-regulation requires that norms in a particular context are considered as incentives.

Although it is generally considered to define "incentive" as the purposeful activity of the process external control, as a product of management system, which is caused by regulatory attributable way to use essential forces or accumulated by human personality energy potential.

Hereto we conclude our theoretical analysis of a specific structure and substructure mechanisms appeared and acted as functional elements of semantic origin. It cannot be failed to notice that all six mentioned substructures are located on same horizontal plane and explain a single issue – the mechanism of activity or human behaviour in the environment.

However, in such a way, human structure seems obviously incomplete, as the fact that he is a creature producing unique spiritual products — meanings — remains theoretically unconfirmed. For this we need to deepen the theoretical level of study of semantic structures to reveal the **mechanism of the origin of the meaning**. Then it will become obvious that the human personality — is not only a physical phenomenon, but also a spiritual self-developing system.

The last remark means that there must be strong morphological increase to the fact that we have described above. And, really, such a

gain exists. It follows from the fact that a functioning unity is more than the sum of its parts. The thesis of the irreducibility of the whole to the sum of its parts was put forward at the end of the XIX century by Austrian art historian H. Ehrenfeld, as opposed to the prevailing at that time thoughts. Specific characteristic of the unity was called "geshtality" of the experience.

The next step in the development of this representation of the abundance of functioning of the unity consisted of the demonstration that the unity is in general something else than the sum of "parts" that are separated from it by "isolation" (separation) (Vertheyher, 1912). Further in the researches of Keller and Verthevher it was shown that parts of the whole in the proper sense - "functions" or "roles" in it, it means that the whole has a functional structure. This structure has a dynamic character; every gestalt under the influence of internal forces (which produce, maintain and restore a certain type of its organization, as well as perform its reorganization) tends to pass into a state of maximum possible under current conditions of equilibrium. This condition is characterized by the maximum attainable preciseness (from ger. praegnant - precise, expressive) of gestalt organization that means by its simplicity, accuracy, completeness, expressiveness and conciseness. As a language for describing gestalt - adopted from the physics instrument of the field theory (Keller, 1920), and then the theory of "open systems" (Keller, 1958). For us, the last remark is incomparable discovery or confirmation of the rightness of the system or hypotheses implemented.

It turns out that the hypothesis on the existence of Semantic Universe initially allowed us to build a semantic substructure of the physical man, and now takes us to discover the substructure of the spiritual man. For this we must show phenotype substructure which consists of the mass of vertical, again conditionally called, intersubstructured mechanisms. It refers to the fact that elements of psychological, sociological and managing substructures are integrated not only within its own borders, but also interact in a vertical plane, thereby creating the original vertical arrangements. This brings to mind the presence of neurons in a human brain.

So, we proceed with the reviewing of vertical functional parts arisen on the basis of horizontal mechanisms, and proceed with brief description on the same principles of brevity in description of human morphogenesis.

Vertical mechanisms. Specificity of the class of vertical functional parts or mechanisms is that they appeared in spiritual substructures of the human organism. Recent are well known to us as consciousness, selfconsciousness and superconscious. Their genesis was shown in the third stage of human self-development. Such mechanisms consist of elements belonging to different levels of morphological structure of the human organism. They have a common function — to complete the human organism to become phenotype.

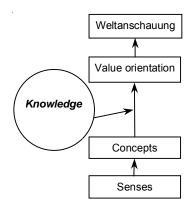
What is important is that consciousness, selfconsciousness and superconscious should be considered as a superposition of the functional parts. For example, modern psychology consideres human consciousness, which, like any functional body part, has properties similar to anatomical and morphological organs: it revolutionizes, involutionizes, it is reactive, sensitive. Naturally, it also acquires its own properties and functions (dialogism, polyphony, the spontaneity of development, reflexivity", - Zinchenko V.L., Morgunov E.B. The same qualities, in our opinion, possess self-consciousness and superconsciousness.

Vertical mechanisms in the structure of the human body are the following: motivation mechanism, goal formation mechanism and the mechanism of development of meaning. Let's review them in amore detailed way.

**Motivation mechanism.** The motivation mechanism appeared first among vertical functional parts.

<sup>&</sup>lt;sup>1</sup> Зинченко В. П. Человек развивающийся. Очерки российской психологии / В. П. Зинченко, Е. Б. Моргунов. – М.: Тривола, 1994. – С. 171.

#### Motivation mechanism



It is possible only when all elements of an individual perceived and are ready to enter into a new phase of development. All the mechanisms presented above are an attributive wealth or education of an individual, since the formation of motivation mechanism the qualitatively new phase of human development starts – a phase that could be called personal. The last remark was emerged due to the fact that only under the mechanism of encouraging the person starts to behave as a subject of public process. Until

now, he had been acting as a representative of a family of natural organisms.

This mechanism not only represents the metal content of society, but, conversely, opens the door for individual mental content into public consciousness, that means, performs the function opposite to the mechanism of socialization. V.Y. Nechaev characterizes it in his research "Sociology of Education": "Motivation – is the mechanism of formation and manifestation of situation of needs of the subject, internal and external determination of behavior (motivation and incentives) in the form of interests, motivations and aspirations. It is manifested in value orientation, choosing the direction of action, method and style".

It is appropriate at this point to recall that its morphological basis is the synthetic substructure, in which consciousness forms and functions. Its elements are following: sensations, ideas, knowledge and system of values of a human being. The product of such a mechanism is the world outlook of a man.

This mechanism gets the initial pulse from the first nature, or rather, from the perceptual experiences of a human. Perception consists of them, as we know, representing a holistic concrete sensual portrait of the reflected object or process. In the vertical motion

 $<sup>^{1}</sup>$  Нечаев В. Я. Социология образования / В. Я. Нечаев. – М. : Изд-во МГУ, 1992. – С. 53.

perception, in turn, can transfer to the representation in the concrete-sensual image of objects and phenomena of reality, but not in themselves of the completeness and seamless, but only the most essential terms, definitions, retained and reproduced in the logical unit without the direct impact of the objects themselves and phenomena on bodies of sensory consciousness.

The nature of the human personality as a social phenomenon is ambivalent and includes both socio-typical and personality-semantic expression, with the latter being carried out mainly through the functioning and development of value experiences (valuably-sensitive person's worryings). These experiences, feelings are represented in the process of moving from social activities to the individual consciousness and from individual consciousness to human behavior or new activity. One of the main features of this interaction lies in the fact that here lay the backbone role of personal value, which refers to a customized reflection of reality, expressing human's relation with it the thing for purpose of which the activity develops, particularly productive activities, and communication. The remaining elements are already familiar to us with the characteristics outlined above. Naturally, that in the system of vertical arrangements they perform different functions.

Product of this mechanism is *the world outlook* of a human being, which refers to "the system of beliefs about the world and human role in it, about man's relation to the surrounding reality and to himself, and deriving by these concepts basic life principles and people's sets (attitudes, orientation), their beliefs, ideas, principles of cognition and value system". Here we reveal the content of the process of consciousness, considered by us as a reflection of the objective social world in the head of an individual, which can be called "prelife".

It must be noted that in the abovementioned definition of the outlook as the content of this category it is shown almost the whole palette of functional elements of the mechanism of consciousness. More far-reaching and significant for us is continue the definition of this category, namely, defining the outlook as a "way of spiritual and pragmatic world development in the unity of its theoretical and practical relation to reality"<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> Философский энциклопедический словарь. - М. : Советская энциклопедия, 1986. - С. 366.

<sup>&</sup>lt;sup>2</sup> Ibid.

It is important to underline the fact that motivation mechanism starts the inclusion of the man into the Semantic Universe. This is facilitated by a set of functional parts in its structure, which, progressing, become more "flexible". Thus a functional part "knowledge" was transformed first into system of values, and then into the outlook. As the outlook is not so "tough" as two previous elements, it allows a person not only to understand other people, but also to decode meanings that are retrieved by us from the semantic continuum.

Thus, the integration of elements of the psychological substructure – representations, sociology – knowledge and management – system of values, – creates of the mechanism of motivation, a leading feature of which is to establish philosophy as a spiritual basis of a human, which is a product of the functioning consciousness of a human.

The mechanism of determination of the goal is central mechanism among this class of functional elements. Genetically, it has emerged as a process of self-regulation of the intelligent living system. In this regard, it should be defined as the moment of spontaneous goal setting for itself. In this regard, the content of this mechanism is entirely determined by the process of self-consciousness. Its elements are intuition, motives, ideals and will of human being. This is the "hardest" process in the whole organism, as it consists of correlates of all horizontal mechanisms. The existing literature stands for the fact that an instinct is the trigger mechanism for the determination of the goal. In general, this statement is not inconsistent with our vision of its formation, since the functional organ precedes intuition.

Its product is the *goal of human life*, which is understood as the ideally located result of its activity on satisfying their needs, in other words, verbally expressed anticipation of future results. In this way the mental content or what we call the concept of "life" of a human being is revealed.

This spiritual reality is most difficult to get, because it assumes the selection of a single value from the number of theoretically possible and a number of realistic options available to their own development. The will of man, gaining forms of alienated product becomes the goal of his life.

Thus, the integration of the following: metabolic substructure – instincts, psychophysical – intuition, psychological – reasons, sociological – ideals and management – will or situational goals that subordinates the private, fleeting desires – creates the mechanism of determination of the goal.

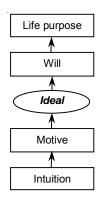
Leading function of the mechanism of determination of the goal lies in the awareness of own life as a self-regulatory process that requires setting the strategic goal of human life.

In this mechanism, ideal as the embodiment of ideas transforms with the help of the flow of consciousness into the will. In this case, the will must be regarded as a prototype product for future work, shaping human motivation to perform certain actions. The will does not have an abstract self-consciousness movement, performing the image not related to it; it is this prototype implementing itself. The prototype – an image of the future, which should not be confused with archetype, reminiscent of which has already become a phenomenon.

This is an integral psychological phenomenon, which corresponds to perception in the system of epistemological forms, but with opposite sign. However, the will is not only a prototype of future action result, it is not only "pure" plan-end (goal-plan), it acts as a unity of purpose and method of action to achieve results.

Means (method) is a becoming result and the result is a becoming means (method). The will, therefore, appears as a directly developing means-end (goal-method), being deployed in outer reality, and this fact distinguishes it from a plan that remains within the boundaries of a logical section.

# Mechanism of purpose determination



Thus, the will is self-performing prototype, which regulates the process of its expression into reality by itself. By means of mental efforts (orders), into which the will is divided, it controls the propulsion elements of the organism. The plan as practically oriented concept repeats in the system of substantive actions, and through them is implemented in the product.

The volition process, like any process of social rationalization should be viewed in terms of changes – action and reflection. This means that, in horizontal motion, it sets in motion parts of the physical body, and in vertical – the motion is withdrawn

by new functional part – the goal (purpose). Depending on the plan content the tactical, operational and strategic goals are formed. The

most important for a human is certainly a strategic level, which determines its live activity in the future.

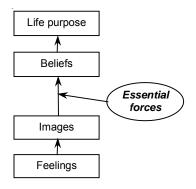
The strategic objective refers to prospective or stage final results of human activity. It is central in the human structure as it is connected with the manifestation of his self-consciousness. This phenomenon is studied by phenomenology.

The mechanism of sense generation. The mechanism of sense generation is the third original formation, arising in the process of functioning of semantic units in the vertical plane. Its elements or functional parts are feelings, images, essential forces and beliefs of human. The final product of the functioning of this mechanism is the sense of life (life purposed) of a human. It is produced of elements of man's superconscious. In this way the meaning of the phenomenon, which is named by P. Teihard de Chardin "superlife" is revealed.

The base on which it appears, is human *feelings*. We should not ignore the fact that feelings synthesized the content of a very complex process of experiencing emotions. Direct source of the mechanism of sense generation is human previous experience (bias). The sense generation can be defined as the process by which these or other objects, phenomena or situations become the subject of personal meaning or change their personal meaning, if it had originally been present. Thus, the essence of the sense generation process is the establishing of the value-relation between an object, a phenomenon, a situation, on the one hand, and an integrated system of life of the individual – on the other hand.

The essential attributes of personal sense (meaning) as a product of the mechanism of sense generation is its subject and life relativity, consisting in the fact that personal – it is always a meaning of "something", this "something" is always defined in relation to "something", and this ratio is always specified (concrete).

## Mechanism of sense generation



So, the integration of elements of psychophysical substructure – *feelings*, psychological – *images*, sociological – *essential forces* and governing – beliefs creates the mechanism of *sense generation*, the main function of which is the realization of his life as a series of random, isolated events, as well as the whole process with a definite direction, continuity, that is the sense (purpose) of human life.

The sense (purpose) of life in this researche is considered as compre-

hension by the personality the objective social meaning of possible directions of activity, understanding of what this activity can give to himself, how much it corresponds to his personality: what is his place in this world, in which activity he can achieve more, revealing his mental potential.

Thus, we have finally pointed out the process by which a person can principally be included into the Semantic Universe. And, if we compare him/her to the mechanism of sense generation, the difference which exists between them, immediately strikes the eye, because the sense of human activity is always present, while general goal of his life may be missed. All this mean that these are two different vertical mechanisms.

Now, for more complete picture of the structure of the social component of the human organism, the class of horizontal mechanisms should be reconciled with the class of vertical mechanisms in a single heuristic model to demonstrate vividly the complexity of the arrangement of the spiritual section.

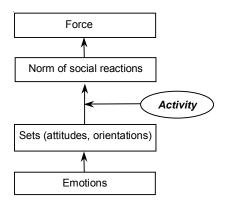
However, combining the abovementioned classes of functional elements a new increase in quality in the structure of the human phenotype is occurred. It turns out that the existence of vertical mechanisms does not exhaust the originality of the functional manifestation of man's spiritual life. In fact, it is revealed that they are removed by a new class of mechanisms that we call synthetic. They can still be called pulsating mechanisms, since they do not have a firm morphological basis, and are manifested as bursts of energy, emis-

sion of it, respectively, by horizontal and vertical mechanisms. They form temporary, illusory or quasi-structures.

Withdrawal of horizontal and vertical mechanisms. It turns out that the horizontal mechanisms of natural origin are withdrawn by synthetic vertical mechanism, which we call the *mechanism of self-actualization*. Its main function is to ensure the inclusion of a man into the phenomenal world.

Vertical mechanisms that we have just reviewed are, in turn, withdrawn by the synthetic horizontal mechanism, which is called mechanism of self-determination. Its main function is reduced to ensure the inclusion of human noumenological world, i.e. the world of meanings (senses).

### Mechanism of self-actualization



Besides, both: derived horizontal and vertical mechanisms each have their structure, function, and the original product. But here we are dealing with the structure and hence the products – phantoms. They do exist, but they cannot be detected because they are derived from the first derivatives of the functional structures. Let's briefly describe them. Synthetic vertical mechanism. Withdrawal of the horizontal mechanisms by

synthetic vertical mechanism that we already called mechanism of self-actualization means that its emergence and existence can only occur during the synchronous pulsation of horizontal mechanisms.

Its elements are the products of horizontal structures, namely: in psychophysical substructure – *emotions*, in psychological – *orientations*, in sociological – *activity*, in management – *the norm of social reactions*.

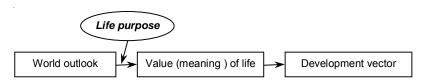
The product of the spontaneously pulsing mechanism (in confirmation of this it is enough to indicate its emotional basis) is the force of a physical body which is capable to produce work on the

transformation of the first nature to the second. In this case we can speak about the human body as a functioning entity subject that has the activity.

The activity of the subject leads to the creation of the "second nature", which exists as objectively, as the first one, although in it, as we see, essential forces of personality are objectified, all this subjectiveness – or, more simply, the culture – turns to be an objectified subject. K. Marx considered this process, as it is known, through the alienation of labor.

Synthetic horizontal mechanism. At the same time the class of vertical mechanisms creates its specific synthetic mechanism, which is already laid in the horizontal plane, being a kind of "negation of negation" It is called the mechanism of self-determination. Its elementary basis consists of already known to us functional parts, namely: world outlook, purpose and value (meaning) of human life. In this combination the role of correlate belongs to the purpose of human life. The leading function of horizontal synthetic mechanism of self-determination — is a conscious choice of social roles in the social division of labor.

### Mechanism of self-determination



The product of functioning of this mechanism is the direction of the process of self-development of human organism or the *development vector* of subjective form of the universe. Hence the uniqueness and value of human being for the Universe. In this way, the inclusion of human into noumenological world is carried out.

The scope of stable internal impulses, directing the activity of the person with respect to the strategic goal, regardless the personal situations, is called its direction. The latter is always socially dependent and is formed during upbringing. In other words, the direction – is external conditions, which became properties (orientations) of the individual. In different theories but the direction is understood

differently: as a "dynamic tendency" (S. L. Rubinstein), sense-developing motif (A. N. Leontyev), the "dominant attitude" (V. N. Myasischev), "the life direction" (B.G. Ananiev) "dynamic organization of essential forces of man" (A. S. Prangishvili). Orientation is a major feature of personality that determines its psychological structure.

In literature it is indicated that direction (orientation) includes several related hierarchical forms: inclination, craving, desire, interest. Besides, it should be noted that all forms of orientation (mental set) of the person are also the starting mechanism of motivation of his/her activity.

Self-motion of horizontal and vertical mechanisms ensures the consistency of human's spiritual life. In addition, vertical mechanisms are integrated into the system of "lifting" functions of the reflected object from the lowest to the highest level of mind, and horizontal – are solidary in constant aspiration "to discard" the product of reflection into the external environment.

However, with the emergence and operation of the phantom mechanisms, it means the mechanism of self-actualization and self-determination, functional effects of morphogenesis of a man are not being exhausted, as here there is another act of withdrawal of abovementioned functional elements.

So, let's once again emphasize the fact that the mechanism of self-actualization and the mechanism of self-determination do not have "firm" basis, which could be called even a quasi-structure. They hang in a kind of vacuum. It seems that in this way human organism produces in its structure deep vacuum state, thereby identifying his structure with the structure of universe. If so, then it remains to understand how it increments own content, generating products that include it into the base of the universe.

For this special process should exist in the structure of the human organism, and, as a result, corresponding mechanism. There is no doubt in the fact that it is possible, as we are dealing with two types of energetic mechanisms. Moreover, the mechanism of self-actualization is by nature associated with physical energy, and the mechanism of self-determination – with spiritual energy.

As a part of an organic entity, as a human organism is presented, to coordinate their interaction one more, fourth type of mechanisms, should appear. Speaking philosophical language, here secondary withdrawal of synthetic mechanisms must take place. And we are inclined to believe that it occurs in practice.

The integrative mechanism of personality or secondary removal of the vertical and horizontal synthetic mechanisms. The morphological basis of it is the energy field, appeared on the basis of *social energy*. K.S. Gadzhiev describes it as something that has no visible and fixed boundaries and values, something immense, devoid of numerical measurements, shape, timeless and spaceless, the will, an opportunity, which can concretize in real substances under certain circumstances. Such an understanding of social energy resonates with the understanding of "passionarity" by L. Gumilev, as well as with H. Ortega-y-Gasset "biological vitality", "vital force" theory.

Secondary removal of mentioned mechanisms happens at the final stage of the system functioning of the human organism, when we deal with the *action*. By the nature *the action is a system of transactions* due to which a person transforms the environment for itself.

If the action influences any subject, and we have the result of such action, then it should be talking about the activity. The latter has two *ingredients*: an internal or theoretical, and external or practical. They are known as the process of cognitive process or mind and practice or productive labor.

Here, the activity must be understood as the fullness and integrity of the manifestation of efficient energy of a person as a subject of historical action. It is clear that it involves communication in material and spiritual forms. There is a reason for the activity to have such a great heuristic potential and effective operation as an explanatory principle in epistemology.

In fact, the activity is the removal of the mechanism of self-determination and the mechanism of self-actualization. It is important to point out that the mechanism of self-determination and the mechanism of self-actualization carry their opposites. For example, the mechanism of self-determination as physical attribute has lepton field, spreading in space, and the mechanism of self-actualization as a semantic attribute has a plan to use physical forces released from human organism. In other words, creating a second nature or the social world by labor, a person at the same time creates a third world or the nature of the logical structures that exists in the form of lepton, telluric or other field of force.

 $<sup>^1</sup>$  See: Кремень В. Г. Україна: альтернативи поступу (критика історичного досвіду) / Кремень В. Г., Табачник Д. В., Ткаченко В. М. – К. : ARC-UKRAINE, 1996. – С. 29.

### Mechanism of self-realisation

development vector

ACTION

vital force of human organism

With all integrity the human organism, as shown above, is transformed by two fundamentally different channels – sensual and rational. The first of these is the process of experiencing, and the second – awareness. The external informational-energetic impulse in the human organism is transformed into the specific wave oscillations.

The specificity of auto waves is that the latter are described by nonlinear equations.

The speed, profile form and amplitude of auto wave are not dependant on initial conditions that led to their emergence, and are determined by the properties of the environment. Unlike waves in linear environment, the auto wave is localized in space — before and after its passage elements of the environment remain in dormant state. In muscle infarction these waves transform matter and energy, and in cortex — information. Specifying the last statement, we can add, that in physical man they bear substance, and in personality structure — information. It is clear that a person can not be reduced to the contents of the human head. It is spilled all over the human organism. Thus, social basis of a person is, obviously, a multi-level area in which essential characteristics of individual social world are deployed.

It is where the personalization of forms reflecting the social needs of substructures person are taking concrete forms – ideas, attitudes, images, motives, knowledge, and essential forces, ideals, beliefs, norms, goals, meanings – as well as the nature of individual social needs is being grounded. Here the image of *potential social world* is being formed, which the subject intends to update the process of communication with other members of social process. It must take in mind that the subjective, that is, opposite to external or objective, in turn, but the form of existence can be subjectified and objectified by form of existence. Biological foundation is an objectified content of external impulse, and the social component – its subjectified content.

The integration of vital force of biological organism with vector created by sense of human life leads to appearance of mechanism of self-realization of human potency. Basic function of mechanism of self-realization is quantization of physical and spiritual energy.

Thus, human personality is dual spiritual-material endless-ending timeless-timing creature. This duality is a creating contradiction, driving human existence. These two aspects of human existence may be described as *two dimensions* – "vertical" and "horizontal", where "*vertical*" component interprets human existence, guaranteeing its axiological-semantic unity; it expresses and realizes itself in "*horizontal*" component.

The self-definition is definition of oneself in the world, which is gaining by a human of his axiological-semantic unity and its realization. An essential feature of self-definition is its future-orientation, where there are two kinds of future – semantic or potential, and temporal or actualized future.

For systematic coverage of unity from one side of spatial-temporal, and from other – non-spatial and non-temporal aspects of human existence it is efficient to use the term "vital field of personality", brought to science by M.R. Ginsburg<sup>1</sup>. The essence of the latter is determined by totality of individual values and senses and space of real action – actual and potential, covering past, present and future.

The psychological science proves that in practice there are always rotations of semantic and physical movement. Action may preserve adopting sense and realize as such only in condition of rotation of objectiveness-subjectiveness of space – time. In psychological language it means that in different moment of deployment of action image of situation transforms into image and program of action, and latter – to the very action, then the realized action transforms into a new image of situation etc. In the image of situation, we deal with predomination of subjective space and objective time, in realization of action, to the contrary – with predomination of subjective time and objective space<sup>2</sup>.

The described transformations help to answer the question of our interest on sources of kinds of psychical energy. The accumulated in motion, in "finding tour", in perceptive action energy transforms into energy of image, and latter may transform into energy of the next perceptive or executional act. In the same way energy of deed transforms into energy of personality. Latter spends saved energy, performing new deeds.

<sup>1</sup> See: Вопросы психологии. – 1983. – № 3. – С. 46.

<sup>&</sup>lt;sup>2</sup> See: Зинченко В. П. Человек развивающийся. Очерки российской психологии / В. П. Зинченко, Е. Б. Моргунов. – М.: Тривола, 1994. – С. 318.

Here is the answer to the question why action is taken for material of morphological units – functional organs, of which social organism is made. The thing is, it is inner or outer side of the thinking process, which creates meanings – informational quanta – for sustaining vital function of social organism. Thus activity may in a sense be considered as a process of creation of new operating elements establishing an integral poly-mechanism of its self-movement in ontogeny and phylogeny. But it is not always so. For instance, it does not happen when a human leads a destructive activity.

Here, we on purpose omit some other functional organs which may reveal themselves as a modern human has been developing. We mean ability of some humans to see through walls, read thoughts in distance, ability to feel colors with a touch of a hand etc<sup>1</sup>. Ability of some humans to come into contact with other worlds may well be classified as such, too. The explanation of these unique functional organs or human abilities by science still lies ahead.

In the end of research of human personality, it should be presented as an integral polysystem, i.e. to show all morphological and functional variety of subjective form of the universum in organic unity. By constructing it we shall prove the conclusions made by S.L. Rubinstein and A.N. Leontiev about mental activity as a morphological object, which has a developed functional structure, a certain subject content, and a semantic structure<sup>2</sup>.

The full structure of human body is its organization which ensures its simultaneous functioning and inclusion in phenomenal, noumenal, and social worlds. In order to build it, it is enough to place logical categories on semantic levels (substructures) and unite them into a system on a genetic-functional principle of constructing of inner-substructural, inter-substructural, and synthetic mechanisms. Series of specific mechanisms of self-deployment of human personality received in this way should be called mechanism of its ontogeny (See scheme 4).

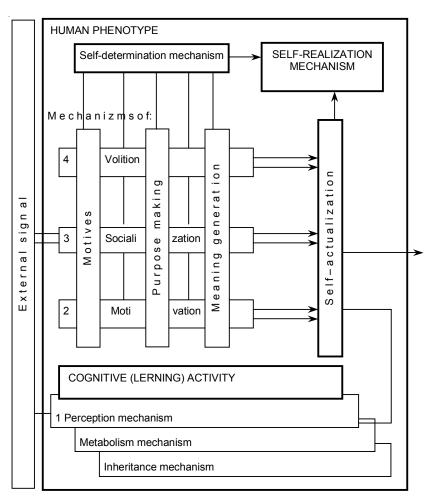
This way we have a deployed integral semantic component of human body which in *static state* is a reason with indispensable instruments (gestalts, memory, attention, etc.) and in *dynamic state*, that is, when reflection takes place, we have a mind with generation of

<sup>&</sup>lt;sup>1</sup> See ibid. - P. 151.

 $<sup>^{2}</sup>$  See ibid. – P. 91–92.

new formations – meanings. It is the inner architectonics of the phenomenon, which we call human spirituality.

It's obvious that if we take a look at this phenomenon from the outside, it will have completely another look. As far as a personality



Scheme 4. Complete model of human personality. Substructures are denoted by figures: 1 – psychophysical; 2 – psychological; 3 – sociological; 4 – voleological

stands in space, which continues the biological body of an individual, it's necessary to describe it by social roles, which are done by a person at the appointed time or during the whole period of time. In practice, it is represented by various kinds of a subject's of historical action activity. Then, the mechanism, mentioned above turn to be the working organs of integrative functional system, which is called personality. In this case we agree with E.V. Ilyenkov, who mentioned that "a child will become a personality – a social a subject, a bearer of socio-humane activity, – only there and then, where and when he himself starts this activity".

Let us now comment upon the principal attributive features of a person's morphology in a prospect of their importance for the explanation of the social organism morphogenesis. The system approach to the study of human nature makes it possible to consider it as a whole, which acts as the dialectical unity of social and biological (physical, mental and spiritual), generic and individual, social and personal, objective and subjective ingredients of a human organism.

It's important to mention that dealing with vertical section of a social body morphology in a human, structure, we operate with consciousness, self-consciousness and superconsciousness. Let us remind that dealing with the section in a horizontal plane we spoke about psychological, sociological and politological substructures.

Overall functioning of a human consciousness structure results in the formation and actualization of its systemic features, primarily: mentality, memory, attention, faculties and intellect. It's important to mention that contemporary psychology has determined a certain propelling mechanism of the operating elements. Outer movements act here not only as a means, technical factor of the operation, but transform into a functional organ of the individual. There is a requirement in the necessity of functioning of the organ in order it was able to operate. That is way A. V. Zaporozhets identifies the inner moment of its self-propelling through the chain of mediations and redefinitions: outer movement – operation – functional organ – necessity².

 $<sup>^{1}</sup>$  Ильенков Э. В. Философия и культура / Э. И. Ильенков. – М. : Политиздат, 1991. – С. 398.

<sup>&</sup>lt;sup>2</sup> See: Зинченко В. П. Человек развивающийся. Очерки российской психологии / В. П. Зинченко, Е. Б. Моргунов. – М.: Тривола, 1994. – С. 98.

The process of the functioning of the structures mentioned above is the process of realization of human intelligence. Its product is mentality as the habits of human consciousness alias algorithms of his thinking. Thus we may speak about the character of the process of thinking as about a functioning mentality.

The process of human thinking should be considered as a generation of thoughts or arrangement of concepts in the structure of a logical organism. That is why the peculiarity of the process of thinking is that it is the only absolutely negentropical process, as it has been mentioned above. The process of thinking — is the process of searching for the invariant relations between functional organs or information flows which come through both: different sensor channels and memory. The ready invariants are "the material" for the process of thinking: images, symbols. Thinking — is a search for the stable relations between the elements and relations in the environment.

Memory is realized through the "cell mind" of the human brain cortex neurons and their ability to amalgamate into ensembles-models. The models division into figurative and symbolic – letters, words, figures – is very important. The images are basic – biological –models, the words are additional ones. Meanwhile the latter, in particular, have defined the progress of the mind, having provided the splitting off and distinguishing the generalized image models. They will not keep in mind without words as far as their diversity and spreading are extremely last and the boarders are vague.

Attention is the operating mechanism of the "amplification-deceleration" system. It reflects "consciousness coordinates": the sensation of a physical body, "I" model, the important objects of outer space — everything the most important, that relates to the human mind and because of it is the object of tracking.

Human abilities should be considered as an ability of interaction between horizontal and vertical mechanisms. This ability systematically exhibits in the process of acceptance and processing of the environmental semantics and also producing of the inherent mind products and realization of the purposefully rational acts of a physical body's movements.

Now let us reveal the functional aspect the mentioned model of the ontogenesis mechanism, i.e. show which model works. The bench mark here is the point that social needs of people are inherently informational and by means of origin may be of **two kinds**. *In one case*, it can be outer informational pulse, which in a new manner rebuilds inner functional human content or human morphology. *In the other case*, it can be inner self-moving of one or several substructures of the person, which demand certain amount of the deficient information for recreation of the destroyed eternity of its inner social world for the its raise on the qualitative new level of the functioning and development.

The informational flow acts as erect and, therefore, metrically heterogeneous state of a semantically saturated space. According to the proposed hypothesis, a bearer of the pure fundamental physical change can be torsion fields. Torsion fields rotate in left and right, this assumes the existence of the "left" and "right" worlds¹. That is why we may say about semantic human multiregularity. Some constituents of a personality are correlatory connected with each other. Soliloquy is an example of the manifestation of a human multiregularity. More interesting example is a currently widely debated in psychiatry notion of multipersonality, which is being connected both with pathological manifestations and creativity.

The system of the innersubstructural filters exists for the breaking of a contact with the outer social environment in the mechanism of the transformation of the mental reality. This system originated as the result the development of the two principally different ways of human mental needs formation. It assigned the reversible character to the mechanism of a human socialization. In the course of mass informational interactions between a person with the environment and the rich inner live obstructions or barriers of several kinds are overcome. These are: physical – in the form of space and time; social – is determined by the status and social roles of the individuals; gnosiological – emerge because of the absence or lack of the experience and knowledge or because of the underdevelopment abstract thinking: ideological – emerges as the result of learning of the Weltanschauung or stereotypes which are contradictory to the ideological basis of the influence realized; psychological – in the form of the existing in the human consciousness social aims, formed opinions, habits, prejudices, passiveness, deferred attention, etc.

The whole scope of these factors determines both the "heights" of the barriers which are between the sender and receiver of the

 $<sup>^1</sup>$  Лешкевич Т. Г. Философия. Вводный курс / Т. Г. Лешкевич. — 2-е изд., доп. — М. : Контур, 1998. — С. 259.

information, and also speed of the formation and passivity of the innersubstructural and intersubstructural mechanisms' functioning. In the real act of a human vital activity intermediate materials of objectification-subjectification are used simultaneously. These are images and symbols. M. K. Mamardashvili said: "The process of thinking requires almost superhuman efforts, it is not inborn; but it can only take place — as kind of awakening or great-recollection — in the force field between a person and a symbol".

Moderate activated models of images follow verbal thoughts, as shadows of subconsciousness, and vice versa. Dominant activity of this or that type of models depends on the specific character of the experienced material and the character of the subject. Moreover, the different localization in the brain is proved. The right cerebral hemisphere, which is supported by the biological basis of a human organism, chiefly manipulates images and the left one — by the symbols and logic. In the whole, the difference among people according to the social and criteria and knowledge is many more than according to the biological and sensitive.

It is important to single out the general level of a biological activity of the brain as an integral background, which is got in the issue of neurons impulses' sum and especially the system "enhancement-inhibition". According to the neurophysiologists, its principal regulator is in the reticular formation of the brainstem. At the bottom of its activity is the tone of feelings and believes. Its highest manifestation is realized in emotions. They have their special programmes for joy, anger, horror, misery, which include both the brain, also through it social basis, and endocrine system.

Despite the fact whether the spiritual need is imposed by the outer image or it is formed in the course of the recreation of integrity of the inner spiritual world, the principal transforming activity is done in the process of awakening the objective reality by an individual.

The model shows that in the processes of experience and awakening there is a certain order of the elements formation, which are comprised into the human informational substructures. The most active involvement in their formation takes the mechanism of the experience together with its instrumental means. They are: instincts, intuition, feelings, emotions and reflexes.

<sup>&</sup>lt;sup>1</sup> Вопросы философии. – 1992. – № 4. – С. 71.

The most fascinating in the functioning of an individual multimechanism is that due to the mechanism of self-realization it pulses, set going in turn to the mechanism of self-actualization and self-determination. Meanwhile, the movement of the horizontal mechanisms is interchanged by the activity of the vertical mechanisms. That is how the unique work of the physical and semantic components of human body into the comprehensive whole is being done. Psychology has already fixed the moment. V. P. Zinchenko and E. B. Morgunov say: "If the action during every its moment of development subordinates only objective space, i.e. time, the subjectivity will abandon it, i.e. it will disappear. "If during each moment the space-time acts only in its subjective forms, the action loses its adaptative sense in relation to these definitions of the objective reality. That is during the each moment of the action's development the unity of objective and subjective must exist. During some conventional moment of the action's development the objective time and subjective reality are in it; during the next moment, the change takes place and the new unity forms: subjective time and objective space. An activity may maintain adaptive sense and be completed only if the objectivity-subjectivity and space-time are interchanged. In terms of psychology it means that during the different moments of the action's development, the image of a situation is transformed into the image and program of the action and the latter is transformed into the action itself and after that the completed action is transformed into a new image etc. In the image of a situation we deal with the prevalence of the subjective space and subjective time and dealing with the realization of an action vice versa – with the prevalence of the subjective time and objective space"1.

Such pattern well harmonizes with our hypothesis about the origin of the energy, as far as psychologists have explained how the collected in the movement or in "the perceptive movement energy is transformed into the energy of the image and the latter may be in turn transformed into the energy of the regular perceptive or executive act. Similarly the energy of the action is transformed into the energy of an individual. The latter expends the accumulated energy committing new actions"<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> Зинченко В. П. Человек развивающийся. Очерки российской психологии / В. П. Зинченко, Е. Б. Моргунов. – М.: Тривола, 1994. – С. 317-318.

<sup>&</sup>lt;sup>2</sup> Ibid. - P. 318.

Though the close scrutiny of the given mechanism go beyond the scope of the research scientific work that is why the participation of the elements mentioned above is considered to be the objective basis for the whole process of the awareness. Here we may briefly outline some aspects of its functioning no more than it is necessary to explain the way in which a human and society interact in the capacity of dialectical oppositions which form the social organism.

The biological basis of the human body corresponds, according to N. Amosov, the system "enhancement-inhibition" of the outer informational-energetic impulse by means of its bringing down to the lowest levels of human mind up to the cell one. Instincts, intuition, feelings and reflexes are catalysts of a self-development of a social component of a human organism.

The mentioned above system "enhancement-inhibition" chooses among all the signals the most active one which has gained the most positive grade on scale "pleasant-unpleasant" and give it the additional energy "push" inhibiting the rest of them. At the next moment it will definitely to another signal, again the most active.

The domination of a certain row of signals in a human body is not random. It is a result of the energetic tension purposeful created by human will while self-commitment of an inner life or emerged under the influence of "target's reflex" or original instinct.

The Biological basis of a human organism is very active and energetic. Its principal instruments are of recreation are lower mechanisms of appropriation, metabolism and heredity. The outer observed reactions of quality of recreated processes in a physiological component of a human body are emotions, which may be both positive and negative.

It corresponds functionally to certain tension of human nervous system, which develops in a form of chemical and physical reactions, on a biological basis, and in a social, correspondently, suggests certain thoughts, attention, subconsciousness, and others. Thus, for example, a thought is a signal intensified in a particular moment. It is impossible to keep a thought, but possible to return in a few cycles.

Subconsciousness – is an interaction of signals, slowed down by the system, mentioned above, but not without activity. These signals realize the simplest functional acts for managing of which the available human instincts and reflexes are enough, and, also commit the automatic tracking after the outer social environment and "a body". And, what is more, energy circulates among signals in the subcon-

sciousness, in the result of which the activity of some of them rises and they "capture the subconsciousness" or burst out from the biological basis into a social one.

As a rule, it happens in a case if the subconsciousness is in the super-intensified state, which occurs which deciding the current practical problem. This power of spontaneous development of the energetic potential is called "the element" of the subconsciousness. Though, the power is not unlimited. The signal, activated by an "enhancement-inhibition" system in a certain moment reports the activity to another symbols, connected with the first one (e.g. with the act being committed). They gain the advantage over other signals from the subcosciousness. Such a signal has more chances to become the next thought. That is why while the great tension of the "enhancement-inhibition" system, the logical ordered thinking is being committed.

Taking into consideration the wildlife, an organism in the process of its development creates negentropy in a form of more and more differentiated and ordered structures, according to I. A. Arshavskiy, and till the most important stage of the development – genetically informative (or childbearing age) comes the most structurally ordered with the maximum level of non-equilibrium state. The complete realization of the specific mission would be impossible without it. The research conducted by I. A. Arshavkiy, shows that the eternity of life is encoded in the genome of zygote. Neither old age, nor, moreover, death, are encoded in the genome. The senile changes in an organism and DNA appear for the second time at the end of the child-birth period.

Here we are finishing our consideration of an individual's inner life mechanisms which provide the self-development and move to the estimation of the outer factors which, as it is obvious now, are, actually, social or personal. They are created by a person in a course of the interaction with other people, i.e. by a social way.

Completing the consideration of an individual's structure, let us underline its energetic inexhaustibility. It is logical to suppose that thoughts, while arising, get the energy of its existence in a form of quantum fluctuation of the vacuum, producing neither small nor zero changes. Therefore, the functioning of a human brain is connected with the realization of vacuums possibilities and not only energetic but also semantic ones. Hence, a human brain is often referred to as social substance.

The information, mentioned above, helps to explain the mechanism of the influence of a separate idea or ideas of a certain person on the course of the world history. Each person has such an opportunity, because to think means to exist in the genetic unity with the opportunities of that quantum basis from which everything specifically corporal originates. Furthermore, a person, making changes of quantum states of vacuum in the course of his or her thinking, manages to influence directly also those material objects the basis of which is the vacuum. The thinking of the ethnos and other big social communities may change, in a short period of time, the structures of the quantum basis.

Thus, let us fix the conclusions, which are the result of the analysis of an individual morphology. *First*, we managed to create the heuristic model of the informational structure of a person, which is here referred to as a personality (individual). And that is the most important.

Second, simultaneously to this we confirmed the initial premise about the double unity of the initial substance. The confirmation is relevant because in the subjective form of the universum, i.e. human organism, there were found two relatively independent subsystems, one of them is the mechanism if its inclusion into the Semantic Universe and another – into the Physical Universe. The thinking is the mechanism of human inclusion into the quantum basis of the Universe. The power of the given above argument is strongly emphasized by the thesis that a person is a subjective image of the objective universum. It means that these two systems exist in the universum in the developed way.

Third, the consideration of the processes of a human organism's organization in the informational aspect, particularly the circulation of the nature through the levels of the organization and conception of the opened systems, let us reveal the interdependence of the informational structures of different levels and inseparable connection of wildlife and abiocoen in the processes of development.

Forth, the technological step which provides the interaction between an individual and society, are his or her essential powers, presented by us as the result of the whole recreational process being progressing in a human organism. Meanwhile, a person interacts with other personalities on the means of interchange of essential powers, which were mentioned above. Due to them a person also doubles himself in this world. The considered above material proves that it is not

correct to speak about four basic types of the essential powers, notably about: economical, social (in a restricted sense of this word), political and ideological. They are exactly the subjective elements in the structure of a social organism. The mechanism of their alienation was revealed by K. Marx. The mentioned above three types of human essential powers are "docking unit" of a personality and society.

And, finally, *fifth*, the human body is very complicated self-developing system which is the principal element of the second nature. It produces the potential social world. It is impossible to talk about the explanation of the immanent connection between a person and society without the evidence of the presence of a potential social world in a human body.

An individual and society may interact as the uniform system, because the inner human activity coincides on the structural level with the human inner activity. Its explanation is the universally recognized merit of the soviet psychological school.

Thus, theoretically we have proved the technological possibility and necessity of the potential social world's shifting into the world of the objectified social reality. It means, that in the structure of the society, in turn, one has to find the analogical morphogenetic substructures and explain them as functional organs which are able to contact with the functional organs or substructures of a personality.

For the deeper understanding of the human place and role in the Universe let us venture a mark upon the potential or syncretic social world, hidden in a persona structure.

# 2.3 Human personality as a potential social world

A potential social world is the product of intrapersonal social process. It appeared as the result of self-motion of the structures of personality as a functional organ of human organism. As it is the product of process character, it cannot fix in perpetuity. For its reproduction a man must keep thinking round-the clock, even during sleep. Without thinking it is impossible to retain it even for a moment. It is in the course of speculating about life when a unique social world is born in the one and only performance. Here it is appropriate to cite H. Skovoroda's words about the fact that a man must "begin to see clearly the eternity concealed in his body... as if a sparkle... This sparkle

is other worlds". Though according to Hegel (*Philosophy of Law*) thinking as subjective one only observes this development of idea as its own mental operation, without adding anything to it. To consider something rationally does not mean not to introduce reason from without into that thing, refining it in this way, but to see the thing reasonable for himself; here the spirit in its freedom, the highest summit of self-conscious reason, *imparts the reality to itself and generates itself as the existing world*².

In other words, the potential social world exists at the subquantum level, represents a "profound reality", discarded by Niels Bohr, though it exists, we cannot observe or percept it; but then again we cannot call it neither a "ghost" or a "senseless concept", for we observe its effects in the form of nonlocal correlations, which otherwise are quite inexplicable.

Potential social world, being naturally semantic, does not locate in the space-time – not a single part of it has application. It cannot be detected only in one point of the space – it is in any place and everywhere; it cannot be localized only in the given point of time – it is in any time and always. Only explicit results of such order possess locality.

It occurs, for example, under alienation by a man of the content of his potential world to ambient. To illustrate this thesis it is important to apply to the process of objectification of individual social worlds. Here, at the explicitly evolute level, everything possesses locality and seems to be random; at the implicitly involute level everything possesses nonlocality and seems to be nonrandom.

Appearing once, the potential social world of a human has been existing independently for, as a rule, all his life. Meanwhile the personality guards it carefully, for, according to Hegel (*Science of Logic*), to the origin of spirit, even more than to the character of living matter in general, is natural not to accept in itself the other primary, in other words, not to admit the continuation of any reason in itself, but interrupt and transform it<sup>3</sup>.

 $<sup>^1</sup>$  Сковорода Г. С. Диалог. Имя ему — Потоп Змиин / Г. С. Сковорода // Сочинения : в 2 т. — М. : Мысль, 1973. — Т. 2. — С. 148.

 $<sup>^2</sup>$  See: Гегель Г. В. Ф. Философия права / Г. В. Ф. Гегель. – М. : Мысль, 1990. – С. 91.

 $<sup>^3</sup>$  See: Гегель Г. В. Ф. Наука логики : в 3 т. / Г. В. Ф. Гегель. – М. : Мысль, 1971. – Т. 2. – С. 213.

Ontologically potential social world represents a specific power field, which a certain man generates in the process of interaction with other people. Meanwhile the potential social world of a personality as an ontological object is not a theoretical abstraction, but material perceptible reality, which influences other people. Its "bodily organization" — a part of that "collective body" or "ensemble of social relations", the particle and the "organ" of which is every particular human individual.

It has its topological characteristics, as the personality, being in the human organism, has distinct boundaries. In fact, it turns out that the *social content* of the personality, on the one hand, is fixed in every semantic nest of its structure, under which we understand elementary functional organs, such, for example, as motive, ideal, will and others, and on the other hand, there is the outer part of semantic structure in the form of skills (functions or the system of social roles) of realizing the specific kinds of interrelationship with other people. The inner and outer parts of social content compose what is known as subjective social relations or individual social world.

The simultaneous presence of the potential social world in the internal environment or in the structure of the personality and in the external environment has long been noticed by the specialists. Thus, for instance, psychologists observe it in the structure of personality. They reproduce its presence through the idea of social role playing behaviour of a man in the socium. In this connection, social psychology can reproduce the structure of personality through the theory of social roles, which it plays in the life of genus. Sociologists are also involved in the study of intrapersonal aspect of the given problem.

In their turn, the sociologists reproduce the potential social world of personality, finding its characteristics in the external environment alias society. They do it by means of analysis of functions, realized by it in the external social environment. In their opinion a man looks like a polyfunctional being, that is why materialists (Marx) have earlier considered it as a partial worker, the ordinary bearer of a certain partial social function", which today is substituted by a versatile developed individual, for whom "various social functions are alternate ways of living<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. – 2-е изд. – Т. 23. – С. 499.

Meanwhile the functions, realized by human personality, emerge as the character of his own, that is individual social needs. The outer activity of a man is realized as the character of labour. According to the known point of view, the character is the same basis of volitional processes, as *intelligence* – the basis of thinking processes, and *temperament* – the basis of affective processes.

When the individual assimilates with his role, which he is fated to play within a certain system of relations with other individuals, with that specific system of social roles, which he is charged to by the group, he begins to exercise those particular organs of his body, which guarantee their best performance. In such case the individual obtains even a specific appearance. To illustrate it we can give the example of proud lift of the neck of royal personages, muscularity of a sportsman, stoop of a book-keeper etc. though socio-biologists believe, on the contrary, that the behaviour of a man in society should be explained by genetic factors.

As the potential social world is the product of personality, it carries the mark of its character on it. If to take into consideration the norm of the social responses of personality, the potential social world as virtual reality, on the one hand, is determined by the character of human life activity, which may be of three types – reproductive, adaptive and creative character, and on the other hand, it depends on the external conditions, which also may be different as to the level of influence to the process of its self-development and functioning.

For all diversity and even irreducibility of the elements of above mentioned individual potential worlds to each other, for example, the ideals or the motives of behaviour of different people may be diametrically opposite, they possess common attributive property to exert pressure on other participants of the social process. It is implied by the general properties of social phenomenon.

The above examined morphological structure of personality indicates clearly on the fact, that potential social world has two planes for self-development within human organism. One of them is formed during the motion from physical through psychic to semantic, and the other – during the transition from consciousness through self-consciousness to super-consciousness. As it follows from the literature available, in the former case we deal with its existence in the value and sense dimension, and in the latter case – in the space-time dimension. Thus, the potential social world may have two forms of expression – semantic and physical.

It is important to point out, that semantic worlds are as real as the material ones. And it is difficult to decide, which of them is more important for understanding the real place and role of a man in the self-development of universum. It is more likely that they both are actual and necessary for its adequate functioning.

Here the interpretation of N. Berdyayev's works through the lenses of this guideline may be most actual. He wrote: "I face the question of genuineness of reality and primacy of this fallen world, in which evil triumphs and excessive suffering is sent to people, with excessive acuteness. ... No tanks and destroying bombings could persuade me in profound, primary and final reality of what is going on in the world. For me they are just symbols of the other ... For me a strong feeling, that this compulsory given world is not the whole of this reality ... that there is a mystery around us ... Our world, which for many people seems to be a finite reality, for me seems derivative" 1.

Though in practice everything is not so simple and comprehensible. If in reality of material world, for example, nobody has any doubts, about the existence of semantic reality knows quite a small number of people. Meanwhile the contemporary level of technological progress and psychophysical evolution of a man resulted in bringing the humanity to the verge, where informational technologies made it possible to reveal a qualitatively new world before him – the world of so-called "virtual reality", "world of imaginary reality" alias "the world of VR systems".

The essence of this world consists in the following: by elaboration of the particular means of sending information and refining the quality of perception and feelings, a man gets the possibility not only to watch and observe constantly this world but also to participate actively in it, not only to empathize, but also to create the developments of this world. From the point of view of the Doctor of Medicine A. Berestov, this imaginary world is as real as the actual world, and according to the intensity of empathy, it is even more sensible than the real one<sup>2</sup>. The estimation of the Japanese scientists showed that even up to the year 2000 the volume of sales of new technologies, connected with the world of imagery realities was equal \$100 million,

<sup>&</sup>lt;sup>1</sup> Бердяев Н. А. Самопознание. Опыт философской автобиографии / Н. А. Бердяев. – М.: Книга, 1991. – С. 150-152.

<sup>&</sup>lt;sup>2</sup> See: Берестов А. Число зверя / А. Берестов. – М.: Троице-Сергиева лавра, 1996.

arousing a real revolution, similar to nuclear, cosmic, informational ones and others.

The naturalization of the potential world in the space-time plane is more familiar to us than its development in the value-semantic coordinate system. Here we deal with socium. Further, we shall study this process in details, for the extension of the social content of the personality out of the borders of the human organism is the manifestation of the social form of the universum movement.

From the ability of bidirectional movement of the potential social world it follows directly the explanation of the *two types of human connection with the environment. The first type* implies the functional links realized through the society as the direct exchange of living activity, mediated by – sense, symbol, myth etc. "The personality in general is a unit expression of life activity of the "ensemble of the social relations in general". The given personality is a unit expression of that necessarily restricted system of these relations (not all of them), by which it is directly connected with the others (with some, but not with all) individuals – the "organs" of this collective "body" the human kind body" – E.V. Ilyenkov wrote<sup>1</sup>.

The second type of these connections is the mediation by the things. Besides, the personality, as it is not in "the body of an individual", but in "the body of a man", it is the "body", where, according to E.V. Ilyenkov "more composite and spatially more wide, containing in its morphology all those artificial "organs", which a man has been creating (tools, machinery, words and books, telephone net and radio and television channels of connection between the individuals of the human kind), i.e. that "common body", inside of which separate individuals function as its living organs"<sup>2</sup>.

Thus, the human personality has two types of connection with the environment: one of them is realized by the mechanism, hidden at the level of unconsciousness, and the other one is taken out to the environment. It is the safety means of the complex and diverse living organism against the casualties of planetary life. Constructively they are two relatively independent subsystems. One of them provides the life activity of the genotype, and the other does the same of the phenotype.

 $<sup>^{1}</sup>$  Ильенков Э. В. Философия и культура / Э. В. Ильенков. – М. : Политиздат, 1991. – С. 394.

<sup>&</sup>lt;sup>2</sup> Ibid. - P. 395.

A special interest is called by the structure of the potential social world. What is it in the value-semantic plane? Though, today it is difficult to answer these and many other questions, related to this aspect, unambiguously. Here we can only admit that, as the planes are different, the form of the individual social products is must be different too.

Especially difficult for us is to answer the question about what structure the potential social world of the personality may have, if to consider it from the angle of value-semantic plane. It seems that the experts in the field of the linguistic philosophy could give a more competent answer to it, for they in particular possess the positive results as to the analysis of logical structure of the language and its semantic abilities.

We consider as more understandable the structure of the potential social world in the time-space plane. It is connected with the fact that the theoretical thought of our country for many decades has been interpreting the structure of the personality as the derivative from the structure of the society. This is gained by the analysis of the system of functions, which are realized by it in the course of interaction with other people. A.N. Leontyev wrote that it is attained by the individual in the society, in the whole system of relations, social according to their nature, into which the individual is involved. On the basis of the appearance of such natural functional quality a man can come into interaction with other people, thus creating wonderful ensembles of interpersonal, social by nature relations. It means that in practice we have as many variants of development as there are combinations of available potential social worlds.

So, to explain the configuration of the potential social world of the personality in the environment becomes possible only due to the "social roles" concept. The social role we understand here as the personified function. Due to this realized system of social roles a man attains the form in the social environment, influences other participants of the social process, becomes notable for them, and, finally, assimilates with them to such extent that as the result of constant exercising his physical body he obtains a specific appearance suitable to realizing them.

The analysis shows that if to combine the results of the sociologists and psychologists into organic system, it will become clear that the potential social world, being in syncretic condition, is already

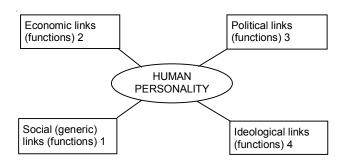
structured. To our mind this implied order of our brain corresponds to the software of modern computers.

We can reveal its structure either according to the type of consciousness, forms of culture, essential forces, which a man possesses due to the attributiveness of the universum or according to the type of main exterior links of the human personality. It is clear that here we should speak of four main types of people interaction: social, economical, ideological and organizational. They will be at the same time the elements of the potential social world and the elements of the personality structure, which interest us so much. Such typological classification is inspired by a well-known objectified structure of the society, in which the spheres with the same name are present, and with which the personality is always in interaction (see scheme 5).

The potential social world of the personality may either infinitely be in syncretic state, rarely undergoing inventory from the part of its owner, or flow as if from the horn of plenty, if the person holds a high position in managerial-administrative sphere, in science or in culture. For appearance the potential social world in the environment there must grow a social demand for it. It is a common knowledge.

Virtual social worlds act as an efficient factor of generation of objectified social world alias society. On the assumption of the above described structure of personality we may conclude that society is generated by the main psychological operation – mental act.

An important peculiarity of the latter is that it, in contrast to instinctive physical act, according to the observations of experts in



 $Scheme\ 5.$  The structure of the potential social world of human personality:

- 1 social element; 2 economical element;
- 3 political element; 4 ideological element

psychology, is a two-act one. A.V. Zaporozhets writes about it: "Mental act has a two-act character even in the simplest cases in the sense that one action becomes a purpose for another. The change of the structure of activity in particular in connection with its new content is realized through the change of operations". Here we may only take off our head to T. Parson's brilliant finding, indicating at the exceptionally fruitful role of *action* in the generation of the social world. Vast heuristic potential in interpretation of the mechanism of generation of the objectified social world from the potential one, hidden in the structure of personality, belongs to the activity approach.

Though, if to be precise in methodological respect, it is required to reduce value-semantic and spatio-temporal planes to the same denomination in order to present the social form of the universum motion, now disintegrated into subjectified and objectified parts, as a whole unit – social life. In the theoretical terms it means that the potential social world, staying in the structure of the personality and being developed in the value-semantic plane, and after coming out to the spatio-temporal plane, before it becomes real and attains a usual parametric characteristic, requires measurement in principally new system of coordinate. This conclusion follows from the fact that the planes – the value-semantic and spatio-temporal – should reduce, before they become the axes of self-development of a real social world. It is supposed that such axes of coordinate are *theoretical and practical*. In the practice of everyday communication they are known as the unity of word and deed.

So, now in order to refine the understanding of place and role of a man in the self-development of the universum, we should study the process of denial it as the planetary organ in the mechanism of the universum self-motion. It can be gained on the basis of the study or negation process or withdrawal of the potential world of the person. As we have just shown, the process of denial of the potential social world of the personality may take place in the two planes: in horizontal and in vertical ones. In the horizontal plane, i.e. at the planetary level, the subjectified form is negated only partially, generating the objectified social world alias society. There is no complete negation here, for the personality enters the interaction with other people and

 $<sup>^1</sup>$  Запорожец А. В. Избранные психологические труды : в 2 т. / А. В. Запорожец. — М., 1986. — Т. 1. — С. 188.

forms the family of social organisms. It would be better to say here about the stable functioning. This results in the fact that the social form of the universum self-motion reaches its maximum. It withdraws in the complete sense of this word, only in the vertical plane, i.e. when the universum transfers into qualitatively new phase of self-motion — cosmic. Here the last traces of man's presence in the mechanism of the Universe self-motion disappear.

## Withdrawal of human personality or the third nature of the universe

## 3.1 Society as the objectivation of person's potential social world

We have already indicated at the existence of genetic bond between biological organism of a human as a product of the first nature and the personality as a potential world, or the second nature. We are now to analyze the process of how the objectified form of the social world organically emerges from the potential form. The essence of the social movement as an intermediary link between the biological and cosmic forms of the existence of the universe lies within this transition.

So, based on our hypothesis, the social phase of self-motion of the universe consists of the interaction of subjective and objective processes. Such a correlation has endless room for development, therefore, the social form of motion is boundless. It has a geological character and cosmic direction of movement. It should be mentioned that there exist significant differences in determining of its content. A.P. Belik, for instance, describes it as "The social form, the kind of matter is a philosophical concept, indicating the substance of the social form of motion, the superior kind of matter capable of accelerating self-development, self-perfection under the involvement and control of generated by it own self its opposite, consciousness, spirit, mind, and thought. The social form of motion is the process and the result of the continuously deepening open synthesis of the universal playback- conversion of all the previous forms of matter and forms of movement by means of consciously determined, means-mediated

activity of reasonable beings with the development of their abilities, mastery of natural laws with the purpose to satisfy their needs".

It appears to us that this definition of social movements is proposed by a researcher, as if he is within it. For certain reasons it does not completely fulfill our expectations. Firstly, it is due to the fact that the social form of motion is not only based on the matter, but it is a phase of self-motion of the universe as a binary basis of the universe. Secondly, the consciousness, the spirit, the mind, and the thoughts do not confront matter in the social form, but, as it has already been demonstrated, along with the matter represents a qualitatively new formation, a human subjected universe. In other words, within the social form of self-motion of the Universe a variety of its attributive features is present. Thirdly, this definition does not indicate the possibility of shifting of this form of motion to a higher, cosmic level of motion. Since the social form of motion has absconded the substantial basis of the Universe, it has thus to return to it after having completed a huge in size and time circulation.

Paradoxical is the fact that even the *Philosophical Encyclopedia* does not offer a definition of this term. Furthermore, among 150 terms with the adjective *social* (like *social pathology of symbols, social physics, social physiology, social deviation, social fragmentation, social diseases, social instinct, social reactions among animals and others)the terms <i>social motion, social form of motion* etc are not presented. However, the concept of *social motion* has once been defined, meaning the *movement of peoples*.

In the course of studying the process of alienation of the potential social world we are to understand the technological aspect of its happening. To achieve this, a change of the approach to scientific studying of the problem is needed. The latter is reached when doing the analysis of transitions of the Universe from one stage to another, we do not move from the existing social world to the essence as this phenomenon is commonly studied, but in the opposite direction, i.e. from the first nature to the second through the human being. Hegel (*Science of Logic*) indicates the possibility of such direction finding as the essence is, on the one hand, the basis as a self-reflected definition of content, inherent to the determinate being, which it gener-

 $<sup>^1</sup>$  Белик А. П. Социальная форма движения: явления и сущность / А. П. Белик. – М. : Наука, 1982. – С. 250.

ates. On the other hand, it is something that explains the determinate being (it is actually it that indicates it). On the contrary, the essence is defined by the determinate being as the determinate being is concluded to the essence<sup>1</sup>. Under such method of elucidation the social phenomenon is simply and conveniently determined by its essence.

The above demonstrates how in the process of formation of the human a certain specific content is alienated off him/her into the external environment. The process of partial alienation of the individual existence off its essence, the human, occurs in this way. The fate of this unique product will be viewed as the initial moment of self-generation of the real social world. The existence of alienated products in the external environment is *the social*.

In order to identify the specifics of the social, we are now to refer to Hegel's study of the essence of the concept to consider the self-emergence of the essence of the social within the 3 stages, namely, the existence, the being, and the reality. Thus, we proceed with the fact that at the stage of existence the essence of the social is represented by the collective energetic field, which has emerged on the basis of the integration of individual power fields. Since self-consciousness has generated it as a concept and forced it to the outside of human head in the form of energetic impulse, for other parts of the power field it is mediated by another concept, and the mind is this mediated concept².

Mechanism through which transpersonal product has been obtained, is an action which is understood here in the psychological science interpretation. We have earlier emphasized the fact that psychological science studies the category of "action" as its major subject. We have previously considered it as an element of the mechanism of self-actualization of a human. For us, it is crucial to emphasize the determination of content of this category. According to V. P. Zinchenko and E. B. Morgunov, "the action is a living form that resembles an organic system, within which not only its inherent properties are developed, but the (functional – V. B.) organs, which this system lacks, are formed and structured"<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup> Гегель Г. В. Ф. Наука логики: в 3 т. – М.: Мысль, 1971. – Т. 2. – С. 88.

<sup>&</sup>lt;sup>2</sup> Ibid. – P. 73.

<sup>&</sup>lt;sup>3</sup> Зинченко В. П. Человек развивающийся. Очерки российской психологии / В. П. Зинченко, Е. Б. Моргунов. – М.: Тривола, 1994. – С. 94-95.

Based on this interpretation by psychologists of the category "action", we view the integration of people with each other as *intellectual interaction*. In this case, the difference between the "intellectual" and the "social" is just that the former is a product alienated by the human body into the external environment, and the latter is the mutual functioning of its alienated products within the external environment. In the process of integration of intellectual products generated by certain individuals into the organic system, which functions within a different environment, the change of their properties can be observed. The expression of the new features of the substance under the changing of the conditions of existence is quite common.

To put it differently, we are now dealing with a spiritual form of communication between subjects of historical action based on the principle "subject-subject". It is a process corresponding to the meaning of the term "Verkehr" introduced by K. Marx and F. Engels in the work *The German Ideology*. The communication as a phenomenon of intersubjective character has been substantially studied by M. S. Kagan in his work *The World of Communication*, in which he stated that "in the process as well as in the result of communication is not an exchange of ideas or things, but a *transformation of condition of every party into their mutual achievement*. The communication generates community, while the exchange preserves the individuality of its parties".

E. Durkheim, for instance, trying to understand what bonds the society, which does not transcend anything, but which self-transcends all its members, finds the source of connection in the similarity of attitude towards the aims and ideas and calls it the "civil religion" that ties the people by means of power, which even the technological progress is unable to terminate.

It should not be ignored that when Z. Freud legitimized the analysis of the unconscious in human structure, and K. Jung expanded this problem to further than a certain individual and introduced a new theory, Unadze and his school attempted to describe it parametrically, then E. A. Donchecnko endeavored to illustrate its functioning as a self-developing system within a collective unity.

E. A. Donchecnko is right saying that "the moment of fusion of the scientific perception of the world into the field of recognition of possibility of a separate and independent existence of the material

<sup>&</sup>lt;sup>1</sup> Каган М. С. Мир общения / М. С. Каган. – М.: Политиздат, 1988. – С. 150.

substrate (brain) and mind (consciousness and various forms of the unconscious), gives a new start to humanitarian science, arranged for by the achievements in the field of natural sciences".

It is extremely important here to remain aware of Max Weber's concern saying that not all types of actions, including the external, are the "social" in common perception. External action cannot be described as social if it is focused on the behavior of proprietary objects. Internal relations are social in nature only if they are focuses on the behavior of others<sup>2</sup>.

Action is not much of an internal product of a person; it is rather of human's interaction with the external structures of society. It is necessary to include the definition of the action provided by of P. Shtompka (Sociology of Social Change). Action, according to him, is an attributive concept, it summarizes the certain properties of the social factory, this "really real reality" of the social world. It is a moment when the structures converge (the ability to operations) and agents (the ability to act); it is a synthetic product, a fusion of the structural circumstances and abilities of actors. The action is conditioned in two ways: "from the above" by means of balance between tensions and limitations, as well as resources and possibilities provided by the existing structures, and "from the underneath" by skills, talents, outstanding abilities, knowledge, subjective relations between the members of the society and the organizational forms, within which they are joined to form teams, groups, social movements, etc. However, the action is not reducible to either of the above mentioned; being related to both levels (of the totalities and individualities), it forms a newly emerging quality<sup>3</sup>.

Thus, we claim that the essence of the "social" at the stage of existence appears to us as the interaction of individual minds, which we regard as the "social intelligence", in contrast to the intelligence of an individual. L. Gumilyov introduced a very powerful description of the mechanism of this interaction through the concept of

 $<sup>^1</sup>$  Донченко Е. А. Социетальная психика / Е. А. Донченко. – К. : Наукова думка, 1994. – С. 25.

 $<sup>^2</sup>$  See: Вебер М. Избранные произведения / М. Вебер ; пер. с нем. ; сост., общ. ред. и послесл. Ю. Н. Давыдова ; предисл. П. П. Гайденко. – М. : Прогресс, 1990. – С. 625.

<sup>&</sup>lt;sup>3</sup> See: Штомпка П. Социология социальных изменений / П. Штомка; под ред. В. А. Ядова; пер. с англ. – М.: Аспект Пресс, 1996. – С. 274.

"passionarity" (from lat. *passio*- passion), which he understood as the "effect generated by variations of this (intellectual – V. B.) energy as a peculiar feature of a human's character. He thus stressed that "passionarity – is a characteriological dominant, an invincible inner striation ... to work for achieving a certain goal". Originally, it is a pulsating energetic object of the total nature, creating a field form of life, which forms the social world within our planetary system.

A theory of action has been formed and is being developed in practice, which has described a full circle and has been greatly enriched within the period from Buckley to Archer. The theory of action thus is now being considered the central concern of sociological theorizing. This is recognized not only by its founders, but by other authors who suggest that it is about to become that theoretical area in which we can expect significant progress<sup>2</sup>. Its major concern currently is the correlation of action and structure.

Let us now see what happens with the field form of intelligent living at the stage of a phenomenon, when it still coexists in organic unity with the mother, or the living form that has generated, and it yet inseparable from the human body. At the second

stage of self-development of the concept "social" we are finally able to explicate the essence of the social world, i.e. to demonstrate how it is expressed within the determinate being<sup>3</sup>.

The transition of the essence of the "social" into its being is, therefore, such a process in which the result and the precondition are different only in the form. Here the essence of the "social" as well as its being, or the social world, is a destiny — both are one-sided definitions, each of which is transited into another and expresses itself there as a depended moment, as well as producing a different definition, which it bears. This transition has two opposite meanings; on the one hand, each member appears as a moment, i.e. it appears as something transitory from direct to something different, as every member is posited. On the other hand, it means that each of them generates the other. Thus, both parties are the motion.

 $<sup>^1</sup>$  Гумилёв Л. Н. География этноса в исторический период / Л. Н. Гумилёв. – Л. : Наука, 1990. – С. 33.

<sup>&</sup>lt;sup>2</sup> See: Штомпка П. Социология социальных изменени / П. Штомпка; под ред. В. А. Ядова; пер. с англ. – М.: Аспект Пресс, 1996. – С. 254.

 $<sup>^3</sup>$  See: Гегель Г. В. Ф. Энциклопедия философских наук : в 3 т. / Г. В. Ф. Гегель. – М. : Мысль, 1975. – Т. 2. – С. 561.

Here the division of the interaction into its component parts takes place. One of them is enclosed inside a living body of the human organism and is expressed as its major attributive quality, individual human activity, while the other is represented by a diverse totality of human activity or integrative activity that constitutes a category of family living of mankind. In social studies, as known, the concept of "family", "family living", "family entity" were introduced by Ludwig Feuerbach who believed that the family nature allows each individual to express him/herself within a countless number of individuals.

Let us consider the correlation of individual and family activities in more detail. Their unity lies in the fact that both the one and the other are the conscious human activity, by means of which the first nature provides for the through-itself being, generating thus the second nature. Therefore, K. Marx, when exploring a human through the prism of the second nature, turned out to be quite right when considering human activity as the essence of his/her living, and the work as a basic attributive property of a human body as the substance of a human<sup>1</sup>.

K. Marx, having defined the category of labor (the latter he viewed as a positive creative activity²) could define a certain "system of systems" that would explain the interaction and subordination of all its "subsystems", and find a really effective system, which under the laws of a unified complete organism $^3$ .

Through the prism of alienated work, K. Marx explained the emergence of a family life of a human. He thus demonstrated how the collective form of living in practice is transformed into a specific form of maintenance of human living. The alienated activity of a human, he wrote, when alienating 1) the nature, 2) his/her own self, his/her own function of activity, his living off him/her, thus alienates a family off a person. It makes a family living of a person a means of maintaining of individual living<sup>4</sup>.

 $<sup>^{1}</sup>$  See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. — 2-е изд. — Т. 46. — Часть 2. — С. 112—113.

<sup>&</sup>lt;sup>2</sup> See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. – 2-е изд. – Т. 4. – С. 133–114.???

<sup>&</sup>lt;sup>3</sup> See ibid. – V. 4. – **P. 133–114.???** 

<sup>&</sup>lt;sup>4</sup> See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. – 2-е изд. – Т. 42. – С. 92.

However, he was cautious when comparing the "society" to the abstraction of an individual. The individual, he wrote, is a social creature. Therefore, any expression of his/her living, even if it does not appear in the immediate form of the collective, occurs in conjunction with other forms of life, is the expression and evidence of social life. The individual and the family human livings are not something different, although a type of existence of the individual life can either be something single, or it can be a general expression of family living; and the family living can also be either be something single, or the pervasive individual living<sup>1</sup>.

The time of the partial alienation of an individual life, or the freedom of action in the form of alienated labor is set in the structure of a human in a qualitatively new way, the necessity for communication and exchange of activities with other people. Now for an intellectually developed person another person becomes indispensable as a form of his/her inorganic continuance for the organization of their mutual and productive living. The process of a person's self-affirmation as a conscious and a family-oriented creature that is a being that views the family as his/her own entity, or him/herself as a family creature, is thus fixed in the existence as a practical creation and reorganization of the objective world through the division of social work.

Consequently, the essence of social existence is revealed as the exchange of activities between a certain individual and social groups, classes, and finally, the humanity. The exchange shifts the individual needs of a person and material objects from the individual level to the level of the public, i.e. the level of living social interactions. The exchange of activities, and later of the goods, has led to the necessity of a qualitative and quantitative analysis of public life. The emergence of science and money was a necessary prerequisite for the realization of these functions.

Due to the specificity of the social environment, the interaction between people has all the signs of violence against the person, as the social fact can only be recognized in the form of the external coercive power, which it has or is able to have over the individuals<sup>2</sup>. It is

<sup>&</sup>lt;sup>1</sup> See ibid. - P. 119.

<sup>&</sup>lt;sup>2</sup> See: Вебер М. Избранные произведения / М. Вебер; пер. с нем.; сост., общ. ред. и послесл. Ю. Н. Давыдова; предисл. П. П. Гайденко. – М.: Прогресс, 1990. – С. 418.

necessary here to study in detail the degree of compulsion of carrying out of the requirements of the social environment, as it is a function of power of compression that enables human interaction and, hence, the emergence of a new social world, where this verge has been crossed and where violence against the person, infringing his/her development takes place.

At the same time, this unity of form as the ratio of existence in being is foremost the establishment, the transition of one certainty of being into another, more specifically, it is the process of transition of the subjective form of the "social" into the objective form and vice versa, while it is generally believed that it is only the need that makes one adapt to the really existing, and hostile at times world. In reality, the unity with the world should be recognized not as a forced relationship, but as a sensible attitude. To solve this problem means to explain the way they interact with each other, beyond which, as we know, there is nothing more.

Thus, in their daily lives, communicating with each other, people generated a certain type of public relations. These bonds between people enabled them to live together and develop a social organism. For this reason at all stages of human history, people have sought to develop and maintain in every individual a personal necessity of communication with their own of a kind, and the mastery of the most effective means of communication for this type of culture. However, until a certain moment, it was a sort of a byproduct of their activities. It first noticed by L. Feuerbach, for whom the relationship between human beings, according to Karl Marx's apt definition, is an internal, dumb generality, unifying a number of individuals with natural bonds only<sup>1</sup>. The force that unites the "I" and the "You", according L. Feuerbach, is a human's love for another human. However, the Marxists did not give him credit for a long time even though K. Marx considered it an "exploit" of Feuerbach's to make a "social relationship "human to human" one of the "basic principles" of his "truly materialistic theory"2. Karl Marx, and later his followers, believed that this relationship is practical and is formed in the process of joint production activities of people and is not an innate sense of community, "I" and "You." Rough materialism and

<sup>&</sup>lt;sup>1</sup> See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. – 2-е изд. – Т. 42. – С. 266.

<sup>&</sup>lt;sup>2</sup> See ibid. – P. 154.

the denial of spiritual incentives in people's lives can be clearly observed in their position.

Only with the advent of the industrial phase of development communication and its product, public relations, have been the subject of special theoretical analysis. Thus, in the 'German Ideology, as we know, it was emphasized that in the production process people, "had to have a relationship with each other", and that this practical communication" has created and is now recreating ubiquitously the existing relations". V. I. Lenin, in his turn, also stressed that people" start to communicate" in the process of a joint practical activity, and a certain kind of social relations² is hereby established, however, the people themselves are unaware of the nature of those relationships and become directly dependent on the nature of these relationships.

M. S. Kagan, describing the interconnectedness of communication and public relations, wrote that there "exists interaction, but it is described not in terms of "form "and" content or "personification", but rather in terms of "process "and "product. Communication is real activity that occurs logically, and public relations are the type of connection of its parties, which becomes the structure of society and, being formed in the practical communication between people, is as well its cause"<sup>3</sup>. Besides, referring to Karl Marx, he points at another aspect of the dialectical interconnectedness between communication and public relations, a conscious focus of communication (as a form of activity of a subject) and the force of public relations which is unconscious, spontaneous and acquiring the unprompted power over the subjects. He therewith concludes the characteristics of their features with a reference to the fact that the third aspect of the dialectics of communication and public relations are linked with the connection of the concepts of "direct" and "indirect", "straight" and "oblique."

It is extremely important for us to consider M. S. Kagan's conclusion that "in whatever form the communication occurs, it aims at the achievement of community (or an increase in the level of generality) of the actors by their free and joint efforts while maintaining the unique individuality of each of them"<sup>4</sup>.

<sup>&</sup>lt;sup>1</sup> See: Маркс К. Избр. соч. : в 9 т. / К. Маркс, Ф. Энгельс. – Т. 2. – С. 411.

<sup>&</sup>lt;sup>2</sup> See: Ленин В. И. Полн. собр. соч. / В. И. Ленин. – Т. 18. – С. 343.

<sup>&</sup>lt;sup>3</sup> Каган М. С. Мир общения: Проблема межсубъектных отношений / М. Каган. – М.: Политиздат, 1988. – С. 136.

<sup>&</sup>lt;sup>4</sup> Ibid. – P. 163.

Now let us see what happens with the essence of the "social" at the next stage of its self-development, the stage of reality. Referring to the works by Hegel, **reality** is the unity of essence and existence. The disguised essence and the devoid of support expression are true here. In other words, they are uncertain stability and devoid strength variety. This unity of the internal and the external as components of the "social" is the absolute reality, which is an absolute ratio if it to itself, the substance that comprises the second nature.

Since the deployment of the absolute "social" is its own action, while the other that also begins with it, and comes down to it, means that it is absolutely absolute. However, the absolute, given only as an absolute identity, is only absolute when it comes to external reflection. It is, therefore, not absolutely absolute, but absolute in some kind of a certainty, in other words, it is an attribute. Consequently, it is the absolute form itself that makes it be visible within itself and defines it as an attribute. It seems to us that the result of establishment of the "social", or its attribute, is *collectivism* as a universal principle, the method of joint activity of people. Its establishment is necessary in order that humanity finally escaped from a number of external dependencies, and to create a mechanism of self-development of the social organism within itself.

Karl Marx wrote that the social as a way of joint activity of people forms a kind of a totality of human expression of living<sup>1</sup>. E. Durkheim (*Division of Labour in Society*), as we know, considered fruitful K. Marx's idea that social life should not be explained by perceptions of its participants, but through the deeper reasons, rooted mainly in the way the individuals are separated. However, according to E. Durkheim, this idea that introduces a logical conclusion of the evolution of social thought is in no way connected with the socialist movement and the "sad spectacle of the conflict between the classes<sup>2</sup>. V. I. Lenin directly pointed out that the social side of the material process is a unification, cohesion, and organization of the workers<sup>3</sup>.

Back in the early XX century the most sophisticated and universal in spirit representative of Russian culture, as spoken about by Berdyaev, the Russian poet and philosopher V. Ivanov finds in

<sup>&</sup>lt;sup>1</sup> See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. – 2-е изд. – Т. 42. – С. 119.

<sup>&</sup>lt;sup>2</sup> See: Дюркгейм Э. О разделении общественного труда. Метод социологии / Э. Дюркгейм. – М.: Наука, 1991. – С. 539.

<sup>&</sup>lt;sup>3</sup> See: Ленин В. И. Полн. собр. соч. / В.И. Ленин. – Т. 1. – С. 178.

contemporary reality "true signs indicating that the individualistic separation of people is only a transitional state of the mankind, and that the future will be marked by the sign of universal collectivism<sup>1</sup>. In his opinion, the time of not only close social cohesion, but also new forms of collective consciousness is arriving. Thus, the supreme stage of human coexistence, in his opinion, is not organization, but collegiality.

Therefore, having traced the changes of the essence of the "social" within the chain <code>existence - phenomenon - reality - we</code> have theoretically reproduced the self-development of this phenomenon, revealed the laws of its transition from one state into another, based on a qualitative transformation of its content. It is high time we stated our understanding of this category, recorded its most essential properties, found above, natural connections and relationships.

As you can see, the concept of "social" (like "intelligent") is also an integral formation. It is the result of a logical movement of a range of its initial concepts and phenomena, but not within a human body, but in the external environment. Therefore, we present its model as it will quickly and securely establish this logical structure in one's mind (See scheme 6).

As follows from the above, the "social" is a means which the universum (and humanity is only its generalized subjective image) is within the Earth. Its essence is that the universe initially appears as a pulsating quantum-corpuscular energetic field, which emerges based on the integration of intellectual energy of individuals, which expresses itself in being as a total process of exchange of activities between people, discovering and asserting itself in practice through collectivism.



Scheme 6. The structure of the category "social"

 $<sup>^{\</sup>rm 1}$  Иванов В. И. Родное и вселенское / В. И. Иванов. – М. : Республика, 1994. – С. 98.

Hence it should now be clear why all the moral systems of the world revolve around understanding, justice, unity and solidarity among participants of the general life process. Theoretical knowledge of the nature of the social world leads us to formalizing of the basic law of its development, as "the law and the essence - are homogeneous concepts", expressing the deepening of man's knowledge of the phenomena and the world. We have every reason to believe that the funda*mental law* of self-development of the social world is intensification of exchange of activities between people, while the strengthening of co-operative principles in the life of the planetary humanity is therewith viewed as its natural practical result. However, the social as a process leads to the emergence of the social product. This is logical, as there is no process without a product and no product without a process. According to our hypothesis, the primary product of the alienation of a human is society. Unfortunately, philosophical this concept has little meaning for our philosophical thought. It just fell out of its problem field. We considered it an achievement of the Western philosophical thought for a long time. For us it was enough to operate with the category of "society", which was a productive tool for the materialist analysis of social reality. It is gratifying that today this concept is finally becoming the object of attention of Russian social philosophy<sup>1</sup>.

So, the objective social world, or society formed under the influence of all the circumstances i.e. it is the product of a double determination – **the basis and conditions**. A person as **the basis** generates the content of the social world in the process of self-organization of the substrate "social" and **the conditions** quantitate into the specific knots – clusters of social content, or Intelligible matter. In order to further understand the function of a human in the process of self-development of the universe, we shall first consider the self-generation of the content of the "social" under the influence of the basis, or internal forces, and then analyze the method of its dosage under the influence of external conditions.

 $<sup>^1</sup>$  See: Кризисный социум. Наше общество в трех измерениях. – М.: Ин-т философии РАН, 1993; Система социологического знания: учебное пособие / авт.-сост. Г. В. Щекин. – К.: МАУП, 1995; Прокофьев Ф. И. Социум: сущность, развитие, прогнозирование / Ф. И. Прокофьев, А. М. Гугнин. – Днепропетровск, 1992; Суспільні закони та їх дія / Бойченко І. В., Куценко В. І., Табачковский В. Г. та ін. – К.: Наукова думка, 1995. – С. 179 and others.

The notion of striation towards formation is that the formation does not simply occur, i.e. by means of the forces inherent to the universe as such, but the basis is accompanied by random alien impact, which while modifying the formation forces of the universe, makes them produce a certain substrate for the social world, which is relatively stable and repeats itself in its main features for centuries. It is able to constantly update itself, it is also a part of the subjectified and objectified parts of the social world.

Consequently, the forces that operate in family living are not special powers inherent to the second nature only. The thing that brings these forces into the game, resulting into intelligent life, should be a special essence, which somehow withdraws the reasonable nature from the scope of the universal nature and shifts what would be a dead product of the formative forces to the highest sphere, the sphere of intelligent life.

This qualitative leap is possible here only with collective thinking, which, in contrast to the individual thinking, lacks features of negentropy. Collective thinking, as follows from the above, directly effects the production of intellectual energy by a person. This is due to the fact that a collective entity capable of thinking in the process of producing scientific knowledge, giving information homogeneous phenotypic character. We note in passing that knowledge as logical constructions rise to internal stress in a certain space, which occupying actualized social world. This is achieved by ensuring that knowledge. representing the senses, is co-opted and packaged in the form of ideas. Between them energetic fields emerge. However, for this to happen a critical mass of thinking material should be established. Then the family life of the ethnicity becomes a single channel-development, with which each participant is in a stable back and forth dependence. Functioning as a motive, semantic field becomes a center of the crystallization of people's thoughts, guiding their actions for achieving certain goals.

So the thoughts of people form a certain semantic core, which becomes an attractor of the process of generating the local social world. Consequently, there spontaneously arise local units of sociality, as a rule, occupying those parts of space where elite of this or that ethnic group is concentrated.

Thus, the generation of social content, as we have showed above, is the product of intellectual interaction between people. However, a perception of the producers of the social world was not always the

same. Originally an "agent" was not placed in the human and the social worlds, but in the supernatural world. At the next stage, it was lowered to the Earth. The generation of the social content was seen in the action of physical, biological, climatic, geographical and even astrological forces. The energy of the subject of action was later ascribed to individuals – the prophets, heroes, leaders, inventors, and geniuses.

It was only at the end of the XX century when there finally appeared "recognition that, although each individual owns only a small voice in the general chorus of social changes, the latter are the cumulative result of activities of all. Everyone is allocated only a small, almost invisible part of the power of an "agent", but, to P. Sztompka mind, together they are omnipotent  $^1$ .

Based on the fact that the same material undergoes both processes, the objectification and the subjectification, we are entitled to believe that this process is carried out by the same algorithm. This means that the process of objectification should begin with the product, which has been the result of individual subjectification of the first nature, i.e., with the mindset of humans, more precisely, of their social formations, ethnic groups. The process of objectification is thus somehow opposed to subjection, as it turns and starts moving in the opposite direction. In other words, in the process of objectification individually produced or subjectified products, or the essential powers, should be transformed into collectively produced or objectified products, the elements of society. The very products of the process are known to us. We do not know the way they are related. The latter here is the object of our study.

Thus, the starting point of the process of objectification is the alienation by the human personality, or, to be more exact, by all the living human beings on the planet, of the potential content of the social world into the external environment. The alienated product of the individual production here appears in a form of a specific product, named as *the mindset of the people*. "The spirit of the nation within the state appearing as customs and laws is a ruling principle" as it was rightly written by Hegel (*Encyclopedia of the Philosophical Sciences*).

<sup>&</sup>lt;sup>1</sup> See: Штомпка П. Социология социальных изменений / П. Штомпка; под ред. В. А. Ядова; пер. с англ.; под ред. В. А. Ядова. –М.: Аспект Пресс, 1996. – С. 244.

In groups of citizens or ethnic groups the excess of intellectual energy generates fluctuations, bursts of purposeful activity, described by L. Gumilev based on rich historical material as passionary stimula. The ideas of Nietzsche about the "Faustian soul" and the "life-fit" of Henri Bergson should apparently be considered the phenomena of the same order. At the moment of excess of intellectual energy a certain special state of the mindset of the people forming a particular ethnic field can be observed. The elements of both local and planetary social fields emerge on its basis. The analysis of this phenomenon became the subject of the theory of neosociogenesis.

The movement of potential social worlds is caused by their inherent desire to go out and be expressed, i.e., acquire the finiteness of the real dimension of our planetary system. This is a function of personality as the basis of the real social world. However, this is only one cause of the social world, the other one, as emphasized above, is connected with the conditions within our planetary system. It is important to stress that if *the foundation has provided for the reasonable character of the second nature*, *the specific conditions* where the process of production of social content occurs, are established to determine the parameters of the social system. The latter are situational in nature, as they are related to the development stage of the planetary humanity, for example, the type of civilization, the division of social labor, the dominant form of ownership, type of society, etc.

Now it is time to consider the place and role of conditions as a second determinant shaping the content of the social world. Conditions, as is known is the direct, which the basis correlates with as its essential premise. The real basis is, therefore, in essence determined. Its determination is the otherness of its self

Conditions possess an original executive body and mechanism for this purpose. The working body of the conditions is the surrounding environment, where the interaction between people takes places. As noted by V. G. Afanasyev, "owing to various effects external environment has upon the system, the environment is usually viewed in a broad sense as the whole reality, surrounding the system, and in the narrow sense, as an essential and necessary surrounding of the system, the thing, in conjunction with which the system reveals its properties, its integrity, determination, and not only defines, but also

 $<sup>^1</sup> See$ : Гегель Г. В. Ф. Энциклопедия философских наук : в 3 т. / Г. В. Ф. Гегель. – М. : Мысль, 1977. – Т. 3. – С. 243.

forms certain properties, the properties that enable it not to dissolve in the environment, but to function and develop relatively independently".

It is clear from the above that the conditions (the environment) play in organizing the society on a micro level a role similar to that the human organism plays in the first nature, i.e., it becomes an authorized subject of a geological process, generating an objectified at the macro level social reality. Here it expresses itself as a part of the mega level.

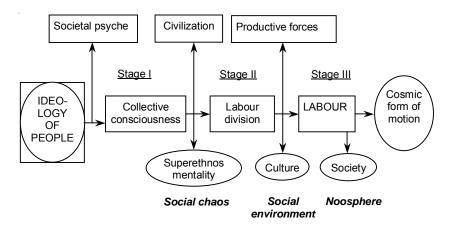
It is now logical to imagine that at the **first stage** of formation of society the collective feelings and emotions, archetypes and morals (customs) of the peoples operate, while on the **second** such powerful social institutions as faith, values and ideological systems are revealed, and at the **third** level ideological systems and traditions as social technologies of formation of human behavior, morality and moral as well-developed regulatory systems of the necessary and practical human behavior. Moreover, there is a possibility that every single process of shaping of the social world results from the activities of only its own set of compression forces.

To complete the analysis of the process of objectification it is necessary to study the second nature as an entity. Here the term "the second" emphasizes its derivative nature. Now we have to design the process of self-emergence of the social world content as a certain independent totality. To do so, we have to consequently reproduce all three stages of the above family formation process, and then, chronologically list all the products of the formation processes of the species. Heuristic modeling is an easy way to do so (See scheme 7).

When studying the algorithm of self-development of society, we can clearly distinguish three levels of organizational development of the content of the social world: *social chaos*, *social environment*, *and the neosphere*. These three structural elements of society generated in the solitary morphological process, are an integrity and comprise the social body. This is an unusual form of a reasonable living matter.

The body of society is thus constructed in a similar to a human organism way, however in reverse. It contains an objectified spiritual part, which exists in the form of chaos, in contrast to the strict order of this element in the structure of a human body; there exists

 $<sup>^1</sup>$  Афанасьев В. Г. Системность и общество / В. Г. Афанасьев. – М. : Политиздат, 1980. – С. 151.



Scheme 7. Algorithm of self-denial of a person or generation of society

an objectified material part, living in "a strict order," as we are now speaking about the neosphere, and there exists an medium part, mediating their interaction, the social environment. The latter is an intimate side of social life.

The examination of three elements as parts of a newly emerged reasonable living formation, which is not clearly morphologically demarcated from the environment in structure, as if it were scattered in space, leads us to an extremely important conclusion. Its essence is that we are dealing here with the morphological object, the organism of society. And society as an entity has to simultaneously ensure the processes originating under the rule of chaos, overcoming the stage of self-organization within a free social environment, finally turns into a phase of marginal rationality – the noosphere.

We are particularly interested in them because the society as every living being, is capable of increasing at the functioning stage, as it prior happened with a person. And it is. Such an increment in quality has been widely discussed in scientific literature. However, the researchers give it different names. Most commonly this functional quality is referred to as the "collective identity", "group identity", "corporate identity", "conditional identity", "people's identity", "combined personality", "composite identity" (a collective "I"), "live Russian Personality", "identity of state", "territorial identity", "the

humankind", etc¹. For instance, the composite personality was viewed by V. M. Bekhterev as a social body, as an integrity that consists of parts, represented by individuals, all social formations. Even highly developed formations are viewed by him as teams. This concept practically covers any formations composed of individuals who have something in common, from the crowd to the government². K. Marx viewed mankind and society as a subject³.

Potential social worlds do not remain aloof from the society they have generated, and continue to actively cooperate with it. Since the content of the potential social world inevitably interacts with the content of actualized social world, we can thus see a radically different picture. Under the new conditions, these two parts of the social are now able to acquire a principally new quality, which bears the name of integrity. Therefore, we have to take an approach to the field form of humanity) as to the outside expression of totality. It obliges us to take a look at its inside as a something that unfolds within itself and preserves the unity, .i.e. the totality (Hegel *Encyclopedia of the Philosophical Sciences*)<sup>4</sup>.

It is clear from the above that the "planetary consciousness," which in terms of ontology represents the energetic-informative field of the Earth, is an integration of energy-power fields of social communities. This enables the researchers to argue that a person can and should be viewed as a neuron in a "collective brain". At the same time, this means that in the process of self-organization of the social world an individual performs the feedback function, without which it is simply not possible to maintain the spontaneous production of the social content. This means that the mindset of people is also a totality, and it should be viewed with the historical approach, in terms of its systemic nature of establishment in order to understand the basis of its sustainable integrity as a totality. Therefore, in reality these two

 $<sup>^1</sup>$  See: Быченков В. М. Институты: Сверхколлективные образования и безличные формы социальной субъективности / В. М. Быченков. – М.: Российская академия социальных наук, 1996. – С. 159–160, 209, 228–229, 235–236, 243, 249, 290, 463 etc.

<sup>&</sup>lt;sup>2</sup> See: Бехтерев В. М. Избранные работы по социальной психологии / В. М. Бехтерев. – М.: Наука, 1994. – С. 87.

<sup>&</sup>lt;sup>3</sup> See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. – 2-е изд. – Т. 46, ч. 1. – С. 21, 38.

 $<sup>^4</sup>$  See: Гегель Г. В. Ф. Энциклопедия философских наук : в 3 т. / Г. В. Ф. Гегель. – М. : Мысль, 1974. – Т. 1. – С. 100.

processes are integrated and appear as a unified totality, the unified (the lepton, the telluric etc.) planetary field of force.

Let us study the formation of the rejected by individuals intellectual products in the free play of cosmic forces. The possibility of synergetic way of emergence of life, i.e. by means of unprompted, spontaneous self-emergence is indicated by K. Marx and F. Engels¹. The first stage of self-generation of the social world, according to the general logic of formation, consists of three subsidiary morphogenetic processes and three specific products, namely: societal psyche, collective consciousness and the family product – the mentality of the social community.

We have already demonstrated that modern psychology views the **societal psyche** as a relatively independent formation that develops outside the head of an individual. What is meant by the societal psyche? "In the broadest sense, according to E. A. Donchenko, it is the substance the living of society, which is passed on from one generation to the next one in a form of a product of inheritance of history and culture of the society, including geographical, climatic, and landscape conditions of living of the inhabitants of this territory. Therefore, societal psyche, according to Young's terminology, is a kind of an archetype"<sup>2</sup>.

In the process of long-lasting formation this element of social world has acquired certain outlines, a particular form, has become a kind of an information-energy pattern, an essential deep foundation of social and individual dynamics. Let us leave the development of more detailed characteristics of societal psyche to specialists, here we will only emphasize its ability to preserve and pass on various kinds of information from generation to generation without help of the reflective properties of the matter (e. g., the human brain). It is necessary here to back up the position of psychological science with arguments provided by sociology. In this regard, we find it important to refer to Marx's discovery of categories of objectification and deobjectification, which are of no less fundamental importance, than archetypes of Jung<sup>3</sup>.

 $<sup>^1</sup>$  See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. — 2-е изд. — Т. 20. — С. 611—612 ; Т. 42. — С. 125.

 $<sup>^2</sup>$  Донченко Е. А. Социетальная психика / Е. А. Донченко. – К. : Наукова думка, 1994. – С. 31–32.

<sup>&</sup>lt;sup>3</sup> See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. – 2-е изд. – Т. 42. – С. 121.

The main product of this stage is the *collective consciousness*. The unity of consciousness found in the history of development of social sciences; strongly prove that unity and continuity exist inside the collective consciousness, as well as inside the mind of an individual. They finally form a collective mind or a collective consciousness which K. Marx called "the associate mind".

In terms of content, the collective consciousness, according to E. Durkheim (*Division of Labour in Society*), is a set of beliefs and feelings that are on the average common to members of the same society and which form a certain system, which has its own life. It can be called collective or common consciousness. It certainly does not have a shared authority as its substrate; it is scattered throughout the society<sup>1</sup>.

Later in neosociogenesis superfunctional organs, which live autonomously in the second nature, emerge from the collective consciousness. Sociologists directly point at existence of such

functional formations as the above discussed. They write about it the following way: "Without a doubt, its substrate is not a single organ, it is in essence scattered throughout society. Nevertheless, it has its own peculiar features distinguishing it as a separate reality. In fact, it does not depend on particular conditions individuals live in; they come and leave, but it remains. It is the same in the north and the south, in big and small cities, among representatives of various professions. Similarly, it does not change with every new generation; it rather binds the successive generations with the previous ones. Thus, it is something rather different than individual consciousness, though it is the result of individual activity. It is a psychic type of society, the type that has its own properties, which has its own conditions of existence, its own way of development, and all the features common for individual types, although expressed in a different way"<sup>2</sup>.

Thus, the collective consciousness of a social community is the final product of subjectification of the first nature, as it emerges on the basis of individual lepton fields. Further on, the objectified

<sup>&</sup>lt;sup>1</sup> See: Дюркгейм Э. О разделении общественного труда. Метод социологии / Э. Дюркгейм. – М.: Наука, 1991. – С. 80.

<sup>&</sup>lt;sup>2</sup> Арон Р. Этапы развития социологической мысли / Р. Арон. – М : Прогресс-Политика, 1992. – С. 319.

social develops on the basis of its own algorithm. It is an integral force field in the form of existence. But it is inherently different from the states of consciousness of the individual; the opinions of a different type. The thinking of groups is rather different than that of individuals; it has its own laws. Indeed, the collective opinions reflect the way a group views itself in its relations with objects that have impact upon it.

The generic product of this stage is a special ontological foundation of the collective reasonable living matter, called the mentality, which today is commonly understood as the structure, the construction of the soul of a collective human, ethnic group, the ratio of its elements and the state of the latter<sup>1</sup>. Recently, a growing number of researchers is inclined to view the mentality as a generic memory, based on a synthesis of the natural and social programs of inheritance. Mentality as a morphological organ contains the converted, or rather, subjectified form of all the ontological richness of the first and second nature. In the functional aspect, it is a system of collective norms of social reactions – of a group, ethnic group, nation, people, etc.

So, at the first stage of the process of shaping the social world the mindset of the people forms three specific spiritual products that firstly, mediate the transition from the individual intelligence to the collective, and secondly, start a chain of transformations of the reasonable component on its own collective basis. Here is the moment of the appearance of a second nature on the planetary level. From this moment, the social reality somehow leaves its source, an individual, and begins to live in accordance with its own laws. An individual that has generated it; loses its dominance over it, and, moreover, it begins to dictate its will to that individual. A person begins to confront it as a hostile entity. Here comes a moment of complete alienation. It is important to emphasize that, in terms of organization we are now dealing with social chaos.

The second stage of social world formation arises as a result of self-development of collective consciousness of social communities, ethnic group, and people. It is the mediating point in generating of the objectified social world. Original products of this stage are *civilization*, *division* of social labor, and culture.

<sup>&</sup>lt;sup>1</sup> See: Каныгин Ю. М. Основы когнитивного обществознания (Информационная теория социальных систем) / Ю. М. Каныгин. – К., 1993. – С. 32.

The first product, or the result, intended for inner-stage consumption only, is *civilization*, which we understand as the way people end natural course of development of natural processes, creating as a matter of fact, a human way of interaction with nature. In other words, the present study is based on viewing civilization as a social organization that emerges in the course of historical development of a human and serves as a means and method of development of society in its unity in the production and reproduction of social life and of a human himself. This conclusion has found confirmation in studies in history and social philosophy. We are now speaking not only of works by foreign researchers (O. Spengler, A. Toynbee, F. Braudel, D. Bell, E. Toffler and others), but also of Russian scientists (G. Gudozhnik, I. Meisel, V. Marahov, M. Mchedlov, L. Novikov, V. Semenov, and others), and Ukrainian philosophers (V. Andrushchenko, B. Havrylyshyn, N. Kirichenko, N. Mikhalchenko, V. Pazenka and others).

There exists a number of definitions and classifications of civilizations. We believe that in the course of human history, there were three basic means or types of civilizations: the traditional, the industrial, and now the informational is being established. Civilization is the social organization of social life, characterized by a universal connection between individuals or the elementary, or rather the basic, social formations in order to ensure the progressive development of mankind. Thus, the prophecies concerning the imminent death of modern civilization are clearly exaggerated, as it is a phenomenon of geological origin. We surely do not deny the possibility of death of the planetary system as part of the universe. But for this cataclysm to happen a dozen of deca-meriad would be necessary. V. I. Vernadsky, in our opinion, was right, saying that civilization "of a cultural humanity, since it is a form of organization of a new geological force ... cannot be interrupted and destroyed, as it is a considerable natural phenomenon, corresponding to a historically, or rather, a geologically formed organization of the biosphere, it is in all ways connected with its earthly theca when forming the neosphere"2.

The main product of the second stage of shaping of the society is *the division of social labor*. It arises on the basis of civilization's

 $<sup>^1</sup>$  See: Климова Г. П. Образование как феномен цивилизации : автореф. дис. на соискание научн. степени докт. филос. наук / Г. П. Климова. – Х., 1997. – С. 6, 10.

<sup>&</sup>lt;sup>2</sup> Вернадский И. В. Начало и вечность жизни / И. В. Вернадский. – М.: Советская Россия, 1989. – С. 139.

self-development as a social organization of mankind. There comes a moment of conscious regulation of exchange of activity within the community and interaction with the natural and social environment. That is why the beginning of civilization gives start to the historical development of mankind in the sense that the organization, the arrangement of social life is carried out in the process of conscious human activity that does not overrule its objective laws, but gives the social development a purposeful, and therefore, a reflexive character with respect to the past and the present.

The importance of the division of social labor, according to E. Durkheim (*Division of Labour in Society*), lies in the establishment of socialites between people. The latter, as it is known, is achieved due to the fact that the collective consciousness becomes weaker and ambiguous the degree of labor division increases. Due to this very progressive uncertainty labor division becomes a major source of solidarity. Indeed, in this case the economic services it is able to provide, is nothing compared to the moral effect is has; its true function is to generate a feeling of solidarity between two or more persons, as he has written<sup>1</sup>.

From a human perspective, the division of social labor, for example, looks like social solidarity or deepening collectivism not only to the direct participants of the labor process, but to the subjects of a single life process, occurring on Earth. The exchange of activity encourages a human to view him/herself as part of the whole. People depend on each other and everyone alone is imperfect, since the division of labor has divided a human him/herself. The division of labor in the economic sphere provides for the integration of individuals into a single social organism, which causes solidarity emergence. As noted by E. Durkheim, it more often performs the role once played by common consciousness, i.e. for the most part, it holds together social aggregates of higher types<sup>2</sup>. Sociologists have thus found out that the more energy and certainty common consciousness has, the slower and the harder the progress of labor division will be.

According to E. Durkheim labor division is "a natural law", and the division of social labor is its particular form. The developing la-

<sup>&</sup>lt;sup>1</sup> See: Дюркгейм Э. О разделении общественного труда / Э. Дюркгейм. – М. : Наука, 1991. – С. 58.

<sup>&</sup>lt;sup>2</sup> See ibid. - P. 5.

bor division creates a system of interconnected social functions, and generates an organic solidarity replacing the mechanical solidarity of archaic society. The morphogenic function of labor division is that it replaces the collective consciousness as a source of social solidarity and the foundation of moral order.

The economic aspect of labor division is thus associated with production increase. The social aspect comes down to the following it should be possible for us to live in the new conditions<sup>1</sup>, the ones created by us. E. Durkheim introduced the social aspect of this phenomenon as follows if the division of labor produces solidarity, it is not only because it turns every individual into an exchangist (¤changiste), as economists say, but because it creates a system of rights and obligations establishing a long-lasting interconnectedness between people. Justas social similarities generate law and morality, which secure them, the division of labor produces the rules, ensuring peaceful and regular coordination of differentiated tasks<sup>2</sup>.

The characteristic trend of the modern developed society is the seclusion of new areas necessary for its functioning and development, the increase in the number of its units and, consequently, the profilization of labor division! At the same time, the labor division has a peculiar and in each area controversial<sup>3</sup>. Here to establish the manner in which elements of the second nature appear, the thesis of E. Durkheim that the need for cooperation has generated the society, is extremely important. "So, the latter have been formed for labor division, not labor has been divided due to social grounds4" - he wrote. Thus, the society genetically grows out from the social division of labor. It is very important for understanding of the process of social world formation."The tendency of labor division continues, according to E. Durkheim, because social segments lose their individuality, as partitions separating them become more astute, in short, there occurs merging, making the social substance free to enter into new combinations"5.

<sup>&</sup>lt;sup>1</sup> See: Арон Р. Этапы развития социологической мысли / Р. Арон. – М.: Прогресс – Политика, 1992. – С. 398.

 $<sup>^2</sup>$  See: Дюркгейм Э. О разделении общественного труда / Э. Дюркгейм. – М. : Канон, 1996. – С. 415.

 $<sup>^3</sup>$  Философская энциклопедия : в 5 т. – М. : Сов. энциклопедия, 1989. – Т. 4. – С. 456.

<sup>&</sup>lt;sup>4</sup> Ibid. - P. 218.

<sup>&</sup>lt;sup>5</sup> Ibid. - P. 239.

At the final stage the civilization and the social labor division in the course of their self-development generate a *generic product – culture*. Culture as a concept and as an element of the social world is exclusively versatile in terms of content. There are hundreds of its definitions in the world philosophical literature, each of which reflects these or that, often significant sides and characteristics of this social phenomenon. Defining the essence and content of culture is so difficult due to the fact that it is "a deep collective consciousness, rooted in the distant past form a blurred mosaic of ideas, ruled by the probability distribution function".

To avoid going into detail and the widespread discussions, we should note that generally "culture" (from Lat. *culture* – cultivation, upbringing, education, development, respect) is a specific way of external motivation of human development and organization of efficient activity, presented in the products of the material and spiritual labor, in a system of social norms and institutions, in spiritual values, in a set of people's attitudes to nature, each other and to themselves". That function in related to the subject of historical action. The term "social environment" characterizes the organizational form of existence of this stage the most accurately.

There is no doubt that for the analysis of society **the third stage of formation** is the most important because it, unlike the previous two stages is the most materialized part of the objectified world. It seems that the process of objectification of the content of the social world shifts from the micro-level to the macro-level and becomes more tangible and perceptible. The elements of this stage include **the productive forces**, **labor and society**.

The first element arising on the basis of conversion of all previous self-development of social content, are the productive forces, which consist of the subjective (human being) and the objective (the system of means of production) elements. Due to professional training a man is potentially able to act as the unique means of converting the world for the benefit him/herself and others. Here, the human body acts as a universal means of production. In addition, a system

<sup>&</sup>lt;sup>1</sup> Налимов В. В. Реальность нереального. Вероятностная модель бессознательного / В. В. Налимов, Ж. А. Дрогалина. – М.: МИР ИДЕЙ, АО АКРОН, 1995. – С. 20.

<sup>&</sup>lt;sup>2</sup> Философский энциклопедический словарь / под ред. С. С. Аверинцева, Э. А. Араб-Оглы, Л. Ф. Ильичева и др. – 2-е изд. – М.: Сов. энциклопедия, 1989. – С. 239.

of means of production (the means of labor and objects of labor) appear, designed to ensure that humans can efficiently arrange their lives. A leap in the process of their development is nothing but a technological revolution. In other words, at this stage of self-organization the content of the social world has materialized in the products of collective human activity, specifically, in the human him/herself as the main productive force, and in the systems of tools for the material and spiritual production.

We should distinguish the process of creating tools as a process and the result of self-negation of the human within material culture. Therewith, labor when creatingmeans of its implementation, in objectivity becomes the process of self-reproduction. For such a process it is sufficient to establish a positive feedback between "exit" and 'entry", and it (given the available resources) can potentially develop perpetually.

Besides, two kinds of tools should be distinguished here, creating and destroying tools. Here begins a split of the single object-mediated process of interactions into qualitatively opposite processes, the creative processes, mediated by tools and destructive tools, mediated by weapons. Bifurcation, as illustrated by history of further formation and subsequent development of society, had far-reaching consequences. But prior to the split destructive processes were driven out of the inner life of communities, included in the sphere of external interactions of functional systems, both in the form of hunting and fighting predators, and in the form of armed clashes with the others ("alien") communities<sup>1</sup>.

In the course of human self-denial the second kind of products, products of the spiritual culture, has emerged. It includes emblematic systems, i.e. tools of information impact. This is the second human self-negation process in terms of power. Let us note that the classifying of linguistic signs to the category of tools is not accidental. First of all, "the basis of analogy between the sign and the tool, as noted by L.S. Vygotskiy, is the mediating function that belongs to both"<sup>2</sup>. Both serve as a means of activity for a human, as a "mechanism", a conductor of its impact on certain systems of the world.

<sup>&</sup>lt;sup>1</sup> See: Коммунистическая партия и научное управление. – К. : Политиздат Украины, 1984. – С. 114.

 $<sup>^2</sup>$  Выготский Л. С. Развитие высших психических функций / Л. С. Выготский. – М., 1960. – С. 123.

B.G. Ananyev wrote "If in the process of labor the mechanism of interaction between a human and an object of labor is a tool, in the process of human communication such a mechanism of interaction is represented by a sign, or rather, a sign system".

In this case, sign language is not only a means of activity. Just like a tool itis its product. And in this sense (being created by humans and not by nature), both signs and tools are purely social phenomena. They amass the experience of generations, and, in order to use it in his/her activity, each person learns to use not only the tools, but also corresponding sign systems. A language symbol, like a tool, is an objectified product of a human activity, an objectively existing material product. The spirit, according to K. Marx and F. Engels, from the very beginning bears a curse to be "burdened" matter, which appears here in the form of moving layers of air, sounds, in other words, in the form of language<sup>2</sup>. Sign systems due to their objectivity just like weapons, are relatively independent of their creators and exist and function as components of their communities. A sign outside an organism, according to L. Vygotskiy, like a mace, is separated from the individual and is, in essence, a public organ"<sup>3</sup>.

There are significant differences between material tools and sign systems, as tools – are a means of the material-energy impact, and the signs are of energy-information influence. As a result, the effectiveness of signs is to a large extent independent of their substantial implementation. Their functional existence, in Marx's words, absorbs, so to speak, their material existence<sup>4</sup>.

The above mentioned products interact with each other through a process in which the very source of it, a human, is involved in this new integration process as a means of mediation. In other words, a human does not only generate the society, but also has to constantly maintain its functioning.

**The basic element** of the last stage of objectification of the subjectified first nature is *labor*, viewed as a purposive activity of a living person, aimed at modifying and adapting the objects of nature to

 $<sup>^1</sup>$  Ананьев Б. Г. Человек как предмет познания / Б. Г. Ананьев. – Л., 1969. – С. 319.

<sup>&</sup>lt;sup>2</sup> See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. – 2-е изд. – Т. 3. – С. 29.

 $<sup>^3</sup>$  Выготский Л. С. Развитие высших психических функций / Л. С. Выготский. – М., 1960. – С. 198.

<sup>&</sup>lt;sup>4</sup> See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. – 2-е изд. – Т. 18. – С. 216.

his/her needs. Here we proceed from the fact that living labor, genetically emerged from the division of social labor, is a certain type of interaction between people and production powers (embodied person). The interaction between people as a product of society formation becomes here a factor of second nature development.

Moreover, labor is meant a material form of communication. Besides, communication taking place in the process of intellectual interaction of people at the first stage of society formation is still present here. The two types should not be confused. According to M. S. Kagan, "They differ in the fact that when material communication takes place, spiritual activity of a subject is only aimed at control of its practical actions (defined by V.B.), whereas the goal of spiritual communion is a spiritual unification of partners, achieving of their spiritual unity, and practical actions, if any are taken, merely serve this only purpose; however, spiritual communication normally happens in the form of the verbal or any other dialogue using signs". The conflicts emerging between the material and the spiritual forms of human denial prove their independent existence. It is well-known that in practice there sometimes emerge cases when a production form of communication hampers the development of spiritual communication and thereby intentionally or unintentionally neglects sociality. The existence of the ruling class is becoming a bigger obstacle to the development of productive forces of industry as well as to the development of science, art, and cultural forms of communication, in particular<sup>2</sup>, as F. Engels wrote.

So, labor as the main product of the third stage of formation of social world appears to allow an individual to fully realize his/her nature, and the purpose of all the changes he has experienced is nothing other than making this realization easier and more complete. The labor here should be viewed as implementation of the professional knowledge of a worker or a person of a liberal profession. In this way, in terms of actual collectiveness, according to K. Marx, the individuals obtain freedom in their associations and through it<sup>3</sup>.

There is no necessity for us to study this element deeper as it already been studied in depth by the Marxists.

<sup>&</sup>lt;sup>1</sup> Каган М. С. Мир общения: Проблема межсубъективных отношений / М. С. Каган. – М.: Политиздат, 1988. – С. 131.

<sup>&</sup>lt;sup>2</sup> See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. – 2-е изд. – Т. 18. – С. 216.

<sup>&</sup>lt;sup>3</sup> See: Маркс К. Соч. / К. Маркс, Ф. Энгельс. – 2-е изд. – Т. 27. – С. 75.

Let us stress the fact that labor is a means of ensuring the normal functioning of a human and his/her collective entities at the horizontal level. At the vertical plane, his/her spiritual component unfolds. Therefore, the immortality can be granted to a human at higher levels of self-motion of the universe, while all manufacturing achievements of a human are gathering dust on the shelves of the planetary archive.

The generic product of the third stage of social world formation is *society*. It is not necessary for us to deepen into the fact that society is a product of human activity, or labor. It is a generally recognized fact. Let us only mention that Hegel defined the society as a system of his (human – V. B.) universal relations<sup>1</sup>. As defined by Karl Marx society is a product of interaction between people<sup>2</sup>. T. Parsons defines society as the social system that meets all the essential functional requirements concerning the enduring existence using its own resources, will be called a society. It is common for the concept of society to contain all the structural functional bases in order to be an independently existing system<sup>3</sup>.

It is important to draw a distinction between society and the community as these concepts significantly differs. The public comprises social institutions, relations between them and their mechanisms that regulate the functions of institutions in the process of social interactions. The institutional structure sets out specific historical measures of the community. The community at each stage of its history exists within specific instrumental dimensions.

The society, in turn, is a perfect configuration "of the community in general", beyond its specific structures and social dimensions it has formed, the joint, but not co-organized co-existence of people; it is a trait of a human as a social being that can be called "sociality" and that means that people simply need each other for their self-identification. In other words, society is a community in a virtual state, and community is a society in a steady motion.

The current crisis required the researchers to use the means of synergy for analyzing the social processes, and the essence of the con-

<sup>&</sup>lt;sup>1</sup> See ibid. - P. 344.

<sup>&</sup>lt;sup>2</sup> See: Маркс К. Соч. / К.Маркс, Ф. Энгельс. – 2-е изд. – Т. 27. – С. 402.

<sup>&</sup>lt;sup>3</sup> See: Парсонс Т. Система координат действия и общая теория систем действия / Т. Парсонс // Структурно-функциональный подход к социологии. – М., 1968. – Вып. 1. – С. 35–58.

cepts of community has immediately become different. Here, for example, is a definition given by a group of St. Petersburg authors, "A community is a kind of a collective entity with its objectives, means to achieve them, the internal language, self-regulation complexes". This approach is much closer to us, and we will further deepen and complement to it.

The Generic product of this stage as the most objectified product has several historical variations, which have a specific name – *formation*. Let us remember that this term is used to call society, which is, according to Karl Marx, at a certain stage of historical development. Thus, the most common approach introduces five social formations: primitive, slave-owning, feudal, capitalist and communist. Formation as a product of historical development is a category of phylogeny.

Organizationally, this stage of formation of social content is already the most structured and differs favorably from the previous two, so we are here dealing with a strictly structured society, called the *noosphere*.

So, we have consequently presented the process of society formation, explaining them as integrity, a specific social body. The younger generation faced it as already completed, and therefore it is just the objective reality as first the first nature. For a person, just entering the life, society is an external power; controlling him/her and guiding his/her further development. In other words, a reasonable person as a living being is opposed to society as a powerful living integrity.

It is necessary for us to be more precise here. Objectified social world or the integration of individual and society should be seen as a gigantic social organism, which, functioning as a whole, acquires fundamentally new qualities of a reasonable living creature. It appears here the same as in the case of human body formation. The latter, as we know, having begun to operate, has acquired the qualities of an individual. We have every reason to believe that society, having passed all three stages of formation, is transformed into integrity, which has the same effect. In other words, society should be regarded as an entity that generates the effect of functioning. Collective identity is a functional organ within the structure of social organism.

<sup>&</sup>lt;sup>1</sup> Самоорганизация: психо- и социогенез / под ред. В. Н. Келасьева. – СПб. : Изд-во С.-Петербургского университета, 1996. – С. 175.

It is necessary to take a closer look at the above when discussing the hypotheses regarding the prolongation of the social world, and go to the presentation of the *philosophical image of the second nature*. This is necessary in order to rise above our observable social reality and present an algorithm of self-development of a social phenomenon in other, distinct from the earth's conditions. This has been mentioned above. This is necessary to be done to be able to observe practically and explain theoretically all possible genetic, morphological and functional variations of the embodied form of mind, wherever it emerges, within the Earth, our universe or in other galaxies.

In order to proceed from the social world to the second nature, it is sufficient to imagine the phenomenon of the mind as an integrity, which means not only a product, but as productivity at the same time. Then this integrity rises to the nature, namely, this identity of the product and the productivity is denoted by the concept of nature, even in ordinary discourse.

Nature as a product (natura naturata, or the created nature) is called an object (empery studies only it). The nature of the productivity (natura naturans or the creative nature) is called the subject (is studied by the theory of philosophy). It is commonly understood that the product obscures the productivity, while in philosophical, productivity, on the contrary, overshadows the product.

Since the object is never absolute, then the essence of the second nature should be something completely biased. In our case, the role of such basis is performed by the original human productivity, not only the source of activity, but the owner of the produced products. However, in different conditions of Cosmos the objectivator of the first nature or its analogues can be represented by completely different entities, the producers of the mind. In this case, they can produce products of the mind even more effectively than the Earth's humanity does.

But the common thing that classifies them as a part of the second nature, is *productivity*, which we understand as a process of the mind creation, and *a product* as a thing, which the mind is materialized into. Therefore, it directly follows from the above that we should consider this particular phase of the universe, synthesizing the first-born material and spiritual bases into the mind, presenting them as productivity and product. The dualism of the second nature between productivity and the product should be presented as a universal duality of the bases, which nature uses to be constantly active, and which

does not give her to dissolve into its product, a universal dualism as a principle of any explanation second nature – just as necessary, how should the concept itself Nature. We are well combined with the dual nature of the original substance.

Initially the second nature is only the productivity, therefore, there cannot be anything definite within it (as any definition is a negation), and the emergence of products by means of it, therefore, cannot occur. In order for the products to emerge, productivity should be transformed from the vague into the definite, and so should be removed as pure productivity. If the grounds for the definite productivity were outside the nature, the nature would not have originally been the absolute productivity. The non-definition is removed and is restored each moment. Therefore, the mind acts within both calm and moving social formations.

Duality as a basis of the world we observe enables us to assume that within the structure of the planetary social organism, two kinds of processes and two kinds of products should be found. *One of them is material in origin, and a thing will be its product, and another is spiritual in origin, the meaning will be its product.* 

If a biological organism as an organic integrity is not only a product of the dialectical interaction between physical and spiritual family of organisms, which we are to analyze in terms of a specific object, but also productivity, that is a specific process; consequently, there can never be absolute identity within the above mentioned integrity, as identity would lead to the absolute transition of the productive nature into the nature as a product, i.e. to the absolute calmness.

Social body as a productive product can exist only under the influence of external forces, for only thus productivity is interrupted and faces an obstacles, preventing it from disappearing within the product. A special environment is a prerequisite for these external powers. They are to exist in the unproductive world, i.e. in the basis. However, this world should in all respects be fixed and invariable. Such a specific grounds for the reasonable phase of the universe is, as showed above, a reasonable living matter, a human, in particular. In this case, it is reasonable living matter due to its attributive qualities that provides for the pulsation of the second nature.

It is extremely important for development of the theory of the social organism that we view the exchange of activity between people as the productivity of the second nature. In the pure productivity of the second nature there is nothing indiscernible beyond the split, the

productivity split within itself creates the product. This means that in the process of exchange of activities, we should distinguish two opposite types of activities stemming from the impact of the two sources, which form the foundation of our universe. And we have two kinds of such activities. They are labor and communication, directed by thinking of a person and using physical human organism as an instrument for implementation of its plans.

Since the absolute productivity is directed only at the production itself, by itself, not at the production of something definite, the trend of the second nature, through which the product emerges, will be a negative trend of productivity.

In nature, to the extent that it is real, there cannot be exchange of activity without a product, as well as there can be no product without the exchange of activity. Nature can only approach to both extremes. And we are further to illustrate the way it does it. Productivity as such appears only at times when the margins are placed. What is everywhere and in everything, that is nowhere. Productivity is only restricted by the limitation. In other words, only limited by a subjective purpose the activity serves as an approach to the product.

In nature, there can be neither pure productivity, nor pure product. The first is the complete denial of any product and the second is a denial of any productivity. Consequently, the second nature should initially be something transitional between the first and the second and we are therefore, arriving at the concept of productivity, which is at the stage of its transition into a product, or a product, productivity of which is infinite. If we attempted to find productivity as a reasonable infinity within the second nature, it would be society as it represents a set of dialectic interactions of individuals as free producers of mind. They are in now way restricted in terms of time or space. The following question is bound to arise here – what should be understood as the product here?

Since the above stated is already a product, then, being productive, it can only be itself in one possible way. However, definite productivity is (an active) formation. Consequently, the third should be at the stage of formation. Then the unique third component, the noosphere, contains everything produced by thought and activity of Homo sapiens.

The noosphere thus has at least three stories. The mind of living organisms functioning in the emerging or pre-human shapes forms the foundation. There is no necessity to prove the existence of ani-

mal mind as there has already been much talk about it in scientific literature, in works by M. Weber, I. Prigogine and others<sup>1</sup>.

Then there is a medium floor where the human mind presides. A common concept that human possesses the most powerful mind appears here quite controversial.

This unique noosphere construction is completed by a cosmic or extraterrestrial mind. Russian cosmists were the first to acknowledge the existence of extraterrestrial mind K. E. Tsiolkovskiy defines Cosmic mind and its reason as everything that is not only beyond the endless consequentiality of reasons and actions, but that completes the nature.

The noospheric product appears as constantly being in the process of metamorphosis. From the perspective of reflection it is, if illustrated using the example of the first nature, just a material that is always ready for transformation from the liquid state into the hard thus never achieving the perfect condition. We are now dealing with two types of products, those of material production, or, fixed, and those of spiritual production, or free. The concept of product (fixed) is opposite with the productive product (free).

Since this phase of the universe has to be eternally productive, this transition should never happen completely. Consequently, even though the product is always productive to a certain extent, there still remains productivity, but not the product. The *renovation of the universum* thus occurs.

The change of the field of activity as well as production of different kinds of products is caused by alternation of contraction and expansion, i.e. by the *pulsation of the quantum vacuum* as its attributive trait. This alternation is not a part of the universe. It is the universe itself and the first stage of transition of productivity into the product. The third component, as it has been already mentioned, is the quantum vacuum, the universe, the human.

The product emergence can only be achieved by cessation of alternation, i.e. by means of the third component that establishes this alternation. Therefore, the universe at the lowest stage (first potency) would be such an alternation, viewed in the state of peace and balance, and, on the contrary, the universe could be risen to a higher

 $<sup>^{1}</sup>$  See : Вебер М. Избранные произведения / М. Вебер. – М. : Прогресс, 1990 ; Пригожин И. Порядок из хаоса / И. Пригожин, И. Стенгерс. – М. : Прогресс, 1986. – С. 19.

level if the third component was eliminated. There is a possibility that the eliminated products could be at different stages of materiality or transition, or that these stages could be more or less distinguishable in one product compared to the order. Consequently, the dynamic succession of products could be thus illustrated.

Though the universum has acquired specific (individual) products, the *matter and the meaning*, productivity as such should still be clearly distinguished here. Productivity as the process is assumed to not have completely transited into the product. The existence of the product a continuous self-reproduction. And if a human strives to provide for the renovation of the Semantic Universe, Cosmos – for Physical Universe. We attempt to prove the first statement with the help of social science. The second one has already been proved by natural sciences, quantum physics, in particular.

We are not to explain what prevents the transition from happening completely in order that productivity dissolves in the product, or what turns the existence of the product into its continuous self-reproduction.

It appears complicated to understand how the activity which constantly strives for the product, always faces impediments preventing it from complete transition into the product given there are no external influences and the product should not reproduce itself to exist. The universum necessity to restore the integrity of initial sources, the material and the spiritual, appears a barrier here. The extent and continuance of the implemented power aimed at splitting the original universum, can be expressed in the following way: the masculine and the feminine halves of a human are in endless striation for unification. Not only the second nature, but the universum as a unity, both avoid emptiness and strictly observe the maintenance of integrity of original foundation.

We have previously viewed the Universe as the absolute identity of duality. Now we are facing the antipode that should be present within this identity. This antipode should reveal itself, if it is possible to do, in the most deduced product. The deduced product is an outward-directed activity. It cannot be viewed as such without the inward-going activity within the same product (reflected to itself). The existence of this activity, in turn, is impossible if it is not rejected (reflected) from the outside in the opposite direction. These mutual transitions in the second nature are known as thinking and labor. Since it is a rule of the total order, it should also be found within

the first nature. So, a plan or a project of a structure in the form of information is directed at an object from the outside. The information concerning the structure or internal organization of an object is directed into the external environment.

The opposite trends emerging in the course of this resistance *include the principle of constructions of all phenomena* not only of the social life, but its any form. If opposite trends are disregarded, social life turns out to be either absolute activity, or absolute receptivity, i.e. it is originally possible for it to exist as a mutual designation of receptivity and activity. Receptivity is here regarded as borrowing and adapting of sociological and cultural forms that have emerged in different countries or in different epochs by a certain ethnicity or community; implementation of the Roman law by Western European countries in the Medieval Period, for instance<sup>1</sup>.

We shall further find out why social organism is a product of a higher level of constructions. We have already explained the emergence of the product through the pressure of the universe aimed at the initial point of inhibition, due to which this point raises to the level of filed sphere and thus acquires constancy. Here, since we aim at the pressure of external nature not at a point, but at nature's product, a human, the first construction raises to the second potency, resulting in the emergence of the doubled product. It will further be clearly seen that organic nature is just a higher potency of the nonorganic, as well as super-organic nature is only a higher stage of the organic nature. It presides over the organic nature due to containing a thinking product, which has now become a collectively thinking product.

From the very beginning we accept as a principle the following: as the organic product is the product in the second potential, the organic construction of the product must be, at least, the symbol of the original construction of any product in general<sup>2</sup>. In order to fix *productivity* in one point, the boundaries must be given. As the boundaries are the condition of the former phenomenon, the reason due to which the boundaries are created, cannot be any more, it returns to the depth (profoundness) of nature or of each product. If in organic nature this limitation of productivity is given through the means,

<sup>&</sup>lt;sup>1</sup> See: Словарь иностранных слов. – 17-е изд., испр. – М.: Рус. яз., 1988. – С. 434.

 $<sup>^2</sup>$  See : Шеллинг Ф. В. Й. Сочинения : в 2 т. / Ф. В. Й. Шеллинг. – М. : Мысль, 1987. – Т. 1. – С. 212.

which we call perceptiveness, and which must be thought as the first condition of the construction of the organic product, in the living nature — it is irritability, but for social form of life this limitation is conditioned by the level of communication of people and social formations with each other.

At the point, where this interchange stops, the productivity transforms into the product, but at the point, where it recreates, the product transforms to the productivity, because as the product must remain permanently productive, the three stages of productiveness should be distinguished in it; the absolute transition of the productivity into the product is elimination of the product itself. The same as these three stages are distinguished in the individual as the higher product of organic nature, they must be distinguished in all the second nature, in this as though "secondary constructed matter", and the sequence of the stages of organization is the sequence of the stages of the productiveness itself. On the basis of this dynamic sequence of the stages in the individual, as in all organic and superorganic nature, the construction of all organic and superorganic phenomena<sup>1</sup>.

Thus, finally, we have approached to the solving of our problem—to bring to the general expression the construction of the organic, neoorganic and superorganic nature! Nonorganic nature can begin from the products, and superorganic alias intellectual nature can begin only from thinking products! Perceptiveness, irritability and the intention to formation and communication participate in the common process of excitement. It is important to remember that in human organism all collisions of Physical Universe and the most complicated logical constructions of Semantic Universe are reproduced by the means of excitement. But if the reason is only higher functions of magnetism, electricity and so on, for the latter the higher synthesis must exist in the universum, but to search for it, certainly, is possible only in the second nature, which, having been considered as some totality, is absolutely superorganic. This is social organism!

As any other organism, the social organism has integrated in its body all kinds and types of people relations and their products, so it should be considered as the organic unity of productivity and the product, the proportion between which it states by means of self-regula-

 $<sup>^1</sup>$  See: Шеллинг Ф. В. Й. Сочинения : в 2 т. / Ф. В. Й. Шеллинг. – М. : Мысль, 1987. – Т. 1. – С. 213.

tion, which appeared not at once. The natural course of development of the social life as the second nature system was the reason for it.

There appeared the necessity in it alongside the accumulation of the products of the process of exchange by the activity between separate people and social communities. The stage of functioning of the products and the interaction of auxiliary processes within the main process of activity as independent subjects, stated the problem of its regulation, which transformed into the main problem of philosophy, because for regulation it is necessary to know the reason and consequence links between the two kinds of intellectual product.

The original split of the universe in the first nature leads to the fact that the second nature is initially its own object. We thus mean that the reasonable should be regarded as a whole, capable of transforming from being a pure entity into an object for itself, which in the earth conditions leads to unlimited amplification of its potential on this basis, and reaching the eternal process of transition of the first nature into the second. The reverse transition occurs in the antiworld, that is at the opposite end of the Universe. The cosmic entities, known to us as *nebulae and black holes*, are apparently, of a significant importance in this process.

The existence of anti-world is beyond doubt, as scientists have succeeded in synthesizing the substance of the anti-world on Earth. Forty years have passed since receiving of the first anti-electron (positron) and an antiproton. And only in autumn of the 1995 in the International Centre for Nuclear Research, CERN (Geneva) they managed to put them together for a moment. Eight atoms of antihydrogen, the real substance of the anti-world, were obtained<sup>1</sup>.

The original evolution is Inhibited (without which it would occur with infinite velocity) by initial duality embedded in the identity of the base. That duality of the foundation is a secret means through which the second nature, and hence, the social world, acquire durability. Consequently, the absolute continuity exists only for contemplation, but not for reflection. Contemplation and reflection are opposites.

However, if the nature of the mind is initially dual, opposite trend should already be incorporated in the initial productivity of the second nature. A positive trend should be countered by a negative.

<sup>&</sup>lt;sup>1</sup> See: Комсомольская правда. – 1996. – 6 июля.

Therefore, the social life generated by the second nature within the planetary boundaries should be a never-ending struggle of the products of material origin and those of spiritual origin.

The same struggle (due to the duality of the substantial foundation of the Universe) should take place in all other cases, the only difference being that in within our planet we are observing a transition of the materialization phase into a phase of de-materialization, to be more precise, of the sensible matter into the intelligible matter, while in the other part of the universe it is the transition of intelligible matter into the sensible.

Now, due to a system of working hypotheses, we have set the boundary of the social world, second nature, or social form of motion of the universe. The lower margin of the social world can be distinguished on multiple grounds, namely, the nature, the type of energy or even the indirect attribute. It seems to us that, based on the semantic structure of a human personality, the lower margin can be set on the basis of emergence of feelings. It is starting with feelings, that a human breaks with the first nature and then gets under the influence of the subjectified first nature or the emerging potential social world. The margin of first nature can be clearly seen here, while the beginning of the second nature we perceive intuitively as nothing else yet is visible.

In connection with this matter it is appropriate to cite the remark of V. I. Lenin regarding the causes of the processes emerging in the organism, causing sensations. Are not these "processes" related to the exchange substances between an organism and the outside world?, – asked V.I. Lenin. Could this exchange occur if the sensations of this organism did not give him/her an objectively correct idea about this external world?  $^{\rm 1}$ 

The upper margin of the social world is fixed by the advent of extra-collective formations and impersonal form of social objectivity. We have already mentioned it above. Probably, the organ of self-regulation of the social world, used as a criterion for detecting and comparing the meanings contained in the signal coming from its lower levels, already belongs to the logical nature, i.e., to the third, supersocial level. Here the situation is similar to the one with defining of an upper margin of the first nature, when a human being its

<sup>&</sup>lt;sup>1</sup> See: Ленин В.И. Полн. собр. соч. / В. И. Ленин. - Т. 18. - С. 38.

product actually controls its development and contains the potential social world.

Thus, the social world begins with human sensations and ends with a verge behind which begins morphogenesis of quasi-structures of the organ of its self-regulation.

Movement in the vertical plane is the self-development of the universe on micro-, macro-and mega-levels. It generates the energy and information field of Earth or produces free energy, i.e., the force capable of doing the work outside the Earth. It is probably intended for the generation of new life forms in Cosmos.

There is no doubt that this would happen again when the human intelligence has reached the critical power in the phase of neocosmogenesis. The last assertion does not only assume the possibility of spreading of the collective consciousness beyond Earth, but also the emergence of a qualitatively new phenomenon, the monolith of the cosmic mind. There are different designations for it, "Cosmic civilization (N.S. Kardashov),"Omega Point" (P. Teilhard de Chardin), etc. This is most likely to happen if Earth's population reached 15–20 billions of people. In the work "Cosmo-planetary phenomenon of a Human" V.P. Kaznacheev and E.A. Spirin, for example, predict the Big noosphere bang, leading to the emergence of the monolith of the cosmic mind and noocosmogenesis<sup>1</sup>.

It is also likely that correlation between Physical and Semantic Universes is maintained through it. Further reproduction of the process of self-transformation of the universe is the task of the immediate future of philosophical science.

All the above allows to introduce the below wording of this phase of self-motion of the universe: social form of movement is a specific phase of self-motion of the substantial foundation of the Universe, which arises on the basis of development of contradictions of biological life, functions as an organic planetary system of a reasonable living matter – a social organism; generating thus such a massive contradiction, which, being an immanent source of development for the latter brings it to an electromagnetic (energy) form of life or the cosmic level of self-motion.

 $<sup>^1</sup>$  See: Казначеев В. П. Космопланетный феномен человека: Проблемы комплексного изучения / В. П. Казначеев, Е. А. Спирин. – Новосибирск: Наука, 1991. – С. 14–36.

The binary methodological approach and a specific ideology proposed in the beginning of the study allowed us to define the nature of the social form of motion of the universe. It coincided with the nature of the substantial foundation of the Universe, as is quantumwave in nature. In other words, substantial basis of the Universe, human and the social form of motion are different states of the same substance, i.e. universum. Their shared attribute, which is motion, directly indicates that the social form of motion of the universum is genetically cognate to other forms, the underlying ones, in particular.

This means that just like a personality alienated products, social organism, being subjectified, is now becoming even freer and alienates the second nature by transition into the third nature. Thus the next phase of self-development of universum, or the *complete denial of a human* occurs.

## 3.2 The third nature or the complete withdrawal of social form of the universum motion

The complete withdrawal of the human can be explained only when the mechanism of transition of universum from the social form of motion to the higher one has been clarified. It is not an idle question. The ideas of researches differ upon the latter. In our literature, for instance, the idea denying the existence of any other stages of self-development of universum, is widely spread. The major arguments are "a human, a society are a higher (the highest) stage of substance development" (V.V. Orlov), "able to develop eternally, staying within its limits" (A.V. Lastochkin).

Meanwhile, A.D. Ursul, for instance, writes that "at a certain stage of development there should appear a new form on the basis of the social one, which can be contingently called "over-social" or "post-social". When describing the processes of the higher level we have prior used the category of "meaning" from the Semantic Universe, while psychologists prefer to operate the notion of "the perfect form", sociologists use the notion of "ideal", philosophers – the Absolute. In other words, all of the above mentioned points out at the existence of a certain third reality, which we now avoid speaking of because it

 $<sup>^{\</sup>rm 1}$  Урсул А. Д. Человечество. Земля. Вселенная / А. Д. Урсул. — М., 1977. — С. 205.

involves the necessity to recognize the existence either of God, or the third world where an unknown force reigns.

We thus assume that through predicting comprehension of it we can introduce working hypotheses regarding the essence and content of the third level of the universum self-development. However, we shall first, create an image of the third world on the grounds of the information available. The famous dialogue *Timaeus* by Plato is of a particular interest here<sup>1</sup>. To start with, as remarked by *Timaeus*, two things should be distinguished; what is eternal, that has no emergence, being and what is eternally emerging, but existing nowhere. The first one, eternally identical being is understood by means of speculation and interpretation; the second one is subjected to the opinion and unreasonable sensation, emerges and dies, does not ever actually exists. If demiurge (creator) uses the first one in the capacity of a "prototype" as a model, everything will definitely work out beautiful, otherwise - "ghastly". It is clear that the first one is understood as a transformation of the universum semantic image in the vertical plane, and the second one is understood as its physical modification in the horizontal plane.

We are now authorizing the researches to comment on the generation of the worlds in the works by other authors, the possibility to comment on the renowned Holy Trinity, in particular, (three-unity of God: the Father – the Son-Holy Spirit) in theological teaching. We will concentrate on the moment of creation of "the world within the world" of G. Skovoroda², done in a pantheistic manner. According to his interpretation, two essences (matter and form) constitute all of the three worlds: the macrocosm (nature), microcosm (human), symbolic (biblical). So, in the latter, "the collection of critters" represents the matter, and shifts to the form, the saintly essence, through symbol; and there are life and death, flesh and spirit in this world³. The idea of pantheism and creative inception of a human in terms of their internal connection find reflection in "Diary" by T. Shevchenko, 1857–1858: will and strength of a soul cannot be expressed without matter⁴.

 $<sup>^1</sup>$  See: Платон. Тимей / Платон // Сочинения : в 3 т. – М. : Мысль, 1971. –Т. 3, ч. 1. – С. 445–542, 647–676.

 $<sup>^2</sup>$  See: Сковорода Г. Сочинения : в 2 т. / Г. Сковорода. – М. : Мысль, 1973. – Т. 2. – С. 16.

<sup>&</sup>lt;sup>3</sup> Ibid. - C. 151.

<sup>&</sup>lt;sup>4</sup> See: Шевченко Т. Дневник. 1857—1858 / Т. Шевченко // Твори : в 5 т. – К. : Дніпро, 1979. – Т. 5. – С. 22, 59.

Contrasting strokes on the canvas, depicting the third level of self-motion of theuniverse in the XX century were inflicted by K. Popper. The third world, in hisopinion, is the product of human activity. He is constantly increasing. However, it is important to pay attention to its considerable autonomy. "World of assumption language, theories and arguments (i.e., logical – V.B.), in short, the <u>universum of objective knowledge</u> (emphasis added) is one of the most important universes created by humans"<sup>1</sup>.

We have direct evidence of human involvement in three different worlds, described by Karl Marx, Karl Popper and other researchers. In contrast to Feuerbach, K. Marx, for example, stresses that the human activities do not only "explain", but "change", that this activity does not only belong to the spirit, but also to the nature and material life of society<sup>2</sup>. The most important in constructions of Karl Popper is a clear distinction between the three worlds: The World I – the world of physical objects; World II – the world of subjective experience; World III - the result of activity of the mind. The latter world, as K. Popper says, can exist without being materialized. Habermas, in turn, believes that people live and rotate in three different worlds, although these different worlds constantly intersect in everyday life. Firstly, it is an objective world in which the business relationships preside; secondly, it is the social world with its standards and assessments, and finally the subjective world, i.e., our feelings, hopes etc.3.

According to K. Popper, the residents of the third (linguistic) world are also represented by products of logic. He writes that the inhabitants of my third world are primarily theoretical systems; other important residents here are problems and problem situations. However, its most important inhabitants are critical reasoning and what might be called. The state of discussions or the state of critical debate; of course, this includes the contents of magazines, books and libraries<sup>4</sup>.

 $<sup>^1</sup>$  Quot. from: Философия и методология науки : учеб. пособ. / под ред. В. И. Купцова. – М. : Аспект Пресс, 1996. – С. 190.

<sup>&</sup>lt;sup>2</sup> Петрушенко Л. А. Единство системности, организованности и самодвижения / Л. А. Петрушенко. – М.: Мысль, 1975. – С. 162.

<sup>&</sup>lt;sup>3</sup> Монсон П. Современная западная социология: теории, традиции, перспективы / П. Монсон; пер. со шв. – СПб.: Нотабене, 1992. – С. 327.

<sup>&</sup>lt;sup>4</sup> Quot. from: Философия и методология науки : учеб. пособие / под ред. В. И. Купцова. - М. : Аспект Пресс, 1996. - С. 190.

Let us imagine, K. Popper writes that all the products of human activity and the memory about them has been illuminated, however, libraries and our ability to perceive the content of the books has been preserved. In this case the civilization will be restored relatively quickly. But if the libraries are destroyed, it will take millennia to restore civilization, i.e., everything will have to start from the very beginning: "If someone had to start from that place, where Adam started, he would be unable to go further than Adam."

These thinking experiments show not only the importance of the third world, but its autonomy. Of course, the third world is created by a human. However, he/she does not always know what exactly he/she does, and the results of his/her activity start to conduct their own life, which humans did not even consider. "Our theories, K. Popper writes, act just like our children: they tend to become more and more independent of their parents. Our theories can do to us what our children do: we can acquire of them more knowledge, than we have initially put into them".

Of course, the natural numbers were created by a human, but then he/she him/herself becomes the object of study, which generates a vast amount of knowledge about the numbers. The same can be said about any scientific theory. The objects of the third world are not only their actual reality, but their development potential"<sup>2</sup>.

So, if material and spiritual productions are the universum split into two parts, this means that they have to be integrated again into an organic entity. But the mentioned parts have gone so far, that only a unique force can bring them together, the force, enabling us to see the whole where it is practically impossible to be seen with the help of other means. We claim that the means able to unite them into an organic unity is a theoretical construction which is logical or reasonable link or mind. The link itself is a functional organ. We should now mention the words of I. Kant (The Critique of Pure Reason) that intelligence is the ability that gives us the principles of a priori knowledge<sup>3</sup>. In contrast to the logical connection, in this process, there is non-logical or irrational relationship.

The fundamental conclusion is bound to arise that the logical within the social world should include everything unveiling fundamental,

<sup>&</sup>lt;sup>1</sup> Ibid. - P. 191.

 $<sup>^{2}</sup>$  See ibid. - P. 190-191.

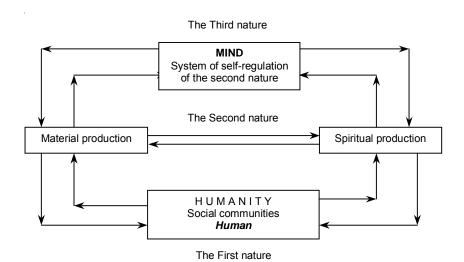
 $<sup>^3</sup>$  See: Кант И. Критика чистого разума / И. Кант. – М. : Мысль, 1994. – С. 44.

essential connections, and also tendencies, realization of which provides for the evolution of social organism as a form of reasonable life.

We should thus pay particular attention to the bringing to the single basis the material and spiritual production, which leads to the important consequence. Its essence is that the movement of the logical within the structure of the social world serves as a basis for the formation of a qualitatively new stage of self-development of universum (See scheme 8).

Based on the algorithm established in the process of exploration of the social world, at the super-social level the same components are to be distinguished. We are now speaking of the third world, the third nature and specific form of self-motion of universum. It is because of the fact that understanding of nature and form of motion at extraplanetary level shades light on the Mystery of space life and allows to comprehend the incomprehensible through hypotheses. Particularly, it concerns the transformation of human after his/her physical death.

It now becomes clear that in order to discover the essence, content and form of extra-social level of motion of the universum, it is



Scheme 8. Heuristic model of the process of self-generation of the third world

necessary to master the category of self-development or self-disorganization of the universum, which in function is opposed to self-organization. This means that, due to the category self-disorganization, we can explore the level, located above the macro level.

Although its introduction to the research practice is the task for the future, it is still possible with a high degree of confidence to say that we are now dealing with the specific nature, the logical. The products of the Semantic Universe, the meanings, are created from it. At this particular level there emerge new relationships and objects. which in science are called "quasi-relationships" or "quasi-objects". "A contemporary philosopher, N. P. Pchelkin writes, is interested not only in the economic relations, which a human is a part of, but the impact of their "image", the model of these relationships on the economic behaviour of the subject, or what is understood as "quasiobject" and "quasi-objective" relationship. Therefore, if simulation of the "social organism" as an intersection of the mass of ordered "objectified" social connections both vertically and horizontally is possible, then this scheme should be supplemented by "quasi-objective" relations: between the exchange of goods and human rationalization of this process, between the real implementation of power and its rationalization, between human behaviour and its motivation".

The similarity of structures of the second and the third nature emerges on the basis of the fact that in the process of universal interaction with the necessity a process of mutual reflection occurs, resulting into the establishment of structural correspondence between the systems. It emerges due to the fact that reflection is the basis where processes of self-regulation and reformation of information occur as a universal means of interconnection of various in nature subsystems of the universe.

The correspondence of the structures of the second and third natures should be explained in detail, i.e. attributive quality of the universe, or self-regulation is expressed here. The upper level of the universe (or nature), that springs from the lower level, with respect to the latter, begins to perform the function of regulation. If this thesis is applied to a human, it becomes an obvious fact. So, a human, for instance, as a biological species, being an offspring of the first

<sup>&</sup>lt;sup>1</sup> Пчелин Н. П. Социальная реальность как "квазиобъект" / Н. П. Пчелин // Дух и Космос: наука и культура на шляху до нетрадиційного світосприймання / кол. авт. під кер. проф. І. З. Цехмістро. – Х., 1995. – С. 73.

nature, within the certain limits controls its development. Second nature, created over the first nature, significantly changes the course of its development. Likewise, the third nature, created over the second nature dictates the parameters of development of the latter.

The emergence of the third nature is a natural process. Products, or rather, organs of the third nature emerge under the impact of a family of social organisms where social life of the macro level takes place. It happens in accordance with general laws of morphogenesis. A need for someone to resolve the accumulated problems in one's body arises inside the social organism. Since there has appeared a constantly renewable function, there emerges a specific organ, self-regulatory system. In the process of reflection the social body is split into the object and the subject. Object, remaining passive, is forced to carry on the demands of the subject. Thus appear the organizational relationships.

We have previously mentioned that the residents of the extrasocial level are meanings and products that contain logical connections. This instance has already been indicated in the works of other researches. It is necessary to mention the hypothesis of N.M. Amosov that the mind should be viewed as an apparatus for control of complex objects by criteria of optimality through the activities with the models. The word "apparatus" thus includes both the structure and algorithm" All the elements of the mind are material and structural. Relations between the elements (models) are also structural. They may be permanent and temporary. Structures are created from combinations of elements. Examples of structures - "codes" - and elements: the genes of the nucleotides in a cell, ensembles of neurons in the cerebral cortex, literacy in a society, memory in a computer, meanings in Cosmos. In other words, thanks to the social world (or social worlds!), our Universe is becoming of a higher level of organizational structure. It thus becomes a non-entropy object of Cosmos!

The reflection system with information processes affects its surrounding systems, causing certain structural changes within them, i.e. conducts them. These systems conducting and reflecting, in turn, send information to other systems and thus become controlling in regards to them. Hence appears the objectivity of God.

<sup>&</sup>lt;sup>1</sup> Вопросы философии. – 1992. – № 6. – С. 51.

Moreover, the language of self-regulation begins to conduct its own autonomous life, which it creates a separate language for, its principles its manner and algorithm of behavior.

This is a special life. It differs from social life as well as social life is different from the biological. There is little that remains from the physical human. But there still remain traces of the spiritual human, since it is the semantics kingdom. This feature of the transformation of social world into the logical has been drawn attention to by Western researchers. They began to study this phenomenon through the prism of language. So, all of the above proves that language (the phenomenon of "linguization" of philosophy, which is also known as a linguistic trend in philosophy), did not accidentally appear under the scrutiny of Western schools of social thought; not the language itself, but *quasi-objects of human life*, which are formed within the linguistic plane.

Therefore, we believe that the place of the social form of motion of the universe, which means, the second nature as well, have been distinguished by us. It is now important to establish the *general function of the second nature in the Universe*, which is the product of planetary mind – knowledge. It is regularly removed by the third nature which is logical in origin.

Having summarized the above, it becomes clear that in further analysis we should be to isolate and separately assess the role and place of each of the following four specific interactions: the *reflection* as an exchange between individuals and groups, ethnic groups of products of consciousness; *labor* as an exchange of structural information (products); *communication* as an exchange of information in the process of spiritual production and management as a specific exchange of management information in the process of organization of social process.

As shown by genetic analysis, specificity of substantiality of social world consists in the fact that it is such a level of self-motion of the universe, which is based on a universal material and spiritual interaction between people, organized in social communities. It should be clear, since any level of the universe consists of tangible and intangible ingredients. Here only the form of substance underlying the universe changes. In this regard, we should distinguish between the interaction of people based on material and information substrates. The existence of two different systems tools explains it. In other words, in the social world it is necessary to distinguish two kinds of

fundamental interactions between people. One of them occurs in the horizontal plane, while the other, since the subject is located at different levels, in the vertical plane.

The present study thus answers the question regarding the fact which substantial form of the universe is in the basis of the social world. The response here is unambiguous. Social world consists of the converted first nature, which we are used to perceive as the natural form. In the beginning the natural form is subjectified in a human organism in the form of potential social world, and further on, in the outward motion, it is objectified in a form of real social world.

In life of a human not covering the richness of the micro-level of self-motion of the universe, it has been typical to concentrate on particular moment of its productivity, and we are thus observing absolutization of either its noumenal, or phenomenal fraction of the process of production. According to V. Shmakov, "if society is artificially centered upon the noumenal only, church arises, if only on the phenomenal, there emerges economic government. However,

both of the essences are only utopias, abstract ideas, because in real life the noumenal and the phenomenal are always expressed in the organic conjunction"<sup>1</sup>.

He further states that "usually the church and the state are unable to clearly delineate their field of activity and constantly interfere in each other's domain. The Church strives to replace hm the state and, vice versa, the state attempts, if not to replace, then to subordinate it, to make it serve state's purposes"<sup>2</sup>.

Therefore, "church" is normally understood as a noumenal-phenomenal body, where the center of gravity lies in the noumenal, and the "state" is where the center of gravity lies in the phenomenal.

In the first case the hypertrophy of noumenal values and total disregard of the phenomenal takes place. They are granted with a purely official position as most. In the second case, with the hypertrophy of the phenomenal values and ignoring of the noumenal a quite similar pattern is observed. It is thus easy to find historical examples corresponding to these two cases.

So the interpreted substantiality of the social world predetermines a more or less monosemantic understanding of it from the perspec-

<sup>&</sup>lt;sup>1</sup> Шмаков В. Закон синархии и учение о двойственной иерархии монад и множеств / В. Шмаков. – К.: София, Ltd, 1994. – С. 186.

<sup>&</sup>lt;sup>2</sup> Ibid. - P. 187.

tive of a substrate of social movement, which is represented by a human and his/her organizations.

So, one of the conditions is that a person should achieve a certain degree of maturity. Here are the parameters derived from the biological phase of his/her development, or intellectual, and, no matter how paradoxical it seems, from a social or community development.

Its main biological parameters are derived from the analysis of the intellectual side of a human. As it turned out, he/she should be entitled to all the major attributive qualities of the substance, the universe, metabolism, genetics, reflection, receptivity, thinking, information, energy and others being the most important. The social parameters determining the degree of maturity are: functional organs, entropy, non-entropy, activities, self-control, self-organization, and others. Biological and social features in their joint cooperation provided for the process of generating of the original in content and form process of self-motion of the universe, which the researchers call the social, or the second nature.

Initially, the social world appears in a potential form and is hidden in the personality structure. We have discovered the mechanism of this transformation through the exploration of human formation along with exploration of morphogenesis of an individual. Mechanism of initiation and maintenance of the potential social world within the structure of a human personality has become clear, due to the construction of a complete model of the semantic structure of personality.

Theoretical analysis of the essence of the social world has shown that the creator of its actual form, i.e. of the real social world can only be a collective subject, because sociality in nature is an implemented corporate principle. Let us add that it should be an active subject.

Toynbee is quite right saying "Our analysis has revealed a significant moment of great importance for the further study (of history. – V.B.). The analysis of the "fields of action" and "bearers of action" implies not only that the "substance or material of the Universe" is activity, not matter, but also the fact that this activity is organized and has a definite purpose. Microcosm brings a purposeful action into the macrocosm, and the action being the main theme of human history, is a pressure of individuals aimed at the foundation of the respective fields of action, the basis which we call a society.

The field of action and the intersection of a set of fields – cannot be a source of action by itself. Society cannot be a source of social

action, but an individual or a group of individuals, fields of action of which make up a society, can.

Community is not and cannot be anything other than a mediator through which individuals interact with each other. According to this A. Toynbee in his Study of History underlines, that not society, but individuals create human history<sup>1</sup>.

In this regard, we share the point of view of those researchers who believe that the subject in this case is represented by groups, ethnic groups, and nations. The latter do not only produce a social form, but dilute it by levels. So the public life generates a public organism, which in literature is used as a synonym of "social organism". And, in a sense, this is true.

In reality, the social form of motion of the universe contains several hierarchical levels, where it can be embodies due to the fact that people are organized in micro groups and micro communities to solve their current life problems. Based on cooperation of intellectual efforts there emerges a hierarchy of energy flows, which eventually transforms into a specific form of motion of the universe. In this way we can explain autonomization of types of intellectual energy, which the esoteric philosophy insists upon. Integrating, they form an organic system, which we call a family of social organisms. According to N. Berdyaev's remark in the "Russian idea" saying that "the organic is hierarchism", the social world contains structural levels, which means that community of social organisms consist of social animals different in kind and type.

With reference to the considered above, we have every reason to believe that the social world does not complete the transformation of the universe, but serves only as a basis for the emergence of the logical nature, the third world, and energetic or electromagnetic form of motion of the universe. Here human vestige, observed with the aid of ordinary, i.e. rational means of cognition are completely lost.

 $<sup>^1</sup>$  See: Тойнби А. Дж. Постижение истории / А. Дж. Тойнби. – М. : Прогресс, 1991. – С. 253–354.

## 3.3 Dialectics of person's life and death in the process of universum's self-movement

So far, we have considered the role and place of a human in self-development of the universum, based on available rational methods of studying. We have thus agreed with the thesis that a human is the universum itself in its subjectified form. However, if it is so, consistently following the laws of dialectics, we should also consider the other of the, namely, it is necessary to analyze the process of functioning of the universum as transformation of a human, or rather, a reasonable living matter. The last statement logically results from the fact that it is the producer of the second nature. The fact that the converter of the first nature into the second one takes the form of a human is only a particular case, associated with the specifics of the planetary conditions of its existence.

So now, assuming that the universum and a human are the two elements of the same phenomenon, we are able to trace the fate of a human in a more distant time frame, that is, cosmically. In other words, specific model or picture of the world should be based on the synthesis of rational and irrational approaches. The latter has powerful explanatory capabilities. It is not difficult to find a human place here. However, a few observations about why we appreciate its heuristic capabilities are necessary here.

Picture of the world is the semantic composition of interlocking ordered and ranked signs and meanings. One of the meanings within this composition is the semantic center of the whole picture, the super-meaning, as a value it outlines is the value-over-value. "Not the interests, material or ideal, directly dominating a person's behavior, but the "world pictures" created by ideas, like arrows, often determine the ways in which the dynamics of the interests moves forward the action", as M. Weber wrote<sup>1</sup>.

In today's crisis of the framework of the planetary system, our ideological position might be seen by some as problematic in terms of explaining of the chaos in which the planetary community is now involved. However, we are firmly convinced that it is due to this picture of the world, that we can find a way in the general evolution process. Even in the current chaos, when the picture of semantic

 $<sup>^1</sup>$  Weber M. Gesammte Aufsatze zur Religioussoziologie. Bd. 1 / M. Weber. – Tubingen L.c.B. Molar (Paul Sieber), 1986. – S. 215.

Universe (the universum) personality has disintegrated, spread into the semantic "sedimets", some of which are still in unity, forming partial universes ("half-universes"), while others have completely ceased unifying with the neighboring ones, or even disappeared from the sight of an individual. The crumbled world picture, however, clearly illustrates the form of being of social space-time, its disappearing.

At the same time we shall note that the destruction of the old world view and the immaturity of the new one have led to the fact that our minds actively actualize the possible pictures of the future, which are surprisingly diverse. St. Lem has mentioned in his Cyberiade that the existence is a trivial and uninteresting thing. Another thing is the non-existence. It is full of meanings and values as one can be non-existent in many ways. In this case, a form of non-existence of the social, the spatial and temporal dimensions, or using the metaphor by Hegel, is "setting them aside."

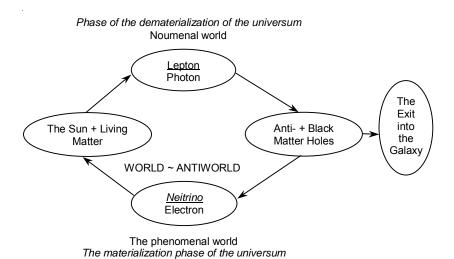
Thus, we argue that in order to, specify the place and function of a human in Cosmos, it is necessary to reproduce the overall picture of the organization of the universe using intellectual tools. Based on the above statements concerning the universum, we can offer our own variant of the Universe organization, thus reserving the right to make any adjustments as a theoretical mind will explore its patterns.

Taking into account that the material and the spiritual inextricably exist at all stages of universum's self-motion, it is logical to present the Universe as follows (See scheme 9).

Based on the above picture, we can say that the mechanism of self-development of the universum is a gradual transition from one phase of motion to another, during which the foundation of the Universe undergoes qualitative changes.

Now it becomes possible to construct a scale, within which, viewing a human as a phenomenon of cosmic nature and content, we can not only understand his/her own content, but also explore his/her function in the mechanism of self-motion of the universum.

Of all the things discussed above, the *axis of evolution of the universum* would be the best to perform this function, which could, just as the scale, be marked with the different states of the universum and human as its subjective image. Qualitative leaps which a reasonable living matter undergoes in the transition from one state to another can be clearly traced here.



Scheme 9. Circuit of the universum within the universe

Due to the attributive properties of the substantial basis of the Universe, the universum and a human are so deeply imbued into each other, that they cannot be separated. The major problem of rational understanding and description of their different states is that its elements resemble more energies or powers, than the substantial formations. However, in reality they realize themselves as something substantial. "Energies" and "powers" never appear in isolation, but only being interconnected as if being "synergies" or "interacting factors" (samskara). No causes and consequences are discussed in this regard.

The axis of the evolution of the universe can be constructed on the basis of the general tendency of self-development of various forms of universe's self-motion. For its formalization, we shall proceed from the fact that evolution goes from the first to the third nature through the second nature. Let us mention that each of them originates at the lower level, is developed there and disappears at the next stage of universe's self-development. For example, a social form of movement arose within organic evolution of the macroscopic, as well as outside of I; it exists in accordance with the laws of organic processes and at

the same time goes beyond the limits of their power. Otherwise, the transformation of the biological process into the social contains a contradiction, the resolution of which leads to a qualitatively new form of motion of the universe – energy.

In this regard, it is necessary to bring r Teihard de Chardin's arguments, who considered a person with his/her "inner world" a starting point, and arrived at a logical conclusion regarding the existence of a similar "internal" side of animals, plants and non-living nature. Let us also mention that this idea is reflected in the works by Schopenhauer and V. Soloviev.

Teihard de Chardin (*The Phenomenon of Man*) chooses the idea of "radial energy" entailing the matter "to the direction of the more complex" as a basis of the "internal source". That it is the basis of the evolution of the cosmos. "Radial energy" is psychic in nature: the essence of reality, according to our observation, can be represented by the "internal" the universe contains at a certain moment. In this sense, evolution is, in fact, nothing but a constant increase in this "psychic", or "radial" energy in the course of activity under the constant impact of mechanical or "tangential" energy. These two world energies, in practice are bound, in his opinion, by an organization, consistent development of which is internally duplicated, resulting in a constant growth and deepening of consciousness. The formation of the planetary consciousness, which is nothing but a spiritual "ova of the world", occurs in the Omega Point.

The present study provides an answer to one of the most complicated questions of our understanding of the conditions of life, namely, regarding where are the nodal or tense points, in which qualitative leaps in self-movement of the universe take place. We have every reason to believe that the universe it qualitatively nodded in places of interpenetration of material and spiritual. It is observed throughout the cycle of the universe. First we had to deal with this pattern when explaining the origin of protein-nucleic life. We observe a qualitative shift of the same kind at the point of interpenetration of material and spiritual in the structure of the biological human organism. We are now expecting an increment of a different kind, and it occurs in the interaction of material and spiritual production in the social world. This means that *the axis of the evolution of the uni-*

 $<sup>^{1}</sup>$  See : Тейяр де Шарден П. Феномен человека / П. Тейяр де Шарден. – М. : Наука, 1987. – С. 120.

verse is exactly where the material and the spiritual though being in different conditions, are in a state of separation.

Now, knowing the principles of transition from the first to second and third nature, it is possible to reconstruct *the direction of the universum's cycle* within our Universe by means of intellectual reconstruction. It is clear that the universe expands in the vertical plane, leaving only traces of its short stay at the horizontal levels. In this regard, we have reasons to consider the changes of the universum on the vertical plane as those leading the transformations on the horizontal plane.

The above discussed allows us to make general theoretical conclusions about the place of the second nature in self-movement of the universum. It is determined by the fact that the second nature is the result of functioning of reasonable living matter as the highest product of first nature development that has emerged on the Earth. It is found at the *macro level* of self-motion of the universum, and on the one hand, contrasts it to the *micro level*, where nebula are formed, and, on the other hand, to the *mega level*, where the process of transition of the cosmic chaos into the structural organization of the universum takes place.

Thus, defining the topology of the second nature, we are dealing with the first and the third nature simultaneously. The common between them is that they constitute an organic entity – universum. Here we have the relation of a part to the whole, where a part permeates into all levels of the whole, and the whole, in turn, permeates all of its constituent parts. The whole is impossible without a part, and thus a part is meaningless to be discussed. In this case, the essence of a moment of self-motion of the whole is the transition of the energy momentum in its parts. In other words, the motion of the universe is not a series of successive transitions of one form of nature into another, but a simultaneous and strictly balanced mutual conversion of them into one another within the whole.

The particular between them is that each type of nature appears as a relatively independent form within strictly defined conditions and parameters of the scale of evolution. Therefore, it now becomes possible to speak of a relatively independent form of their existence. Each of the three forms of nature either twisted, compacted, compressed to a super-dense state, as the first nature does by means of its transition into a human, representing the richness of attribute properties of the universum, or, on the contrary, is scattered in the

Universe, as the second nature does in the process of its transition into the third nature, forming the nebulae that under certain conditions transfer into the super-dense formations through black holes, for example.

Therefore, the laws of self-motion of the universum, at least those of the planetary level, can be holistically described only if a convergent spiral, according to which the first nature develops, will transit into a divergent spiral, which explains the development of the second nature. Therefore, in our opinion, R.F. Abdeev who defends the converging spiral, and K. Marx and F. Engels who have offered the divergent spiral of development are all quite right. The processes occurring in the first case can be described as "the emergence of order out of chaos", while in the latter, as" the emergence of chaos out of order". The Omega point of Pierre Teyar de Chardin lies just on the margin of transition of the top of the second nature into the beginning of development of the third nature.

Knowing the above, and it's only bits and pieces of information about a human, it is simply impossible not to admire the beauty and richness of its attribute properties. In the process of subjectification within a miniature of a human body it includes attributive properties of the first nature and practically creates and maintains the second nature in a sencrient way. He/she is a microcosm! He/she is great and mysterious as the Universe is.

There already exist hypotheses, assuming the possibility of existence of special material objects, which are "the world within themselves" i.e. containing the Universe.

They are related to the dialectical interdependence of the mega and micro objects. And if our universe turns out to be a fridmon, i.e. a micro-object, inside which there is a holistic world, the collection of such fridmons along with other forms of material objects may form a new universe. Consequently, our Meta-galaxy is just a cycle in the evolution of substance<sup>1</sup>. It is logical to introduce a working hypothesis that the Big Bang, which both, the naturalists and the philosophers discuss, is the destruction of the internal overvoltage of one of the fridmons, which gave life to the planet Earth.

 $<sup>^1</sup>$  Сафронов И. А. Человек и Вселенная: философско-методологический аспект / И. А. Сафонов: дис. ... доктора филос. наук в форме научного доклада / И. А. Софронов. – СПб., 1994. – С. 36-37.

A number of individuals is thus striving to realize a set of genetically related inner worlds, which constitute their essence. This process is infinite, i.e. it dialectically negates any embodied forms of its expression. However, whether it is possible for practically any conscious subject to turn the universal features of its generic nature into reality depends on a set of factors and specific conditions of its life.

In any case, the human race and its individuals should realize that they are the subjects of potential worlds, properties and regularities of which are found in the course of their functioning. In this connection, the law of transformation of variety of potential worlds into reality universe becomes a law of self-development of conscious individuals themselves.

For this reason their activity is of fundamental importance i.e. it does an evolutionary selection of universal features, which enables generation of "secondary" worlds. The second nature is a means of life support of the universe. It is what Pierre Teilhard de Chardin called the neolife (artificially generated). The life that makes a step forward under the influence of collective thinking!

Hence, we come to the realization that the protein-nucleic organization of life though being the dominant form of living matter on the planet, is still not the only one. Along with it, there develops and operates a field form of reasonable living matter, which is continued, according to our hypothesis, beyond Earth. It appears that the living reasonable matter is distributed in the universe in the form of a unified structure, components of which correspond to its massive "cellular" structure, postulated in the works by Y. B. Zeldovich, I.D. Novikov, and other physicists¹.

There is much for a philosopher to think about. Beyond doubt is the fact that only an in-depth study of the second nature in future will lead humanity to a dream, which is vaguely cherished by the human scientific study, to be able to master the primary energy lying outside of all atomic and molecular properties, compared to which all other forces are only the side-forces, and having united them, to take

<sup>&</sup>lt;sup>1</sup> See: Зельдович А. Б. Избранные труды: Частицы, ядра, Вселенная / А. Б. Зельдович. – М.: Наука, 1985. – 483 с.; Зельдович Я. Б. Драма идей и познании природы: Частицы, поля, заряды / Я. Б. Зельдович, М. Ю. Хлопов. – М.: Наука, 1988. – С. 239; Новиков И. Д. Эволюция Вселенной / И. Д. Новиков. – 3-е изд. – М.: Наука, 1990. – С. 192.

over the helm of the world, to find the very mainspring of evolution as Teihard de Chardin (*The Phenomenon of Man*) writes<sup>1</sup>.

Thus, the study of cosmic interaction of clusters of living matter (its reasonable forms) should be explained not just by scientific or historic interest, spiritual needs of people, but also by the expression of general laws of development of the Universe. We should strive to comprehend the types, the functional organization of the cosmic living matter and especially of its reasonable form. Particularly, along with the four known forms of physical connections (weak, strong, electromagnetic, and gravitational) we can assume the probability of existence of other classes of connections, which determine the functional basis of the organization (properties) of the living cosmic matter. The possibility of such searches has been mentioned in the advanced studies by scientists, C. E. Tsiolkovsky, in particular.

A human is rightly understood as a higher stage of organization of the Universe at the macro level, the "accumulates the results of its infinite development in generalized form, "therefore, to further advance into the Universe, which is the organizational form of existence of the universe, it is necessary to do a thorough study of the properties of a human body. We should not hesitate to put forward new ideas about the necessary connection between a human as a reasonable subject and the fundamental laws of its development.

Here we should pay attention to the fact that a human really is the essence of the development of the macro-level. At the micro – level this place is taken by the quantum vacuum, which accumulates all the morphological and functional richness of the universum. But if so (and it so beyond the doubt), it means that we can now put the question of what kind of substance reflects all the attributive properties of the universum at the mega-level? In other words, it is now time to include in the agenda of philosophical and natural sciences the question what is the substance that transforms intelligible matter in the sensible on the mega-level. It is clear that the category of "universum" contains everything that is formed as a result of selfmotion of the quantum vacuum, a human and the unknown yet entity of the mega – level.

 $<sup>^{1}</sup>$  See: Тейяр де Шарден П. Феномен человека / П. Тейяр де Шарден. – М. : Наука, 1987. – С. 195.

Neocosmogenesis theory gives a chance to understand the social form of interaction of macro-objects as a necessary stage of self-development of the Universe. The social world is a naturally emerging state of the expanding Universe, which forms a unity with other forms of interaction, the highest cycle of its evolution. It is necessary to mention the hypothesis by E.V. Ilienkov about how with the help thinking processes there emerges a cycle of the universum. He wrote, "Why not to suggest that the matter in its development due to the thinking brain and appearing in the form on it creates the very conditions under which the radiated sun energy is not wasted fruitlessly on simply warming the world, but accumulates in the qualitatively higher form of existence, and then works a "trigger" or as the fuse, giving rise to the reverse recovery of dying worlds in the form of a hot nebula".

It now becomes clear that material and spiritual, or, as the materialists say, human reasoning or, the matter, acts as a link in the general cycle, by which the development of the universum is closed in a circle, in the image of a snake biting its tail, as Hegel preferred to express the image of the true (opposed to "bad") infinity.

Further, defining the place and function of a human in the mechanism of self-motion of the universum, it is logical to hypothesize about the nature of human *life and death*.

It is well known that these categories in the theory of cognition are not perceived monosemantic, and they are very much disputed. At the same time there is a number of opinions in the scientific and philosophical literature, shared not only by scientists working in specific areas of scientific knowledge, but also by many experts. Thus, the definition of life as a division of the universe into the subjective and objective parts is common for the scientific literature, and there no rejects regarding it. In particular, this point view is supported in Hegel's "Phenomenology" and E. Schrudinger's famous article "What Is Life?" One of the contemporary authors sharing this opinion is, for example, G.A. Yugay and many others.

If this is the definition of life is true, then we every reason to determine the nature and categories of death. The latter appears as the natural shift of the living material from one phase of movement to following one. Its appearance at a new level of universe's

 $<sup>^{1}</sup>$  Ильенков Э. В. Философия и культура / Э. В. Ильенков. – М. : Политиздат, 1991. – С. 432.

self-development is *birth*. So the death of the subject of life on one level of movement of the universe is his/her birth at another level.

Moreover, the definition of the nature and content of life and death acquire new traits because life appears in two dimensions. One of them is associated with parameters of the horizontal plane, and another with the movement within the vertical plane. It must be said that they are not simple in either case. Even being in one plane social life, for example, can take place under the prevalence of material or spiritual. We are still to define the types, the species, and subspecies of life forms in general.

In this regard, the study by the theoretical physicist F. Dyson is of particular interest. He notes that in formulating his natural-scientific hypothesis about the essence of life, he used the ideas of K.E. Tsiolkovsky about the possibility of existence of life in the cosmos as a basis. According to F. Dyson's concept that for the living matter to exist in outer space, three barriers, i.e. zero gravity, zero temperature, and zero pressure, should be overcome. This scholar suggests that it is theoretically possible for systems to exist, comparable to terrestrial living matter in terms of complexity or organization, but not related to protein-nucleic base (substrate). "It is logical, says Dyson, "to imagine life, independent of the flesh and blood, incarnated in the systems of superconducting circuits or interstellar dust accumulations".

Adopting of such a hypothesis means that at least four forms of life should be allocated in the cycle of the universe within the boundaries of our Universe. They are the planetary, i.e. the one taking place in this world, life in the anti-world, and two transitional forms, at the phase of materialization of the universe and the phase of its dematerialization. It thus means that each life form (a human life is of no exception here) experiences the transition (the death) in cycle of the universe and is born as a new living form for four times. In this case, mechanism of self-motion of the universe should be presented as a cycle specific forms of life. Quantum vacuum undergoes a change and each time appears as a different form.

It is clear that the universe is impossible to terminate. Other assumptions arising from its properties are true as well. For example, according to materialists, matter is really indestructible. And they

¹ Природа. – 1982. – № 8. – С. 68.

are right. However we can thus say that spirit is also indestructible. Matter and spirit during the transition of the universe from one phase of motion to another only appears in a different form. We can and should recreate two completely equivalent cycles of matter and information. And only their organic unity at the micro-macro-, and mega-levels completely reflects the nature of it.

The researchers are already working on explaining of this cycle. And we can now present a cycle of Reason or information on micro-, macro-and mega-levels based on the foregoing material and works by V.V. Nalimov<sup>1</sup> (See scheme 10).

The above heuristic model shows that Karl Jaspers was quite right, saying that our consciousness is based on the unconscious, it always grows out of the unconscious and comes back to it. We are now speaking of the micro-level, where consciousness first appears, and which incorporates the products of the planetary Mind.

This picture is a "stream of consciousness" in the vast cosmos, which functions in a similar to currents and trade-winds in the ocean, or roads on land. In this case, if the latter unites the continents, as well as cities and towns, the "stream of consciousness" unites the cosmic worlds. The idea of "stream of consciousness", was presented in the novel "Ulysses" by James Joyce and repeated in the works by V. Nabokov³, K. McCullough⁴, L. Martynova⁵ and others, right up to naturalization of idea of "the ocean of consciousness" in "Solaris" by the fantast writer St. Lem and a film by A. Tarkovsy bearing the same name, in the works of F. Dostoevsky⁶, T. Shevchenko⁶, Ovidious⁵,

 $<sup>^1</sup>$  Налимов В. В. Спонтанность сознания / В. В. Налимов. — М. : Прометей, 1989. — С. 104.

<sup>. 104.</sup> <sup>2</sup> Джойс Дж. Улисс / Дж. Джойс // Иностранная литература. – 1989. – № 1–12.

<sup>&</sup>lt;sup>3</sup> Набоков В. Лолита / В. Набоков. – М. : Художественная литература, 1991. – С. 272.

 $<sup>^4</sup>$  Маккалоу К. Поющие в терновнике / К. Маккалоу. – Х. : Око, 1992. – С. 462–465.

 $<sup>^5</sup>$  Мартынов Л. Граница // Стихотворения и поэмы : в 2 т. – М. : Художественная литература 1965. – Т. 1. – С. 364–365.

 $<sup>^6</sup>$  Достоевсий Ф. М. Братья Карамазовы. Часть IV // Собр. соч. : в 15 т. – Л. : Наука, 1991. – Т. 10. – С. 139–157, 358–380.

 $<sup>^7</sup>$  Шевченко Т. Дневник. 1857—1858 / Т. Шевченко // Твори : у 5 т. — К. : Дніпро, 1979. — Т. 5. — С. 22, 59.

<sup>&</sup>lt;sup>8</sup> Овидий. Скорбные элегии. Письма с Понта / Овидий. - М. : Наука, 1982. - С. 14-15, С. 56-58.

Sophocles<sup>1</sup>, and Aeschylus<sup>2</sup>. Today in the works of A.I. Golovin this idea is regarded as "a way of thinking, the increase of number of associations, and their interconnectedness. Generally, as an expression of properties of the mysterious intelligence, self-organization and self-realization, in the XX century has been recognized not only in literature, but also in the methodology, the philosophy of art, science and scientific progress, culture in general. Its turns are unexpected in the world outlook that is in the process of establishment, the historical flow of concepts of "three worlds"<sup>3</sup>.

Firstly, our ideological approach coincides with the ethical and humanistic way of Enlightenment in Ukraine in XVII—XIX centuries which developed within the aspect of pantheism, the problem of the essence, its contradictory aspects, the visible and the invisible, the living and the dead etc, i.e. "a world within the world", as suggested by G. Skovoroda. Secondly, this cycle of consciousness is well superimposed by the concept of K. Popper, G. Skovoroda and our point of view, specified above. It impossible though to impose a point of view of D. Bell who develops a concept of three worlds on the basis of technological determinism, and highlights the following historical types of society, "pre-industrial", "industrial" and "postindustrial". It is rather a variety of them in the horizontal plane or at the macro level, not the movement of the universe vertically.

It is obvious that consciousness here should be understood as circulating knowledge or a special kind of cultivated intellect of a human and the cosmos of information able to stimulate weak electromagnetic waves, reproducing similar images within the global or local air, in the head of an individual or a different structure of the planetary system, for example. After all, what we call human consciousness is actually  $\underline{co-knowledge}$  that is something consonant with the external and independent from a human being formation appearing and existing in brain structure as its counterpart.

<sup>&</sup>lt;sup>1</sup> Софокл. Антигона / Софокл // Драмы. – М.: Наука, 1990. – С. 124–168, 333–374.

<sup>&</sup>lt;sup>2</sup> Эсхил. Прикованный Прометей / Эсхил // Трагедии. - М.: Наука, 1989. - С. 234-267, 442-506.

<sup>&</sup>lt;sup>3</sup> Головин А. И. Идея «потока сознания» и концепция «трех миров» / А. И. Головина // Дух і Космос: наука і культура на шляху до нетрадиційного світосприймання / кол. авт. під кер. проф. І. З. Цехмістро. – Харків, 1995. – С. 37.

<sup>&</sup>lt;sup>4</sup> See: Белл Д. Культурне противоречия капитализма / Д. Белл // Этическая мысль. – М.: Политиздат, 1990. – С. 243–255.

Each of the following elements is sensual consciousness: the unconscious, the mind, self-consciousness, super-consciousness, and finally, the cosmic consciousness (pure mind), and they all have a similar structure. Therefore, they are open to each other, mutually understood and mutually stimulated by one and the same source or type of interaction. The only difference between them is the threshold of sensitivity of perception by human senses and ways of representation for the internal use of the perceiving subject. A human, for example, in order for an external signal to operate, decodes it into vibrations of the internal structures, then transforms it into images, works with them, then re-encodes and sends it to the external environment again.

Confirm this idea, N.V. Kivenko writes: "The systems belonging to the same type of motion, in this case, to the vertical, I observe not only the common features in the way of construction, but also common characteristic elements of systems, determining the way of their functioning and direction of development". In fact, it turns out that spiritual means of perception of social reality, among which intuition is the most effective one, are more sensitive or subtle for fixation of slightest hesitations of the microcosm than regular senses of macrolevel events, such as hearing, sight, etc.

We thus have every reason to believe that the universe, beginning with the prior-consciousness or the unconscious, starts the process of *dematerialization*, i.e., it transits into the opposite phase of self-motion, from matter to spirit. Its rise ends in the phase of *materialization*, concentrating in the subjective image, a human, it begins to transform itself into an objective image of cosmic origin, the nebula. And we need to investigate this transition as human noumenon.

Thus, the main function of a second nature after we have found out that it is an attribute of the universum, is not limited to the search, but it also has to reveal its contents. In order to do this we need to conduct a separate analysis of this aspect, but for now let us denote it with a *set* of auxiliary hypotheses, leaving procedure of verification for another study.

It is logical to assume that the main function of the second nature is to recharge the Semantic Universe. We can give a more universal version of it, which is the maintenance of relationship between the

 $<sup>^{-1}</sup>$  Кивенко Н. В. Отражение и его роль в живых системах / Н. В. Кивенко. – К. : Наукова думка, 1972. – С. 106.

semantic and the physical Universe in a dynamic equilibrium. The second version is even more solid, as the second nature coincides with the first nature in terms of structure, i.e. it contains both the material and the spiritual at the same time. Maybe its purpose is being an entity of the universeum?

The idea that the main function of the second nature is the renovation of the universe, i.e. its return it to its original condition of being undivided into the first and the second nature, looks possible. However, it is probable that the *main function of the second nature* is to increase the non-entropy level of the Universe. At this point of study we can use either of them because even in a probabilistic form it leads us beyond the second nature, including it into a more general system, the Universe. Which version is more true will be unveiled further on, but we are now leaving the discussion of the main function of the second nature to the universe. After all, there still may be unconfirmed hypotheses in the study. This means that those following us, will work out other options for its search, trying to get to the truth as close as possible.

Thus, we should recognize the fact that co-evolution of human and Cosmos is a long-term perspective. A human, just like the atoms constituting him/her, is not only an earthly, but also the cosmic object, connected with the Universe and its quantum basis well as with common laws of self-motion of the universum, by means of genesis of his/her body and brain.

If it is so and a human is organically included in the circulation of information, it means that we should further explore the attributive properties of a human and search for aliens on Earth by means of attributive features of human organism. V. Tkachenko and A. Polubev have already introduced a hypothesis that because of the free circulation of air (information or consciousness currents. – V.B.) in Cosmos, it is more efficient for us to use social resources for noosphere exploration. In other words, we should invest in study of the planetary consciousness, its possible connections to Cosmos rather than waste it on the electromagnetic reconnaissance of the Universe.

So, the solar rays lighting the Earth and gliding its surface, take a print of everything the Earth noosphere includes to Cosmos. The information of us, our lives, our intellectual achievements goes to other habitable worlds. However, stellar rays possessing information about other worlds come to our planet the same way. The only thing one needs to do is identify it and understand correctly. Contactors

are able to do so, however, it is highly important to distinguish the true contactors from a much larger number of charlatans and mentally ill people. Therefore, extraterrestrial civilizations should be searched for on Earth, i.e. the stellar rays hold complete information concerning their lives. The problem is just that we should learn how to perceive and interpret it.

The presented picture of the mechanism of self-motion of the universe with the logical form is unlikely to be rejected without any serious theoretical refutation and construction of an alternative variant of this process. We should thus bear in mind that here we are speaking about the planetary life form, along with which there can exist a variety of them in terms of quality, as there are extraterrestrials civilizations in the universe. The latter is not news for us, but a hypothesis, which will soon be confirmed. It is logical to assume that it will be proved if not by the contemporaries, then by the next generation of scientists. We should think in terms of time scales, adequate for the process under analysis. At the same time we are entering a stage of overcoming the geocentrism as a principle of explanation of the world.

However, the questions bound to arise, one of which being associated with the thrust of the ascent of the universe from the physical to the spiritual life. Who or what sets the motion vector for these cycling life forms? Why is the vector of evolution directed in this particular way within our planetary system? Who or what keeps the process within certain limits? Why social life can not develop within the horizontal plane eternally? Why death or disappearance of life forms is inevitably? Why do people not remember their past and each time start from the very begin?

When summarizing, we have to answer the question what of the practical we consider valuable for the present study. First of all, it seems that uniqueness and multi-functionality of human properties have been established. The testimony of the quantum wave nature of social relations generated by an individual and a social phenomenon arising on this basis, gets an individual involved in the general circulation of the universe. The necessity of integration of people in the process of living and acquisition of social power based on it, is the regularity of emergence of the second nature. This fact allows us to view the social world as an inartificially-natural stage of self-development of the universe and to consider its causations with its other phases.

It is encouraging that through theoretical justification of the essence of the category "social" its structure has been determined, which allowed us to consider collectivism as an attribute of sociality, and corporatism as the principle of coexistence of people, in the process of which they produce the content of the social world. The latter appears as complicated three-stage process of transition of the universe from subjectified form, i.e. hidden inside a biological organism, to the objectified form.

The potential form is virtual, hidden inside a person and has the ability to form and express itself only under certain external conditions. The real form located on the outside, on the contrary, has duration in time and is subject to decay and gradually disappears from Earth, leaving a trail of people's historical memory.

In this case, the *foundation* or the main source of social "phenomenon is a biological form of self-motion of the universe, and the *actualized social world is the condition* of its self-development acting on the principle of external supplement. All definitions of personality as a totality of social relations, having contributed to the study of the social world, should now be properly considered narrowly as the foundation here certainly plays a leading role. This means that personality initially is an attributive property of a human, and not the product of impact of the society. The impact of society on it despite for being significant, but it is secondary if compared to substantial properties of a human organism. The social form disappears by flowing into the logical form, still existing within the third nature. It thus apparently retains its properties and is able to germinate like a seed in every place of the Universe, by adapting to the content of the geological climate.

The important result of the study is understanding that the human as a producer of the social world lives and operates within two planes, namely in the "value-sense" and "space-time" planes. The social world also self-develops in two planes, the vertical and the horizontal . The epistemological analysis has thus showed that the combination of horizontal and vertical movements of the social world is possible only in a coordinate system of *theoretical and practical*. The importance of unity of theory and practice in human life can be clearly understood here.

Moreover, we have already shown that there are *two kinds of cau*sality, the natural causality and the free causality. It is clear that the duality of determination is caused by the binary nature of the substantial foundation of the Universe and its producer, the human personality. It is obvious that if the causality is established in a phenomenon, it means that it s possible to uncover the logic of its origin, establishment, functioning and development.

The peculiarity of expression of causality in the social world is that both natural and free causalities take place simultaneously. Thus, the natural causality gradually turning into the free is prevalent on-side of human personality, while on the side of society, the free causality, on the contrary, gradually turns into the natural.

It is clear from the foregoing that spontaneity is replaced by regularity as social material moves away from its source, human. For instance, at the stage of social chaos, spontaneity is the master of situation. But on the second stage of self-development of social content within social environment the antagonism between spontaneity and regularity is observed. It is here, transforming the possible into reality with its content, substance reveals itself as a creative power, and turning the real into the possibility, it reveals itself as destructive power. But both are identical, creation destroys, destruction creates, as the negative and positive, possibility and reality are completely united in substantial need as Hegel (Science of Logic) write<sup>1</sup>. There is virtually no room for spontaneity at the third stage, or noosphere. Regularity dominates there.

Today, the leading trend of social development is globalization, which can be defined as "a series of processes that make up the sole world". It can now be characterized by such parameters as increase of capacity, intensification and aspiration to Cosmos. We can now indicate other *laws* observed by researchers at the present stage of self-development of the social world. One of the main laws is that a modern human does a transition from being a Homo sapiens to a *Homo inteilligens* through socio-biological changes, or according to Charles J. Lamsden and Edward O. Wilson, by means of "genetically-cultural co-evolution".

Their principal difference is that Homo sapiens organizes and lives on the basis of material production and produces mainly material goods, while a *Homo inteiligens* develops spiritual production and produces "temporary values". The shift of spiritual feelings to the forefront necessarily generates a new system of values based on the

 $<sup>^1</sup>$  See : Гегель Г. В. Ф. Наука логики : в 3 т. / Г. Гегель. – М. : Мысль, 1971. – Т. 2. – С. 206.

spiritual production. This, imperceptible at first glance, shift will inevitably lead to fundamental changes in social life. According to J. Masuda, "a new human, Homo inteilligens should now create a civilization that is completely different from the one built by Homo sapiens".

It is thus impossible to ignore the significance of the increase of conversion and a sharp amplifying of the power of energy expended on it. This is despite the fact that the human person is at the cocoon stage! Indeed, personality is a factor of self-development of the Universe increasing not daily, but each moment. His/her age is only a couple of thousands of years, while the organic nature has existed for millions of years. According to Russian cosmists, the mankind is definitely likely to have a brilliant future, if human receives all the necessary things for their further development!

On the basis of development of this pattern other trends are emerging and becoming visible in the social environment. Factors contributing to their emergence are the increase of share of robotics, releasing a person from working in the sphere of material production, intensification of communication between people, computers and global state and interstate, as well as autonomous, civilian communication networks, coupled by strengthening of the role of intelligence of the individual due to human genetic and cultural evolution. We have every reason to suppose that the break-in will take place at the time of creation of artificial intelligence.

And we have yet to grasp the complexity and depth of the latter thesis because the progress of global humanity totally depends on its implementation. Consequently, an idea that the information civilization will be followed by era of human civilization is now being confirmed.

Let us summarize the results of the completed work without going further into the abyss of problems of Cosmos. We are thus leaving the questions about the afterlife, human existence in the form of energy etc for future researches. Let us concentrate on what is understandable to an ordinary human, and is reaffirmed and hence, verified by the modern scientific worldview.

Firstly, in our opinion, we have substantially commented on the place and role of a human in the mechanism of self-motion of the uni-

<sup>&</sup>lt;sup>1</sup> Масуда Й. Гіпотеза про генезис Homo intelligens / Й. Масуда // Сучасна зарубіжна соціальна філософія : хрестоматія. – К. : Либідь, 1996. – С. 355.

verse. Traces of its presence are found in the first nature, it reaches a peak within the second nature and disappears, apparently, having realized its function in the above mechanism of the third nature. Having indicated the three worlds available for the cognitive analysis, phenomenal, noumenal and neogonistic (social), we have thus avoided any arbitrariness. We have only illustrated the statements presented in the scientific philosophical literature.

It turned out that an individual, being a multifunctional organ of the universe, acquires strength and power only in cooperation with others. It is obvious that every single world, virtual, physical, spiritual, and social is generated and lives due to the original type of organism. In this case, if it is known that the physical world is based on a family of natural organisms, and the spiritual world on the family of spiritual organisms, the family of social organisms produces and provides for the livelihood of the social world.

Here we can logically conclude that the anti-world is the fourth nature, which is opposite to the second nature in terms of functions. In other words, it facilitates the transition of the universe from dematerialization phase to phase of materialization. Besides, a working hypothesis can be introduced that the virtual world in human structure should also consist of a family of virtual organisms or those organisms which we would call the seed for the Universal field. Being contrasted to the subjectified state of the family of other types of organisms, it should be in the subjectified position it has acquired in the anti-world.

Secondly, it has become clear that in order to understand the laws of expression and establishment of the third nature, one needs to master a qualitatively new toolset. When unveiling the logic of self-development of the social world, we made extensive use of three well-known laws of dialectics, namely, the law of unity and struggle of the opposites, the law of transition of quantitative changes into qualitative, the law of denial of the denial. However, we can not limit it to social form of motion of the universe only because they obviously have a more general character. Their explanatory potential extends to other forms of self-motion of the universe.

Finally, explanation of further development of the human population on the cosmological scale is possible only if it is based on the idea that life is not absurdly cut off on Earth, but is logically extended to the Semantic Universe. To do this, it is necessary to attempt to explore the social form of motion of the universe not only based on

the laws of self-organization, but applying laws *self-deorganization* to it. There is much less absurdity than it might seem.

Dialectics in fact proved that the destruction of one is at the same time the creation of another. In this case, given that social life is more perfect than the biological, it is possible to conceive and that semantic life is more reach than the social. Exploration of the closer edge of the universum available to our comprehension is a part of the function of philosophical knowledge. We need it due to the attractiveness of working at the forefront of comprehension of the truth, its complexity as a research tool and the charm of results achieved with its aid, which give initial idea of what is hidden behind the horizon of development, and what will tomorrow be accessible to social science.

Thirdly, the explanation of the epistemological aspect of social phenomena has led not only to clarifying of the unclear, but to the generating of new and more complex problems. For example, those seemingly legitimate transitions of the first nature into the second, and then, the third nature can be regarded as stages of formation of a qualitatively new *Cosmic Living Creature*. And, oddly enough, it is beyond doubt because the procedure of formation, as a methodological tool of explaining the morphogenetic processes of the macro-level, has yet worked flawlessly. Specificity of the Universal Being is that its original components, the first and the third nature are integrated by the second nature. We are now observing a picture similar to that viewed in the structure of a human body and society, where material and spiritual ingredients are integrated into an organic entity through the transient component, the psyche.

The presence of the living matter and of the reasonable living matter within the planetary system is very reminiscent to the existence of psychophysical and psychological components within the structure of the mediation unit of a human body. If they are related (and they certainly are), the second nature is the "soul" of the Universal organism.

There still remains a question of what is the third stage of the Universal organism, or the third nature. What is the form of its existence? Is it an Absolute Spirit? What is the functional effect of such a Super-organism, and in what system? Responding to them, we can make another step towards clarifying the place and role of a human in the new multisystem. But this is far beyond the scope of this study.

## CONCLUSION

Let us summarize the results of the completed work without going further into the abyss of problems of Cosmos. We are thus leaving the questions about the afterlife, human existence in the form of energy etc for future researches. Let us concentrate on what is understandable to an ordinary human, and is reaffirmed and hence, verified by the modern scientific worldview.

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## Наукове видання Бех Володимир Павлович Особистість і універсум: когнітивний аналіз

(англійською мовою)

## Монографія

Головний редактор В.І. Кочубей Технічний редактор А.О. Литвиненко Дизайн обкладинки і макет В.Б. Гайдабрус Комп'ютерна верстка О.І. Молодецька, А.О. Литвиненко Підписано до друку 15.07.2011 Формат 60х84 ¹/ 16. Папір офсетний. Гарнітура Скулбук. Друк офсетний. Ум. друк. арк. 12,1. Обл.-вид. арк.10,9. Тираж 300 пр. Замовлення № 28 ТОВ «ВТД «Університетська книга» вул. Комсомольська 27, м. Суми, 40009, Україна

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Свідоцтво суб'єкта видавничої справи ДК № 489 від 18.06.2001 Надруковано на обладнанні ВТД "Університетська книга" вул. Комсомольська, 27, м. Суми, 40009, Україна Свідоцтво суб'єкта виданичої справи ДК № 489 від 18.06.2001 The attributive qualities of the person in the process of cognitive analysis of the correlation of a person and the universum are being consecutively revealed as the formation products of the first nature level, the agent of the second nature level and the basics of the third nature level. Simultaneously it is shown that the consecutive change of nature forms is nothing else but the mechanism of the universum's self-movement. The axis of the evolutional process is used as the specific scale for determination of the place of the person in the process of self-development of the universum. The general function of the person in the universe is defined as the renovation of the universum, namely the transition of the universum from the phase of materialization into the phase of dematerialization. This transition is comprehended by means of thorough investigation of noumenon of the person. Life and death of the person are regarded as his/her transition from one level of the universum's self-movement to another.

This manuscript is addressed to the higher educational establishments post-graduates, students and researchers of the problems of modelling the informational pattern of the personality and social processes, and besides for all those who are interested in the problems of the system covering of the potential social world, society and the mechanism of self-development of the public life.

У процесі когнітивного аналізу взаємозв'язку людини й універсуму послідовно розкрито атрибутивні якості людини як продукту становлення першої природи, агента другої природи і основи третьої природи. При цьому показано, що послідовна зміна форм природи є механізмом саморуху універсуму. Як специфічну шкалу для визначення місця людини в процесі саморозгортання універсуму використано вісь еволюційного процесу. Генеральною функцією людини у Всесвіті визначено реновацію універсуму, тобто переведення універсуму з фази матеріалізації у фазу дематеріалізації. Це переведення можна осягнути шляхом вивчення ноумену людини. Життя і смерть людини розглянуто як її перехід з одного рівня саморуху універсуму на інший.

Для викладачів вищих навчальних закладів, аспірантів, студентів, дослідників проблем побудови інформаційної моделі людської особистості та соціальних процесів, а також для всіх тих, хто цікавиться проблемами системного освоєння потенційного соціального світу, соціуму і механізму саморозгортання суспільного життя.