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Myth — dream — recollection — scientific discovery: the case of C. G. Jung and P. A. Florensky

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Abstract: The report is dedicated to the research of development peculiarities of a creative personality and his/her creative product from the point of view of the theory of dynamic systems. The basic concepts — fractal and attractor — are examined; the process of forming of a creative personality and his/her making creative product is interpreted as chaotic, which gains the character of well-organized structure under the influence of organizing factor.

The events of life of internal and external character, conscious and subconscious impressions, gained by a creative personality in the process of his/her individual development, appear as attractors of a chaotic creative process.

The influence of attractors takes place in such chronologic points of ontogenesis, which coincided with periods, known in age-related psychology as periods of the most complete ripening of cerebral structures, thus according to all three axes — vertical, front-back and lateral. These periods are sensitive to influence of this or that furcational factor.

The initial time and space matrix becomes the original «formula» of subsequent development of the «initial fractal» in the row of similar ones, operates during the whole life and shows up in all spheres of personal activity, as well as in the creative product of the person.

In the case with the Russian scientist Pavel Florensky and the German theorist of psycho-analysis Carl Gustav Jung attractors are mystic dreams, forming primary matrix of personality — a self repeating fractal, identically showing up also in the structure of a person, and in his/her scientific creative process and creative product — regardless of national, cultural, social or another belonging of personality.

Keywords: theory of chaos, fractal, attractor, matrix of the personality, consciousness and sub-consciousness.

The basic sphere of my professional interests is research of a creative process and its conditionality by individual development of a creative personality in the process of his/her forming. Methodological basis of my scientific activity is research of the development peculiarities of a creative personality and its forming of creative product from the point of view of the theory of dynamic systems — with the basic concepts of fractal and attractor (Paytgen, Richter 1993), as both the process of forming of a creative personality and his/her process of making creative product is chaotic, however under the influence of an organizing factor they assume the character of well-organized structures.

While studying during a few years creative works of more than 500 authors of verbal belles-lettres texts, I came to a conclusion that the laws of the theory of dynamic systems work regardless of national, geographical, social belonging of authors or their individual biographic history.

Life events of internal and external character, conscious and subconscious impressions, gained by the creative personality in the process of his/her individual development, are the attractors of the chaotic creative process.

As for the verbal texts — products of creative activity — such attractors are, firstly, mechanisms of language and speech (that is, mechanisms of generating a verbal text) — at a lower, general level, and secondly, some other, more difficult, individualized, «personality», mechanisms, «personality» attractors, — time and space factors of personality's ontogenesis which influence the formation of unique, difficult, author's picture of «fractal». Due to it we are able to visualize the hidden psychical processes which take place during the creative acts.

Thus, under the terms of the chaos theory (the theory of dynamic systems) the process can be explained as fractal, and «measuring» of chaotic processes can be carried out by the exposure of attractors, which force an unsteady chaotic system due to the points of «attracting» to get the fractal proportion, acquiring certain geometrically completed forms.

I also made an important observation about clear correlation between the periods of maturation of cerebral structures and sometimes the influence of negative or positive furcational factor, which «slit» individual space of a creative personality, destroying consciousness on the new level of awareness about surrounding.

The dynamics of the morphofunctional maturation of cork areas correlates with the origin of the proper psychical new formations in sensitive periods of development (although, according to the latest information from psychological science about prenatal development of a person, postnatal development of the person is already determined by the process of birth (in particular, by character of births: lightness/weight, duration/briefness, presence of complications, etc)).

As for the postnatal development of a creatively gifted person (illustrations of his/her main stages can be found in (auto-) biographic documents and belles-lettres works of writers) we noticed an extraordinarily interesting feature. It is found out that the most meaningful (interesting, strange, aesthetically beautifully, meaningful etc.) events and impressions which kept by the creator's memory or people from his/her surrounding took place at such chronologic points of ontogenesis, which coincided with periods, known in age-related psychology as periods of the most complete maturation of cerebral structures, according to all three axes — vertical, front-back and lateral. We proved that these periods can be considered sensitive for the influence of this or that furcational factor.

For example, almost a «clinical» case of such coincidence is a case of the priest P. Florensky — a very gifted man. The influences of furcational factors took place exactly in those maturation periods of cerebral structures, mentioned above, in the second part — according to the periodization, made by V. S. Mukhina (Mukhina 1997).

Thus, in the process of ontogenesis of a creative personality time and space influences take place in the following way.

During this or that period of ontogenesis certain cerebral structures are formed.

And whatever time and space vital event will take place in this period (which is, actually, sensitive to visual, audial, operational — abstract or concrete, analytical or synthetic character, — emotional and other development of a person that is formed), — it will influence the formation of the personal, unique psychofractal.

The same event which took place in the non-sensitive period (that is, the event took place, but the proper cerebral structures at that moment were not yet formed, or formed already long ago and other events already affected it) will not influence substantially: another «record on a matrix» is already done, and the picture of a fractal will be different.

We would remind you that, with what periods of the most complete maturation of cerebral structures according to all three axes — vertical, front-back and lateral — they coincide (according to our hypothesis, exactly these periods are sensitive for the development of a creative personality — let us talk so far about verbal or artistic-verbal, or even artistic-spatial gift).

Between the birth and the age of two years there is an intensive and surplus synaptogenesis — the formation of synopsis, those contacts between nerve cells (scientists believe, they are related to the capacities for gaining experience). At seven years the amount of such contacts reaches the level, which is a norm for adults.

In the vertical measuring that allows to find out the dynamics of development in the direction from subcortical structures to the cortex of large hemispheres, phylogenetically older subcortical structures which are responsible for effective baby's adaptation to the environment, develop the first (some of them are mature already from the moment of birth, and complete the development in the first years of the child's life).

Thus, during the first years of life there is gradual transference of basic centers which regulate the psyche and the behavior, from the subcortical structures to the cortex of large hemispheres.

And as a horizontal measuring foresees the analysis of dynamics of back and front departments of the brain development from the first to the last (function of acceptance, storage and processing of information), accordingly in the period from 3 to 7 years the structural organization is observed and the direction of maturing of the mentioned departments from primary (projection, analyzing— visual, auditory and others like that) projection areas to the second (more difficult treatment of signals, in particular, collation of current information with the contents of the memory) and then to the third (the final maturing of pictures on the basis of cross sensory influence) of associational zones (Mariutina 1996:346).

In particular, at the age of three the process of growth of the cortex is slowing and at seven it stops (speed of growth was the highest among babies at the first year of life, and then the growth was slowed gradually).

Thus, from three to seven years there is an intensive development of the second and tertiary areas of the large hemisphere cortex which are physiologic pre-conditions for new psychic formations to appear (the same).

Frontal areas of cortex front departments of the large hemispheres, which are evolutionally junior and mature the last (that is nearly at 7 years) mainly provide analytical-synthetically activity of the brain, take part in the construction of the programs of behavior, and control their implementation (Mariutina 1996: 347).

Besides — according to S. Morgan's data, who compared the dynamics of the morphofunctional maturation of the brain with the stages of intellectual development (J. Piaget), — it is possible to name more concrete points of brain structures maturation.

So, in the period from 2 to 5 the secondary cortical structures which are responsible for conditioning for teaching within the limits of separate modality are maturing (pre-operated intellectual state).

From 3 to 7 years (especially 5–6) mature the tertiary cortical structures in the back departments of the cortex (block of reception, storage and processing of information), which provide implementation of concrete operations.

At the age of 6–8 (most intensively, lasts until 12) — tertiary areas of block programming of behavior (frontal areas), which provide the implementation of formal operations.

Besides on the early stages of the person's development the nervous fabric grows and plasticity of CNS is correspondingly formed, that is conditioned by changes in the environment which can substantially influence the morphofunctional features of CNS, men and animals behavior.

It must be kept in mind that, in spite of the non-simultaneous maturation of the mentioned structures, on all stages of ontogenesis the brain works as a whole (through system organization of psychical functions), showing on every age stage a certain «sum», the result of the non-simultaneous maturation of different structures (Mariutina 1996:342–343), so it can be assumed that the influence of one furcational factor in a more early sensitive period causes a «system» reaction, influencing the subsequent course of events and strengthening the sensitiveness in the following period.

Now we will compare the marked points of ageing of cerebral structures with the basic points of ontogenesis of P. A. Florensky and C. G. Jung, where the influence of educational factors (negative and positive) took place.

As we can see from the analysis of recollections of such an undoubtedly genius person (so wide and deep was the gift of P. Florensky in different spheres of art, fields of science — from humanitarian to natural and mathematical), influences of educational factors in the process of ontogenesis of this creative personality took place practically

during all age-related periods of excellent degree of ageing of all cerebral structures according to all measurements (vertical, lateral, sidelong).

This case ("the case of Florensky") can become another peculiar "invariant" for us, as in it, like in a magic ball, almost the whole "universe" of human creative personality (and at the same time almost the whole universe as space phenomenon of all-embracing harmony and to strict co-ordination of structures) was reflected, "outlining" the vital and spiritual way of that it is possible to see the shown evidently space of Creative Work as the spatiotemporal phenomenon.

According to the statement of P. Florensky, his life, in general, had such specifics as: each time some stripe of life began to bring the results of labour and objective data appeared for complacency, either internal or external earthquake took place. And after that no idea about its realization could come into his mind.

The basic material where the main "points of shift" (i.e. influences of educational factor) of ontogenesis of P. Florensky are withdrawn, were his recollections published in the book "For my children". (Florensky 1992).

In the age period from 3 to 5 months the next case took place: the mother and the aunt of little Florensky bathed in the Kura, and the bank was a steep slope. The child was put on the verge of the bank, and he rolled down the slope.

Almost near the water he was caught by the aunt Sonya (Florensky 1992: 100).

Let's compare the story of this event in the description of a repeated dream: in dreams every night or almost nightly over and over little Pavlo heard the howl of his mother, who saw him rolling down, the fall itself, this all was though embedded in consciousness of the child: "everything is inundated by burning light, and suffocating", but in the dream the event is as if reflected: his mother is sinking in a steep water, yelling furiously, and sometimes the aunt Yulia, who is sinking, too, joins her and:

"I am dreadfully sorry for my mother, I try to help her, but I don't have the power to move, as if I was tied, swaddled by hands and legs and here is no one else or they hear neither mother's laments, nor my passions, — I say passions because I even cannot say a word. I actually don't see my mother, I only hear her but the main thing is that I know that she is there below. With this painful feeling of helplessness and complete impossibility to help, poured by tears, I woke up every time" (Florensky 1992: 100).

Thus, it is obvious, that events that made sharp impression of change of surrounding space took place in the earliest period of ontogenesis of the creative personality of P. A. Florensky which imprinted themselves in a later dream. These feelings: "painful feeling of helplessness", sorrow, "passions", "mortal harm", "complete impossibility to help", "poured by tears" and others like that. Florensky himself determines the character of these events as initial trauma at a very early age: the "initial kernel of formation" is the "spiritual wound he received in the earliest childhood from my falling from a high bank of the Kura".

Age period near 2 years.

"We lived in two apartments. The dining-room, the living room and some bedrooms were in one of them. In the other I lived with the aunt Yulia — in the other, I mean in the outbuilding. The two apartments were connected through the yard, paved with stones, grass germinated among the" (Florensky 1992: 28).

As we see, here pre-conditions are already created for the furcational breaking up of space: a change of usual geographical space, necessary for self-consciousness of the person, coming outside usual surroundings. Thus, this description testifies to the presence of the bifurcational branching of space already in babyhood: a young child realized the presence of two different, but related spaces.

But additionally an event that strengthened these pre-conditions took place: usually little Pavel walked escorted by someone from the elders, but once, feeling himself bored without his aunt Yulia or his mother, he began to run independently to her or after her. And he saw something incomprehensible on the stone roadway of the yard. At first he heard some unheard, original sound, that frightened, and then began to run farther with the eyes almost closed, and suddenly "became stupefied":

"An extraordinary projectile stood in front of me. Something revolved quickly in it, chirped, creaked, and bright sparks poured from the wheel. And, the most frightful thing at all was that, some man, he seemed to me like a dark silhouette in the sky, probably, far in the day, — some man was standing at this projectile imperturbably, passionless and fearlessly and was holding something in hands." (Florensky 1992: 28).

And only the "magic and frightful instant of confluence passed with this fiery primary event of nature, realization of himself" appeared only, panicky horror gripped the child.

As Pavel Florensky asserts, it was the first of mysterious shocks of the soul that he remembered.

According to the statement of P. Florensky, he already understood then, that adults would not "grasp the mystery that confided in me and terrified me". And although it was suggested many times that he be accompanied through the yard, he disagreed on it.

Already in this period the propensity to philosophical contemplation took place, double vision of the same events: Florensky marked that it was difficult to say, why he disagreed to repeat this experience from the childhood: whether "only for fear of the stream of connected flashes and for other fear — not to go through already experienced things, see that about what adults told me, is something ordinary, that does not really inspire horror".

This feeling of revelation of natural and horror secrets connected with him, Tiutchev's Abysses and gravitations to it, became, according to Florensky's opinion, "one of the biggest internal scrolls" of his heartfelt life.

Florensky himself again determines psychological essence of the event, which made the mixed injuring impression: "magic and frightful instant of confluence with this fiery primary event of nature", but as realization itself" appeared "only — as a little child was embraced by "panicky horror".

A scientist, philosopher, theologian and author of perfect artistic-verbal texts, Pavel Florensky, realized that:

"Indeed, I don't believe evolutionists at all; but, it seems, that Kenton developed his theory not because of rational reasons, but due to a sweet fairy-tale on the basis of the marine impressions from his childhood which he retold to himself. If students and followers understood, on what, actually, the theories of their teachers are based, on what distant from rationality intuitions of childhood they are based, they would stop jurare in verba magistri [swearing by the words of the teacher(lat.)], but at the same time they would grasp the secret of childish-genius personality of these teachers deeper" (Florensky 1992: 49).

In other words due to a later analysis in himself of primary influences of natural rhythms Florensky makes an important conclusion about forming of primitive ontogenetic matrix of all genius creative people, about child's nature of all further creative ideas and understanding of natural and scientific laws and about unity of structure of harmonious nature and harmonious creative personality that was formed under natural influence.

In the age period of 17,5 years according to Florensky there appears the finishing passing to the period of final fracture of the stranger, borrowed structures, they are required to be restructured in accordance with the individual matrix of young personality.

"The summer of 1899 was the time of especially rapid internal change. <...> I slept deeply which was like a fainting-fit, so that there were even no dreams, or, in any case, they were forgotten even before awakening. But correspondingly strong was the sense, or, better to say, mystic experiencing of darkness, nonexistence, "conclusion". <...> This was as though the feeling of buried alive, when many-many kilometers of black impenetrable earth lie above him. <...> I felt also all my interests, activities powerless. <...> I was captured by hopeless despair, and I realized final absence of communication from the visible world. In this instant the thinnest ray that was either visible light or an unheard sound, brought the name of God. <...> It was like a revelation for me, opening, shock, blow. From the surprise of this blow I woke up suddenly, languages awakened by external force, and, not knowing for what, but lining a result to all experienced, cried out for the whole room: "No, it is impossible to live without God!"(Florensky 1992:195-216).

Events with the same structure took place in the process of ontogenesis of C. G. Jung.

Age period of 6 months:

At this time the change of space took place:

"When I was six months old, my parents moved from Kesswil (Canton of Thurgau) during the parish of the castle of Laufen, located on Lake Constance in the riverheads of the Rhine. It happened in 1875"(here and farther cit. after: Jung 2003).

Age period of about 2-3:

This period touches the earliest recollections of Jung:

"I remember myself from the age of two or three years. Remember a vicarage, garden, laundry, church, waterfalls, majestic society of Laufen and miniature castle of Verz and farm of sexton. These moments are only small islands of recollections that swim at-sea not clear outlines, each by itself is without connection with others."

The brightest of them is related to the aesthetic harmonious feeling:

"One recollection comes to me, probably the earliest in my life, that in reality seems to be not clear, mizzling. I was lying in a baby-carriage under the shade of a tree. It was a wonderful, warm summer day, the sky was blue, and a yellow-green sunlight was penetrating through green leaves. The top of carriage was heaved up. I only began to feel the beauty of this day, and I felt indescribably good. I saw that the sun shone brightly through the leaves of trees and blooming bushes. Everything is absolutely strange, bright, wonderful"(the same).

In this case appears a haptic, visual unique picture which impressed itself on an individual personal matrix.

At the age of three Jung had a dream:

"In the dream I got down under ground and saw something unusual, something unlike a man, which belonged to the underground world, it was sitting motionlessly on a golden throne, looking upstairs and eating human meat. Fifty years later I found a fragment from the work about religious rituals. He touched the idea of cannibalism which is the basis of the Eucharist.

This dream let me into secrets of the earth. It was like the burial into the ground and many years passed before I went out outside again. I know today, that it happened to bring the light into the darkness which surrounded me. It was initiation into the kingdom of darkness. At this moment my intellectual life unconsciously began» (also there).

Age period — 5-6 years:

The event which promoted fixing of religious stereotype took place in this period.

"When I was six years old, parents took me on the excursion to Arleskheim. <...> We went to the church, and Mother suddenly said: «And it is a catholic temple». The fear and curiosity induced me to slip out from her and have a look

inside. The time was exactly enough to see large candles on the decorated altar (it was before Easter), but here I stumbled over the spoke and struck my chin on some iron. I remember that I deeply wounded myself and blood flowed strongly when parents picked me up. My feelings were contradictory: on the one hand, it was ashamed, because my screaming attracted the attention of parishioners, but on the other hand, I felt, that I had done something prohibitive. Jesuits, green curtain, secret of cannibal... That is the Catholic Church, which is connected with Jesuits. It is guilty, that I fell down and yelled».

It influenced little Jung so much, that during many years, when he only entered the temple, he felt «the secret fear of blood, falling and Jesuits». The most important thing for his further life became the «mystic game» with two own equations, two «I», that afterwards (in adult life) developed with full force:

“At the wall the slope began; there I found a large stone that grew into the ground — it is my stone. I often sat on it and I gave myself up to the strange metaphysical game — it looked like this: "I'm sitting on this stone, I am on it, and it is under me". The stone could say "I" too and think: "I'm lying here, on this slope, and he's sitting on me". Then the question arose: "Who am I? The one, who's sitting on the stone, or I'm the stone on which he's sitting"? I did not know the answer and every time I rose, I felt, that I did not know well, who I am now. This vagueness was accompanied by the feeling of strange and charming darkness that arises up in consciousness. I did not have doubts, that this stone was related in a secret way with me. I could sit on it for hours, charmed by its riddle"(also there).

Both Jung and Pavel Florensky realized the important role of such influences in childhood that affected his further life of a creative personality forming his/her time and space matrix:

“The possession of the secret influenced my character. I think it was the most considerable experience of my childhood. That's why I never told anybody about my dream: the Jesuit belonged to the mysterious sphere too about that — I knew it — I can't tell anybody. The wooden man with the stone was the first irresponsible and child attempt to give the external form to the secrets. I was deep in thought about all these and felt that I must try to understand it, but I did not know what I really wanted to express. I always hoped that I'm able to find something (maybe in the nature), that will give me the key of my secret, will make finally clear what it consists of, in other words its veritable essence. At that time I had the passion for plants, animals, stones. <...> The episode with the carved man became the higher and last point of my childhood. He lasted approximately a year”.

We will mark that the initial fractal is that or other configuration of primary time and space that influences the child and can in the adult state help to decide some psychological, emotional or intellectual problem:

"I did not recollect about it until I was thirty five years old. Then before me this child's impression appeared again with an unusual clarity. I worked on the book "Libido : its metamorphoses and symbols" and collected material about the "cemetery of live stones" near Arleskheim, about Australian amulets, when I suddenly understood that I clearly imagine myself one of these stones : black, oval, painted on both sides. After this image a yellow pencil-case and a wooden man appeared in my memory. This man was a little heathen idol, something like an ancient statue of Aesculapius with the scroll".

Let's compare it with another statement of Jung about similar situations:

"When I run into difficulties or an unsolvable situation, I began to draw or play with stones. And each time it was some rite d'entree (a ritual action. — Fr.) — I found a saving idea and went back to work"(also there).

Age period — 14.

It is the period of aggravated opposition between two "I" and gradual predominance of the real "I".

"The older I became, the more often my parents and acquaintances asked me: what I, actually, wanted? But I did not know it. I was interested in various things. <...> Then I did not understand yet how this choice corresponded to the nature of my internal duality. In natural sciences concrete facts and their historical background, in theology — philosophical and spiritual range of problems were important for me. Science lacked, to my mind, sense and religion — facts. Science served more to the needs of the first "I", and studies of history and religion — to the second "I". The science in a greater degree served to the necessities of first "I", the history and divinity — second "I".

This opposition of two "I" didn't let me to decide for a long time".

With the growth of the internal conflict the second "I" seemed to Jung «more doubtful and unpleasant", <...> my "number 1" lived here and now, and my "number 2" did not have soil under feet.

"Number 2" is "one of the eyes in the universe with thousand eyes, but it is immobile, like a round-wood on a roadway", "number 1" — rises against this passivity, wishes to do something, but it is in the captivity of unsolvable problems. Jung "had only to wait, what will be out of it. » (also there)

In the age period 17-19 the final withdrawal from the youth crisis took place:

"The everyday growing fascination of naturally-scientific employments did not compel me finally to forget about my philosophers. Sometimes I went back to them. The choice of profession was cowardly near"(also there).

During this time Jung saw a series of "fractal" dreams:

1)" My sudden, at first sight, decision had the prehistory. Few weeks later when I was torn apart by contradictions and I could not make the choice, I had a dream: I saw myself in the dark forest not far from the Rhine. I walked up to a small hill (it was a grave), I began to dig and to my surprise I found the remains of some prehistoric animal. It extraordinarily interested me, then it became clear to me: I must study nature, must study the world where we live, and everything, that surrounds us";

2)"I had another dream later. Again I found myself in the forest, dissected by the river-bed, and in the darkest place, in the jungles of the bushes, I saw a large puddle, and a strange creature in it: round, with varicolored tentacles, that consisted of numberless little cells. These were giant radiolarians, about three meters in a diameter. And such a wonderful animal lies here in the place forgotten by everybody, in deep, clear water, — it shocked me.

I woke up with emergency agitation: these two dreams, removing the last doubts, simply compelled me to appeal to natural sciences";

3) "<...> I had an unforgettable dream, which frightened and heartened me simultaneously. In it I found myself in an unknown place and slowly walked ahead in dense fog towards strong, almost hurricane wind. In hands I was holding a little fire, which at any minute could go out. And everything depended on whether I will save its life or not. I felt suddenly, that someone followed me; I looked around and saw an enormous black figure. It followed me, dogged my steps. And at the same moment, without regard of the horror that overcame me, I understood that I must go and despite all dangers carry, save my little fire. When I woke up, I understood that it is "Broken ghost" — only my own shade on the cloud, created by the light of the fire. Besides I realized, that this fire — the only light I owned — was my consciousness, my only treasure. And though in comparison to forces of darkness the fire is small and weak, nevertheless it is light, my only light.

This dream became lighting for him: he knew now, that

"Number 1" "was the carrier of the light» and «number 2»«followed it like a shade". And the task was to save the fire: to go ahead, to make the way through the wind which throws back: "I, my "number 1" must study, make money, must live, win difficulties, make mistakes and stand defeats. The storm which was brought down on me is the time that unceasingly goes and unceasingly goes after me. It is a powerful whirlpool that pulls me with strong force. Only the one, who headily rushes ahead can avoid it. The past is surprisingly real and it devours everybody who will manage to pay off the right answer".

The turn by 90 degrees happens in his ideas about the world: Jung

"I found out that my way passed outwardly and breaking forth outside, it got into limits and twilights of three-dimensionality. Probably, in the same way Adam once abandoned the paradise that became a phantom for him and light appeared there where he will plough the stony field by the sweat of his brow".

In such a way Jung "broke up" with he second "I", dissociating it from himself and allowing it to have fully autonomous existence" (also there).

Thus we see that the initial (child) time and space matrix is the original "formula" of further development of «primary fractal" in the row of the self-similar. Thus primitive matrix (and aspiration of its permanent renewal, especially during crisis situations), operates during all life and does not depend on national, age-related, social, cultural or other belonging of a person.

Unique individual fractals of each author of a verbal-artistic text if disposed among other similar unique fractals of other authors, and placed to other net of coordinates (biographic events, life way, features of creative work and others), at once appear homogeneous, identical for the structure. In case with Florensky and Jung such fractals are: individual life way, structure of personality, mystic perception of the world (attention to dreams and other life displays of sub-consciousness) — and profession and scientific self-realization.

The method, which we offered can bring many discoveries not only for research of literary work (and not only in the period of youth), but also in general for creativity that proves in all spheres of human life.

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Area of Interest:

Psychology of Creativity, Psychology of Development, Psychology of abilities, Psycholinguistics:

Creation of literary work, psychological analysis of literary work process, development of literary, artistic, musical abilities, development of gifted person, formation of creative personality, influence of ethnic-ecological factors on development of formation of creative personality and special abilities, psychological analysis of literary and autobiographical works, self-reflection of creative personality, gender analysis of creative personality, psycho-fractal analysis of literary work