Nicolai Levashov

The Final Appeal to Mankind

Volume 1

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Content

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Come, tell me, what's the bliss of knowledge,
The Soul's greatness lies wherein?
Is it not in the premonition, that
All that matters is—as yet,—to be?..

Finality, Infinity — before me,
Careening, will blue–streak, as one
Eternity its secret will disclose,
Those fetters' burden will be gone.

The Soul, open to Knowledge,
Beauty Supreme will consummate
My daring Dream, your final message
I will begin to understand...

In plain defiance of understanding
Beckons to us the fleeting Truth—
A flash, a glimpse—just for the taking?
The flash, the glimpse—a crafty ruse?...

My flimsy scull upon the Sea of Knowledge
I sent adrift, contesting elements,
The truths, revealed to me, were worth the passage–
wisdom supreme ignites the Universe...

En route I came across superior reason,
Initiated into mysteries arcane,
I proved my mettle on the trek, that wasn't easy –
Now let me show my Quest for Truth was not in vain…

Nicolai Levashov

Preface 1

It is a great honor and privilege to play a role in the production of this work.

As a physician and doctor of humanities, I find it speaking to my intellect even while addressing the deepest aspirations of my soul.

Nowadays, we are flooded with New Age books telling us how to meditate, visualize, be "mindful" or eat right. It is a clear sign to me that both religion and modern science have sorely failed us. At the same time, we are besieged with data from the information revolution, yet find ourselves thrust deeper and deeper into ignorance and darkness. The more we access, the less rationally we function.

Among this plethora, Nicolai Levashov's book stands out as unique and unprecedented in the history of the planet. It lights a way into the darkness and unfolds a scientifically-based, multidimensional reality that jolts us out of our frozen, linear, all-or-nothing binary thinking. It stretches our grey cells, but richly rewards us if we permit ourselves to receive and assimilate what it has to offer. It will destroy a host of paradigms for us—many from modern physics—and will invite us to follow step by step the development of a world-view far different from the myths fed into our circuits through ignorance or malice.

So this is a demanding book-replete with mathematical formulas and magnificent illustrations—transmitting information of thrilling, soul-shaking proportions. One needs to navigate carefully and scientifically as this new world-view unfolds—from the birth of planet Earth to the evolution of the soul and the meaning of human destiny. You will not find this information in your computers—nor anywhere else.

The present volume, the first of a series, shows us how the same cosmic processes govern such seemingly disparate events as survival after death, the flight of migratory birds, reincarnation and the disintegration of an atom. The author brings to bear his encyclopedic knowledge of a multitude of fields—biology, physiology, medicine, genetics, physics, astrology, etc., to transcend by light-years the science of today. The intent is to give the reader an overview of fundamental cosmological issues about man and the universe. The book is, in a sense, a skeleton which will be fleshed out in subsequent works, but still provides the reader with the "bare bones" knowledge upon which to build.

It also contains an extraterrestrial document delivered by a renowned 1929 Nobel Prize nominee of impeccable integrity—Nicholas Roerich, a great Russian artist, scientist, archeologist and educator—whose works are still on view at the New York museum that bears his name. The first chapter introduces us to the genesis of planet Earth and its six spheres — and to the recurrent theme of how a critical range of numerical values determines creation or destruction. Examples abound in our everyday life — critical ranges for our blood pressure, body temperature, blood pH, etc., outside of which we could not survive. We shall see this shown in many ways in the whole fabric of creation — how existence or non-existence turns on a narrow spectrum of values: for example, in the emergence of life from the non-living (chapter 2);

the formation of a functioning bee colony (chapter 3); the emergence of intelligence (chapter 6) and the soul's odyssey toward higher and higher planes of consciousness (chapter 6). And these are but some of the fundamental issues for which modern science — dead-ended and bankrupt — can offer us no answers.

A word about Nicolai, the man.

Personality-wise, he is free of ego and full of kindness, affability, ebullience and humor. And he totally shuns any attempt to turn him into a guru, despite his awesome knowledge and power. My personal association with Nicolai is now going on a year and a half. With a professional background in science and the humanities, I feel strategically placed to grasp some of the momentous implications of his work on this planet.

As I attend occasional seminars or observe his work on subjects, I am struck by the incredible sophistication of his technology. He is no mystic, but navigates with ease in multidimensional realms of consciousness far beyond our wildest dreams — those of us who would follow must constantly shift our paradigms and concepts of reality. His science of today is so far advanced as to put quantum theory on a par with the abacus! The present volume is eloquent testimony to this. For those who dare to traverse these realms it is a voyage of discovery that could bring unparalleled enlightenment to the world and advance man's evolution by countless millennia.

Barbara G. Koopman,M.D.,PhD.

Diplomate, American Board of Psychiatry and Neurology, former attending staff member Mount Sinai Hospital, New York City

Preface 2

It is a great honor and privilege to help bring this book to the world. I know that many of you reading it for the first time will find in it rational answers to the most profound life-long questions: the origin of life, of man, of man's place in his world and the cosmos, and the nature of the soul.

The work speaks for itself: it is so original that many will have difficulty believing that so much information could have come from the mind of one person. It would be a mistake, however, to think that the information given in The Final Appeal to Mankind was received by Levashov from some higher authority. We are all too inclined to "pass the buck" of the responsibility for our lives, to some entity beyond us. Indeed, I believe that what Levashov has found about man and his nature are things that we could have known long ago had man evolved naturally and had the courage to ask the right questions.

Nicolai Levashov is endowed with remarkable abilities to consciously move his spirit outside his body to other spiritual and temporal dimensions, and to see within and mentally influence living and non-living matter both locally and at a distance. While these talents provide information not readily available to most people and permit Levashov to perform mental experiments testing his working hypotheses, for the most part the discoveries documented here are the product of Levashov's unrelenting search for the truth using a process of thought that is scientific in the best sense of the word, but without being mechanistic nor mystical.

It is difficult for those of us who have been enculturated in mechanistic reductionistic science to imagine that there could be another way of investigating nature that would yield consensually valid, repeatable findings with predictive value. Yet there is an entire tradition of such a process of investigation that preceded, then paralleled, the rise of mechanism, but which was never embraced by the scientific community of the time. Practiced by few, this more functional thought process remained hidden from general view, or the findings generated by this process were irrationally dismissed as "mysticism." The few in modern times who did utilize a more "functional" thought process were scientific thinkers such as Goethe[1], Rudolph Steiner[2], the French philosopher Henri Bergson[3], and the physician and scientist, Wilhelm Reich[4], who formalized the process.

The key to their process of thought and investigation was what Goethe called "active, imaginative perception," that is, the reliance on subjective sensation and mental imagery to apprehend and comprehend the object under investigation. This

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[1]Bortoft, Henri, The Wholeness of Nature, Lindisfarne Press, 1996.

[2] Steiner, Rudolph, The Course of My Life, trans. Olin Wanamaker Hudson, New York, Anthroposophic Press, 1951.

[3] Bergson, Henry, Creative Evolution, New York, The Modern Library, 1911.

[4] Reich, Wilhelm, Ether, God and Devil, Orgone Institute Press, Rangeley, 1949.

demanded a trust in the clarity of one's sensations and perceptions, an unobstructed contact with oneself and the external world. In the case of Steiner and Reich, what was harvested from this thought process was often objectified in the physical world through experimentation, yielding many remarkable products including means of significantly fructifying the soil without chemicals for farming, modifying the weather, and shifting bioenergetic potentials in the treatment of disease.

In contrast to a functional science, it has been one of the explicit tasks of mechanistic science to totally (or as much as possible) exclude the human subjective element from the investigatory process. However, the advent of quantum mechanics and the uncertainty principle indicated that this was in many cases not only a practical impossibility, but, thought a few daring scientists, undesirable. This seemed to mean little, however, to the vast majority of scientists, who conditioned by mechanism, continued to refuse to acknowledge their role in the outcome of experiments and dismissed those who did with derision.

Among the exceptions are a few scientific investigators working on the cutting edge of consciousness, whereby experimental subjects without any particular psychic ability can, through conscious mental intention, significantly influence inanimate machines (random event generators) and accurately mentally view scenes mentally at a distance. Further, these effects can be obtained not only "non-locally", that is, at apparently limitless distance between operator and object, but also independent of sidereal time[5]. Simply stating that Levashov thinks and functions in a non-mechanistic way does not, however, begin to convey the depth of his ability to penetrate into problems of natural science or the extent of his mental powers as a "psychotronic" healer, clairvoyant, and psychokineticist.

I have studied psychotronic healing intensively with Nicolai for the last four years and assisted in several experiments correlating EEG output with mental intention and out-of-body states. His knowledge and understanding of most areas of science and medicine is extraordinarily broad and deep: In discussion of medical problems he never fails to astound me with how much he knows about the fundamentals of normal and pathological physiology and many of the flaws in reasoning in traditional medical thinking. His system of psychotronic healing (the effect of the power of the mind on living and non-living matter, to be discussed in detail in later volumes) is based upon the deepest understanding of the fundamentals of what is correct in traditional medicine and his own discoveries in physics, biology, ecology and the role of the spiritual bodies in health and disease.

Most of the findings described in the chapters of this book are the bedrock of psychotronic healing: they are tools of the healer, just as calculus is that of the engineer. Without their use success in healing, no matter what the healing discipline (including traditional allopathic medicine), can only be incomplete.

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[5] Jahn, Robert and Brenda Dunne, Margins of Reality, New York, Harcourt, Brace, Jovanovich, 1987.

Nicolai Levashov was born in 1961 in Kislovodsk, Russia. As a child he was not aware of anything unusual about himself, but later, as he grew and developed, came to realize that he had remarkable parapsychological powers. It was not, however, until he studied the scientific approach in university that he came to understand what, exactly, these powers were and how they could affect living and non-living substance.

This was accomplished through detailed, extensive questioning and analysis of what was given as the fundamental laws of nature. Not only did this provide answers not previously anticipated by science, but the process further developed his mental abilities and the growth of his spiritual bodies. In 1984 he graduated from Kharkovsky University with a major in Radiophysics (the equivalent of a master's degree in the United States). In the following years he worked as a consultant in a variety of research and engineering firms. In 1990 he received a degree of Specialist in Psychotronics, highest category, which granted him the privilege of teaching specialists and the license to do corrective healing with large groups of people.

Subsequently he taught psychotronic healing in medical schools in Russia and trained over 300 physicians there in his techniques. In 1991 he received the highest recognition in his field, Magister in Psychotronics, (higher than a doctorate in the United States), from the International Center of Phenomena in Kiev, which is associated with the Ukrainian Ministry of Health. At the end of 1991 he moved to the United States.

Since 1989 Mr. Levashov has appeared on many television and radio programs in Russia, Europe and the United States as an expert on parapsychological phenomena, the most recent on CNN, where he demonstrated psychokinetic effects and discussed the use of psi warfare by the United States and other countries.

The Final Appeal to Mankind was written between 1987 and 1992. The present volume consists of the first six chapters of the complete document. Volume 2, containing the remaining chapters, will be published before the end of 1997.

Alexander Nudelman, a Russian-born engineer did a literal translation from Russian into English. It was the task of the text editors, Dr. Koopman and myself, to edit and rework this transliteration. This was accomplished with the assistance of George Orbelian, a Russian-speaking Russian-American.

Richard A. Blasband, M.D.

Introduction

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The universe...the mystery of Life! How did life begin from non-living matter?

How did it happen that inorganic atoms, combining in various orders and quantities, created organic molecules, which then evolved into living matter?

The enigma of life....How did it all begin, how did it unfold and how did it bring forth such a multiplicity of living forms?

Where did man come from when he first appeared on planet Earth? Did he develop slowly according to the Darwinian theory of evolution? Was he thrust from the Garden of Eden in order to expiate his sins before God? Or if not God's doing, who brought man to this planet, when, and for what purpose? And how can we account for the rich diversity of all the races of man?

How did we come to possess the capacity to think? What happens to us when we die and what awaits us after death?

If there is a soul — what is it? Where does it go when we die? If heaven and hell exist, then where are they? Why do we not see them, as have those who experience clinical death and then return to life with reports of being welcomed by angels and drawn into a tunnel of light? What happens at the moment of conception and how does the human embryo develop?

What is reincarnation? Do we live one or many times on this planet? Is it possible for us to see into the past and future and to move through vast realms of time and space without a craft?

Are we alone in the universe?

The answer is obvious if we are willing to stretch the boundaries of our conventional thinking. Suppose that one hundred years ago extraterrestrials sent us a message in the form of radio signals requesting contact with intelligent beings on Earth. How could we have heard or responded? Without radio receivers and decoders to pick up or decipher such signals, we could not have had an inkling that we were being contacted.

Added to this, most other civilizations in space function on a vastly different developmental level, transmitting and receiving not through radio signals, but telepathically and holographically.

Thousands of signals continually bombard us from space in the form of three-dimensional holograms broadcasting the desire to establish contact with man on Earth. But most people are unable to understand or process this information. The few who can register and understand it translate it into common, everyday language, but sadly, despite their efforts, these messages fall on deaf ears. This is what happened

earlier in this century, in 1929, when Nicolas Roerich delivered the Third Appeal from the Coalition of the civilizations—it was simply ignored.[6]

There are billions of civilizations in space. Some are still at the early stages of their evolution, while others like our Earth civilization, have yet to emerge; there are also those who have already reached high levels in their development. This is a normal and natural process. Our own civilization will shortly have to undergo its birth into the cosmos. If we succeed, we shall reach a qualitatively new and advanced level of development. Using only the power of thought, man will be able to influence the planet's ecology, modify the weather, abort natural disasters and heal the wounds inflicted upon nature by our senseless acts. We shall be capable of truly understanding ourselves and our abilities.

Time travel to the past and future and space travel over billions of light years will not seem, as some believe, "miraculous or delusional." Rather, in times to come, if and when we are willing to accept the new knowledge required to elevate us to the next level of understanding of natural law, these things will be as commonplace as air travel is today.

If the human race refuses to adopt this new knowledge, Earth's emerging civilization will remain stillborn, destroying itself before it fully develops. I know that for many this assertion will appear outrageous and will stir up angry protestations. They will say, "Our civilization has achieved such tremendous success everywhere! Man has walked in space, traveled to the moon, and soon will reach Mars, etc. Science, culture, and art are rapidly developing, especially in the last hundred years! Currently we have an information revolution!"

The Final Appeal to Mankind may strike some readers as harsh and absolute. But try to listen and understand before jumping to conclusions. As Jesus exhorts, "He that hath ears, let him listen."[7] It is an exercise in futility to offer food to a starving man if he refuses to eat: He will die of starvation no matter what you offer him. The new knowledge and the willingness to share it are available to the peoples of the Earth, but it will not save them if even at the brink of disaster they refuse to accept what is offered. If this should happen, regrettably our only recourse would be to patch up what can be salvaged and prolong the time left for Earthmen to come to a final decision before they die. So you who are still asleep, wake up before that sleep becomes eternal! In Jesus' day there was still time to postpone awakening; this is no longer the case. We have run out of time! The human race has reached a critical point in its history, a real, tangible "doomsday." This is not some empty abstraction, another "end of the world" story that has been repeatedly foretold in the course of our history yet never came to pass. Most of us have stopped reacting to such warnings and have become confident that the end of the world will never come.

[6] See "The Third Appeal to Mankind'' following this introduction.

[7] New Testament, Matthew Chapter 11, verse 15. King James Version.

What is this doomsday, this crisis in human evolution? We may call it by many different names, but its significance is not in its label, but in what it really forebodes.

And we may well ask: What is the significance of mankind in the cosmological picture? As I will show, man has a most significant role to play in the development of civilization on a cosmic scale, but this role has remained hidden for thousands of years. Ignorance, lies and failure to grasp and understand the basic laws of nature have served to keep man's true destiny hidden from himself. The laws of nature function whether or not man understands them, but from now on humanity will be unable to survive and progress without this understanding. Frankly, unless man does learn to live his life according to these fundamental laws of nature, there will be no one left to evolve on our majestic, blue planet Earth.

No nuclear war is required for man's demise. If we continue to abuse and meddle with nature, without heeding her laws, we will self-destruct faster than a nuclear holocaust could dispatch us. We must be ever mindful of Christ's warning: "When the blind lead the blind they shall both fall into a pit."[8]

Only a century ago we were in no danger of extinction: now it is imminent and palpable. What is this sentence of death that hangs over our heads?

Over a period of billions of years, flashes of lightning in the Earth's atmosphere gave rise to a layer of ozone that made life on Earth possible by deflecting lethal radiation from outer space away from our atmosphere. Sea water actively absorbed the radiation thus enabling primordial life forms to develop within it. These early sea creatures continued evolving in the water until Earth's ozone layer was sufficient to deflect most of the radiation back into space. Only then did life migrate from the sea to solid land.

Beginning in 1961, the technology developed then and still in current use today destroyed 30% of the Earth's ozone layer. According to calculations, if we continue the present pace of our technological activities, such as repeated rocket launchings into space, within the next ten to twenty years the remaining ozone layer will be totally destroyed.

Ironically, the means of its destruction will be the very advances we so proudly hail as the pinnacle of our scientific achievement. Every living creature on land will perish under the impact of lethal radiation from outer space: only underwater creatures will survive and everything will start all over again from the beginning...

Compounding the problem, man in his ignorance and contempt has seriously disrupted nature's balance, causing the extinction of thousands of living species and the outbreak of lethal epidemics such as AIDS. How did this all come about?

At a certain crossroads on the path of his evolutionary journey, man took a wrong turn. As Socrates observed, "To know the world, you must first know yourself." People took no notice of this advice, but tried to master knowledge of the uni-

[8] New Testament, Matthew, Chapter 15, verse 14. King James Version.

verse without the necessary prior knowledge of themselves. And thus their descendants, following in their footsteps, arrived at the present impasse.

No knowledge can ever be absolute, but one path can lead towards the truth, while the other leads away from it, despite their sharing a common starting point. How can one tell which leads where?

When man first tried to grasp the nature of the universe, his mind could not fathom the profusion of questions flooding him all at once. He then filled the gaps in his knowledge with axioms and postulates that allowed him to construct a working model of the universe. Had he pursued the correct path of knowledge, this model of the universe would have led him to a new and higher level of understanding, rending aside the veil of mystery from the unknown. This, in turn, would have made for an ever-deepening and fuller grasp of the universe.

In other words, had man pursued the correct path of knowledge, his expanding awareness would have left fewer gaps in his understanding and less need for filling them in with theoretical constructs. By contrast, his pursuit of the erroneous path gave rise to more and more theoretical gaps, a state of affairs which should serve as a warning. Modern science has more gaps than ever before and understands even less now about the fundamentals of nature, as shown by the fact that increasing amounts of experimental data tend to contradict what we have accepted as the basic laws of biology and physics; modern science is frightened to find itself on the brink of an abyss.

In medieval times, religion was the persecutor of science. For many years man fought for science's survival and finally triumphed. It would be a consummate tragedy if now modern science became the Grand Inquisitor of the New Knowledge — the new and deeper grasp of nature and natural law. This book, The Final Appeal to Mankind, is a beginning "alphabet" and "grammar" of the New Knowledge. It embodies answers to such questions as the nature and origin of the Earth; the structure and function of the seven planetary layers and why there are only seven; the riddle of biogenesis and the laws of evolution. You will come to know the origin of intelligence, the time of its emergence, and its essential characteristics; how mankind came to exist upon this planet; the great enigma of life and death, and what transpires after death.

You will also come to grasp the unity between microcosm and macrocosm, fathom the mystery of the black holes, the history and destiny of man, the nature of the universe and much, much more. The information offered here is neither mysticism nor science fiction; it is authentic, well-founded knowledge and it is up to you the reader to accept or reject it. Once again, let us remember the words of Christ: "Ask and it shall be given to you...Seek, and ye shall find...Knock, and it shall be opened unto you...For everyone that asketh, receiveth; and he that seeketh findeth; and to him that knocketh, it shall be opened."[9]

[9] New Testament, Matthew Chapter 7, verse 7–8. King James Version.

And I, as author of this book, can only hope that I will not turn out to be "but one small voice crying out in the wilderness."

Nicolai Levashov

The Third Appeal to Mankind

Presented in the year 1929 A.D

An appeal by the Coalition Group of Observers (CGO) to all intelligent inhabitants of the planet Earth, to the race calling itself ÒmankindÓ.

Delivered by E. Roerich and N. Roerich, intermediaries of Shambhala. 1929

This is the third and final Declaration of the CGO to people of the planet Earth. The CGO gave its **First Declaration** to the inhabitants of **Amuradgehapure**, then the largest city on Earth **in the year 576 B.C.** The **Second Declaration** was presented to the inhabitants of **Tkaacetkoal**, the largest city on the American Continent **in the year 711 A.D**. The present **Declaration** to the people of Earth is basically identical to previous ones in content and is written in the most common languages on Earth: Chinese, Russian, English, and Spanish. The text was edited with a consideration for contemporary levels of the inhabitants' knowledge and misconceptions.

The sole purpose of this **Declaration** is to propose negotiations in the near future between representatives of mankind and the Coalition in order to determine whether mankind is ready to become a member of the Coalition. The negotiations will be possible only upon your completion of certain preliminary conditions which will be given later. For a proper understanding of these conditions we shall offer a brief description of the true nature of the cosmos compared with the one resulting from mankind's characteristic way of thinking.

By now mankind has a more accurate conception of the universe than it had at the time of the first and second Declarations. So, indeed, you recognize that the Earth is not flat and is not located in the center of the Universe: it rotates around the Sun, like the other planets; and you are certainly aware that the sun is not located in the center of the universe, but is just another star within the galaxy.

However, the most recent energy transformation, sustaining the activity of the stars (including your own sun) and permitting the existence of life on Earth is only one of many in the universe. Aside from these observations, the vast majority of your cosmological constructs are **in error**.

Your scientists' belief that all universal laws are and always will be unvarying and that physical constants are unchanging is illusory. For example, the gravitational constant changes significantly even within your solar system, not to mention on any larger scale. This fact has led you to seriously miscalculate the size of galaxies and the distances between them, and has also produced the erroneous theory of a circumscribed universe and, only this year, another erroneous theory of an expanding universe. Your basic concept of three-dimensional space, which serves as a fundamental building block for your cosmological ideas, is also in error.

The physical world is always changing; there is nothing static in it, including spatial dimensions. Dimensions in space fluctuate, changing evenly over a very wide

range. The best condition for the beginning of organic life is a spatial dimension that equals +p (3.1416...). Any significant deviation from that number will have a negative influence on life. At present the region of your solar system has a dimension of +3.00017. The nearness of that figure to the even number 3 (resulting in your three-dimensional concept of volume) simply misled you.

A gravitational vortex with a dimension of –3.15 is drifting close to the edge of the greatest concentration of stars in your galaxy. Even if it only barely grazes your galaxy, it threatens to wipe out all organic life on all the planets that do not have proper protection. This situation makes it imperative for you to become a member of the Coalition in the near future, at least within the next 6,500 earth years, so the Coalition will have enough time to help mankind to prepare and protect itself from the vortex.

Presently there are about 220,000 (two hundred twenty thousand) intelligent races in your galaxy, including yourselves, who are considering joining the Coalition. But please do not construe our warning about the vortex as an attempt to influence your decision.

You are in error regarding **the origin of life on Earth**. The solar system originated from a dust-like cloud, disseminated by the Coalition's construction corps in a certain region of the your universe that has the two conditions necessary for the initiation and development of life. This region is sufficiently remote from other stars and has a dimension of space close to +p.

You are mistaken **when you compare an intelligent race to a living individual**, thus envisioning the unavoidable deterioration and death of mankind in the near future. During the evolutionary process, about which you have only a very vague understanding, new species of living beings arise out of the old, and one's concern should be for the next generation: to have new, intelligent races on Earth originating from yours. Precisely this consideration must define the goals of an intelligent race.

Meanwhile, according to CGO observations, the human race has no such goal, nor even a semblance of one, leaving its development to chance and aiming all its efforts toward the gratification of temporary needs. Your errors in thinking should not be taken as accidental and transient. They are unavoidable and lasting due to the specific nature of your thought processes, which we shall now briefly explore.

Thought and the very existence of living matter have a common basis. (We remind you that we are forced to express ourselves in your language and at your level of knowledge, and because of this certain inaccuracies may occur). Your thinking and structure are the products of the limits of your logic. The search for logic is characteristic of your way of thinking, but any similarity with the way of thinking typical of the majority of intelligent races, which are members of the Coalition, ends right there. This fact compels many members of the CGO to doubt the correctness of regarding you as an intelligent race.

You analyze problems by thinking in terms of binary processes or alternatives, like an absolute "yes" or an absolute "no", which you accept as real. This is an irra-

tional process of thought used only by those with severely distorted structures. It compounds itself in the multistage analysis of complicated problems. At the same time the number of levels in your analysis is usually very small, even if the problem you are analyzing is quite complicated. The search for a solution comes down to choosing one out of two possibilities where two possible solutions exist, whereas the most correct solution lies somewhere in between.

The following analogy will be clear to your mathematicians: If one obtains answers to "yes" or "no" kinds of questions concerning a particular problem, the solution will be analogous to choosing one of the apices of an N-dimensional cube, whereas the range of possible solutions includes all points of N-dimensional space. To be exact, most of the time you erroneously err in the estimation of the real range of possible solutions which in reality are seldom quantitative.

As best as we can ascertain, in your scientific and juridical law, the meaning of each discovery or invention, the essence of any important idea, can be expressed by a simple sentence, consisting of a hundred words out of a 50,000 word vocabulary, including mathematical and other specific symbols. The total quantity of possible sentences of that vocabulary is represented by a very modest figure, 100. If we consider only those sentences that have an analytic function, that is to convey meaning — the number will be reduced to 50. Now, if we also eliminate those sentences that are grammatically correct but lack even the slightest discernible meaning, the quantity of meaningful sentences remaining will be reduced to 25. Finally, if we then select the false statements from true ones, being generous with the former in our evaluation, we have only **3-10** statements remaining that actually correspond to reality. Meanwhile, we know some examples of life forms from several other planets that are capable of showing at least the same number of various unconditioned reactions to different combinations of external stimuli that are quite consonant with reality; however these life forms cannot be called intelligent. There are such species on your planet too. Evidently, it would be more correct to consider humanity not intelligent, but a **potentially intelligent race**, because the limitations of your thought processes, as you should have already gathered, are not of congenital origin.

The human brain at birth is as impeccable a mechanism for thinking as are the organs of thought of many intelligent races in the universe. The problem is that the development of your thinking process from the very beginning took an absolutely wrong path. At the beginning of the creation of the thinking process, the capability of thinking was one of many potential reactions to the same information (**Fig. 1**). On this graph, labeled "**Logical Foundation**," the intensity of perception of reaction to the influence of information is located on the ordinate. Acceptability of that reaction is located on the abscissa, with negative reaction to the left of zero, and positive reactions to the right of zero. The curves on the chart represent everything in nature that has not yet been processed by the anti-entropic activity of intelligence. The chaotic splashes of curve are readily explained by physiological threshold effects.

The development of intelligence involves not only the building of a complex system of logical thinking, but also reconstructing and improving the foundation which serves as a basis for that system.

As numerous examples from different intelligent races show, the reconstruction of a logical foundation according to the pattern shown in **Fig. 2** best fits the requirements for an accurate comprehension of nature. It is important to mention, however, that we know a few races in the universe who not only show that linear structure but also have some branches stretching out to infinity (**Fig. 3**). They constitute their own independent union of races, outside of the Coalition, because we could not find a language in common with them.

The principal difference between their way of thinking and ours is that the area delineating our foundation of logic is **finite**, while their is **infinite**. It is hard for us to survive the heavy impact of their positive and negative reactions to an informational input that extends out to infinity.

Man's primitive logical foundation has two major splashes to the right and to the left of zero, and also several minor ones. This fact shows once again that **man never had before nor does he now have any obstacles to the construction of his own logical foundation in accordance with the pattern of continuous (non-binary) logic generally accepted in the universe**. From the very beginning, man's intellect developed in a completely faulty manner, oriented only on those powerful splashes, so that it now approximates the appearance of the logical foundation shown in **Fig. 4**. Those splashes to the right and left of zero are nothing but your absolute **"yes"** and **"no,"** [your binary split] without which you are, in general, unable to imagine anything, even though only the force of habit stands in your way. This ridiculous splitting of your logical base into absolute conceptions of **"yes"** and **"no"** is the greatest obstacle to comprehending a state of being which today is only rudimentary in you.

Moreover, you have recently developed a theoretical elaboration of your system of logic that compounds, rather than corrects, your errors: your theoretical logical systems now operate with greater refinement of your binary conceptualizations, leaving out all other variants of logical decision-making (**Fig. 5**). These ludicrous theoretical elaborations, instead of being a move forward, are a step backward, even compared with the original, logical, foundation of human thinking described above.

This is because the area of the figure describing your logical foundation, instead of being equal to some finite number, becomes equal to zero. Thus, one of the most primitive functions, which has only two meanings, is taken as the basis of your thinking. A general summary shows that the larger the area describing a logical foundation, the more perfect is the process of thought.

Hence, regrettably, the inevitable but deserved conclusion is that if your system of apprehending reality can scarcely be called **thinking**, it must be **the most primitive of all those possible**. Your binary logic forces you to distort everything that is essential. Thus the natural series of numbers, which is possible in principle, is just an artificial mathematical trick that is only slightly consonant with reality, but it becomes for you the cornerstone of that mathematical foundation so familiar to the ma-

jority of humans. You try to quantify just about everything and at the same time you cannot even provide precise information about the strength of the wind, expressing it simply in binary concepts of "yes" and "no", "it is" or "it isn't" and, moreover, without the expectation of any meaningful understanding of those statements.

Arithmetical quantification led you to new problems, brought about more by the primitiveness of your thinking than by the exigencies of reality. So you waste your energy trying to solve them, seeing them as real anomalies of nature that are difficult to harmonize with your world view. One example: your dealing with rational and irrational numbers as if they had a real scale. Binary logic forces you to fragment and artificially separate solid perceptions into independent facts, occurrences, conceptions, and categories, artificially separating them one from the other.

Your limited logic and obsession with quantification forces you to believe that there is a finite number of attributes to an object or event and also to label each of them. This gives you the dubious opportunity of separating one attribute from another, a trick you call "abstraction." The movement through the steps of abstraction to more common signs is, in your understanding, the only way (and the only right one), but in reality it takes you in the opposite direction from truth.

You believe that moving from the highest level of abstraction to the lowest common denominator is the only correct way to proceed. On the contrary, it is really just the opposite. It is no accident that all your abstract constructs, called philosophical systems, are self-contradicting, even though they are based on a common logic.

Step by step, descending into darkness along levels of abstraction, step by step, losing connection with reality, little by little your philosophical systems lose their orientation and finally at the "dead end" of their progression you are forced to answer the meaningless question about the priority of matter over spirit, by a "yes" or a "no." Because of the weakness of your logical foundation **you are limited in your ability to finely differentiate between objects and events, basing your distinctions upon a variety of notations**, **which are quite chaotic and illogical even from the point of view of your own logic**. This is very easily proven, for instance, in the case of human language, where the distinctions are quite inexact.

Your method of communication, which you claim as one of the superior achievements of the human mind, is based upon the establishment of such meaningless differentiations. **If you calculate the number of meaningful sentences in your language, you will see how primitive it is as a method of informational exchange, and is, rather, a way to limit that process**. And **it is not an achievement of intellect, only a transient, dysfunctional step in the early stage of human evolution**.

Considering language as an instrument for both exchanging and conveying information, you have not yet noticed how much it impacts your way of thinking, how inevitably it forces you into the very same process of fragmentation and compartmentalization. Thus your ethics and esthetics, particularly, contain a multitude of conceptual pairs that are mutually contradictory, such as thesis and antithesis.

Your public and personal morals follow the same principles of polarizing ideas like “love—hate,” “good—evil,” “life—death,” and so on...

Even your own observation, that different nations attach different meanings to those antithetical concepts is of no help to you. In the course of time, the very meanings themselves keep changing. Meanwhile you think of yourselves as **a highly civilized race**, yet in a court of law you apply a “yes” or “no” criterion to determine whether a verdict of guilt or innocence is appropriate for a single individual. Under no circumstances would such criteria be acceptable for determining the fate of a nation. But you permit the categorical principles of “yes” or “no” to dominate even there, turning virtually the entire planet into an enormous jail for all nations.

Moreover, your binary system of logic allows you to entrust the destiny of all nations and the entire human race to a handful of individuals. In international politics this is your idea of “a state of peace” or “a state of war” with abrupt shifts of logic. You think that this is perfectly natural, without even considering whether it is rational, and pursue it with a truly absurd tenacity. The latest world war and the new one about to happen, prove that your precipitous development of technology has not propelled you into wisdom.

Because of the abrupt and almost instantaneous shifts of your social structures and international politics from one state to another, it is very difficult for us to make any prediction regarding your future development. For the last couple of thousand years, the CGO has observed that you are almost continuously at war with each other: because of the natural course of historical processes, it will take twelve thousand years before your warring will begin to diminish.

Nevertheless, the CGO is aware that there has been an accelerated development of intelligence by at least some individuals, and this consideration allows us to believe that this Declaration is not hopeless. However, any agreement between mankind and the Coalition can only be concluded after human beings have overcome their reprehensible habits.

Owing to the primitive state of your logic, the CGO is forced to be skeptical of the development of the human race in the following additional respects: your civilization’s attitude to ward technology and your personal fear of death. The development of technology in itself, is definitely a positive sign, which leads the CGO to favor the human race as intelligent, but the idealization of technology, and your assigning it a special role as the prime attribute of your civilization, is alarming to us. Historically, when separate regions of the Earth lacked direct communication, the human race developed haphazardly. It did achieve several experimental civilizations of different types, some of which were approved by the CGO.

Regrettably, when direct contact between different cultures finally appeared in the process of development and expansion, they could not coexist in peace. Crude, primitive and, because of these qualities, more powerful civilizations usually exterminated those that were more intelligent and humane, only to be exterminated, in turn, by an even cruder force.

Unfortunately, a **mechanistic civilization**, the most primitive of all, dominates the Earth at the present time. It encompasses the entire human race, keeps it under control, and will not give a new civilization the chance to emerge. Only if the mechanistic civilization self-destructs and man takes control into its own hands, will a new and different civilization emerge: one that will be more conducive to the essential well-being of the race.

The CGO hopes that this final Declaration, along with appropriate help from the Coalition, will initiate that transformation provided mankind shows a sincere desire to change. We wish, however, to point out that civilizations with centers in Amuradgehapure, at the time of the First Declaration, and Tkaacetkoal, at the time of the Second Declaration, were more attuned to the needs of the human race than your contemporary mechanistic society.

As one of possible means of help, the CGO can provide the human race with detailed descriptions of those civilizations, to be used as models for a new civilization. One of our major criteria for judging a race as intelligent is where every member elevates collective intelligence above all else. Consequently, man as an intelligent being must prioritize the development of the collective racial intelligence. The functions of man are as follows: harvest all information from previous generations, add whatever is newly acquired from experience and perception, then pass it on to the next generation, increased and improved.

Chaotic fluctuations in the movement of an intelligent society's thought processes are necessary: after sifting through history one finds zigzags in the movement of thoughts that correspond to shifts in the changing objective picture of reality. The latter is unpredictable in direction, while the spectrum of thinking of any individual has a consistency during that individual's life span. Hence it follows that **each generation's transformation is necessary not for the preservation and continuation of the species, but for preservation of their cumulative intelligence as a race of intelligent beings**.

Therefore, considering the cosmic laws of Freedom of Will and Freedom of Choice, any hope you have that contact with extraterrestrial races will help to solve your ethical problems are groundless and impractical. The problem has a solution, but it is not what you think. Indeed, generally speaking it is not a problem at all. Moreover, we cannot offer the human race appropriate solutions, no matter how dire the situation might be, because each race has a right to decide its own destiny.

The CGO will maintain contact with mankind and its independent representatives to answer any questions and to provide help with any problem relating to personal character. But the main purpose of this Declaration is to warn you about the coming danger and apprise you of our offer to become a member of the Coalition. At the very first inquiry, the by-laws of the Coalition and a description of its structure may be handed over for study and publication by the government of any of the four largest countries, or by the Secretary of the League of Nations without any further provisos. If you decide to join the Coalition you will first have to undertake the re-

building of the logical foundation of your thinking according to guidelines common to the Coalition.

That stipulation is needed because your distorted way of thinking will cause a growing inferiority complex in anyone who joins, but, also primarily, because of basic differences in the thought process itself. This would lead to failure in the exchange of vital, perhaps very basic, information between the races of the Coalition and mankind. Regrettably, this Declaration is an example of such a flawed communication. At present, mankind is useless to the Coalition and vice versa.

Without the reconstruction of your thought processes, we are powerless even to lend you a hand to protect you from the vortex. As we see it, it will take you about six thousand years to reconstruct the logical foundation of your thinking, which, considering the very considerable threat to your galaxy, is a most crucial period. Therefore you should undertake this task immediately.[10]

The CGO pledges that as soon as man's first inquiry is received, we will hand over the initial course and detailed instruction for the gradual training of future generations in continuous [non-binary] logic. However, we will not do so before all the intelligent nations of Earth cease their absurd quarrels and agree to concentrate all of their efforts on the lengthy process of thought reconstruction. Otherwise, if a bellicose nation comes to grasp the principles of continuous logic it would be tantamount to giving it an absolute weapon, and ultimately lead to destruction of the entire human race.

The present Third Declaration of the CGO to mankind is the final one. The absence of a response in the next 50 (fifty) earth years will be construed as an indication that mankind is rejecting this offer to become a member of the Coalition.

By permission of The Coalition Group of Observers (CGO).

[10] As a result of certain interventions, the threat of annihilation by the gravitational vortex is no longer a problem. However, mankind is in far more imminent danger of extinction through destruction of his ecosystem. *N.L.*

Chapter 1. The formation of planet Earth. The synthesis of non-living matter

What is matter? How was it formed? How many kinds of matter are there and how do they interact?

These and many other questions have confounded man's mind throughout his history. In order to find an answer to these questions, the human race turned its sight toward the vastness of space and to the microcosm. But the further man's understanding advanced, the more he found himself mired in questions and problems for which he had no answers.

In order to better understand nature, **man must drastically change the deepest foundations of his knowledge**. It is necessary to **KNOW and to UNDERSTAND the laws of formation of the universe and its development**. It is necessary to comprehend the laws of life of the planets, stars, and galaxies of our universe. They are much different from what contemporary science believes.

First, I would like to point out that everything considered by contemporary man as the universe is but a **small fragment of the Great Cosmos**, like a single grain of sand on the beach of a boundless ocean. And that grain of sand is **our home, the cradle of mankind**. In order to progress further, man has to comprehend the world into which he was born.

There are an infinite number of types of primary matter in the Great Cosmos. They interact more or less among themselves or do not interact at all. If two kinds of primary matter do not interact, then nothing changes in them: **they may even interpenetrate without influencing each other in any way and with nothing new appearing during the process**. It is as though they do not exist for one another.

Let us define the degree of influence of one form of primary matter on another as the "**coefficient of interaction**." We may then say that where there is no interaction between different kinds of primary matter **the coefficient of interaction equals zero**. It means that "bricks" of two different kinds of primary matter cannot fit together in the same structure, that they have no common characteristics and qualities. The coefficient of interaction is different even for two kinds of primary matter in separate points in space, because **space itself is not uniform in structure**.

Only when interaction takes place within a defined volume of space is it possible to talk about the mutual interactions of primary matters. In principle, there are volumes of space where there is **maximal** interaction between primary matters and others where **it is impossible**. Also there are certain regions of space where primary matters interact only partially by means of one or another shared quality. (**Fig. 6a**)

Where there is a **maximum interaction of two primary matters** (let us define them as **A** and **B**) **a total merging of these primary matters results in a new, hybrid form — AB**. Merging is possible only within the limits of a volume where all their parameters are the same. Different kinds of primary matter existing within the

same non-uniform space will be influenced differently by that space: it exerts a larger influence and change on one kind of primary matter, and a smaller influence and change on another. **Non-uniformity in space changes the qualitative structure of primary matters, thus creating conditions for their mergence and for the formation of new qualities**.

Thus, within the boundaries of a non-uniform space where conditions exist for the merging of the two kinds of primary matters, A and B, **a qualitatively new kind of matter forms — the hybrid AB** (**Fig. 6a**).

In turn **AB** has an influence on the non-uniformity of the space where it originated: the non-uniform space fills up with the primary matters and is transformed. Non-uniformity constitutes a distortion of space, leading to a change of dimension within the limits of that non-uniformity, as compared with neighboring regions of space.

Thus, a change in spatial dimensions within a certain quantitative range leads to conditions for **the merging of two kinds of primary matters**. In order for two primary matters to merge, a dimension must change as follows:

Δ**L = 0.020203236**... (Fig. 6 and 6a).

Similarly, for **the merging of three kinds of primary matter, the dimension of space,** Δ**L, must change once again**. Primary matter cannot merge using only a part of itself. **Only entire primary matters can merge**. Just as two and a half living men cannot exist, but only two or three whole men, neither can there be the merging of portions of primary matters.

Let us define a third kind of primary matter as **C**. As a result of the merging of three kinds of primary matter within the limits of a certain volume of space (for convenience let us consider it a sphere), **a qualitatively new hybrid, ABC**, forms, occupying a smaller volume than hybrid **AB** (**Fig. 7**). Moreover, the spheres have precise boundaries, within which **the dimension of space is uniform**. The **conditions for the merging of one more kind of primary matter**, **D**, arises when the dimension of space inside a non-uniformity again changes by the factor Δ**L = 0.020203236**. **A qualitatively new hybrid form, ABCD**, appears (**Fig. 8**). It will occupy a sphere of smaller volume than that of **ABC**.

With the next change, Δ**L**, in the dimension of space inside non-uniformity, conditions appear for the merging of one more kind of primary matter, **E** with **ABCD**. **A qualitatively new form, ABCDE**, appears (**Fig. 9**).

Following a subsequent change, Δ**L**, in the dimension of space inside non-uniformity, conditions appear for the merging of yet another form of primary matter, **F**, with **ABCDE**. **A qualitatively new form, ABCDEF**, emerges (**Fig. 10**).

After further changes in ΔL in the same non-uniformity of space, conditions arise for the merging of another form of matter, **G**, with **ABCDEF**. **A qualitatively new form, ABCDEFG, is thereby produced** (**Fig. 11**).

Thus, with each subsequent change in the dimension of non-uniform space, ΔL, **the seven kinds of primary matter forming our universe, consecutively merge**, creating at the same time six material spheres or bodies of qualitatively different composition and size.

The inside sphere, formed by all seven kinds of primary matter, is the PHYSICALLY SOLID PLANET, EARTH, a substance that has four aggregate forms — **solid, liquid, gas, and plasma**. Different aggregate forms appear as a result of the fluctuation of dimensions less than ΔL. Moving away from the physical center of non-uniformity, we have the following picture: a sphere formed by the merging of **six kinds of primary matter**, is called the **"ETHERIC"** or "EPHEMERAL" sphere; the merging of **five kinds of primary matter** produces the **"ASTRAL"** sphere; **four kinds of primary matter** constitutes the **FIRST "MENTAL"** sphere; **three kinds of primary matter**, the **SECOND MENTAL** sphere; and **two kinds of primary matter**, the **THIRD MENTAL** sphere (**Fig.12**).

The amount of interaction between spheres can be defined as their "coefficient of interaction": α1; α2; α3; α4; α5.

$$\alpha 1 > \alpha 2 > \alpha 3 > \alpha 4 > \alpha 5 \qquad (Fig.12a)$$

where:

α1 — is the coefficient of interaction between the physically solid and etheric spheres.

α 2 –is the coefficient of interaction between the physically solid and astral spheres.

α 3 –is the coefficient of interaction between the physically solid and first mental spheres.

α 4 –is the coefficient of interaction between the physically solid and second mental spheres.

α 5 –is the coefficient of interaction between the physically solid and third mental spheres.

We then define **planet Earth**, as consisting of **six concentric spheres, each interposed within another, the whole constituting an UNBROKEN UNITY**. This fact is essential for understanding many phenomena and mysteries of both living and non-living matter, such as the evolution of life on our planet. Following the completion of the qualitative structure of Earth, non-uniformity in that region of space is neutralized (**Fig. 12b**).

Material spheres (not necessarily visible, physical mass), created by the merging of the primary matters, fill up the non-uniformity, equalizing the area of space. The non-uniformity of space can be compared to a depression or "well," which appears on a flat, even surface of earth. The unevenness exists until the depression fills in with soil.

After the completion of the planet's formation the same kinds of primary matter that created the planet continue their circulation, but without merging with each other, like a river, overflowing a reservoir after filling it to the top. The different primary matters that have merged to make up the planet vary in their activity within the planet; this is manifested by motion in the core of the earth, earthquakes and volcanic eruptions.

The formation of the earth was completed six billion years ago. This was the first cycle of evolution of the various kinds of primary matters and resulted in the evolution of non-living matter. The second step was the evolution **of living matter**. Before we move to that phase of evolution, it would be useful to keep in mind that our universe, including our planet, Earth, was created by the merging of seven kinds of primary matter.

The number "seven" has no mystical significance. The fact that our universe was formed from seven kinds of primary matter is **neither unique, miraculous nor divine**. It is just an expression of the qualitative structure of our universe.

It is not accidental that **white light splits into seven colors in the process of diffraction, that there are seven notes to an octave, and that the acquisition of seven spiritual bodies completes the human being's earth cycle of evolution**. But, to repeat, there is nothing mystical or supernatural about all this.

Now, let us take a close look at **the evolution of living matter**.

Chapter 2. The emergence of life on Earth

Life! Living nature. **What is it?** What kind of magic could spark and fortify the spawning of life within a primeval ocean — from the chaos of a sterile, primordial planet spewing forth magma and fiery ashes?

Organic life — what is it? How could the miracle of life spring from the same types of molecules and atoms that make up the soil, water and atmosphere of our planet? What is the solution to the enigma that has perplexed so many generations of scientists: physicists, chemists, biologists and philosophers? Still, to the present day, these questions go unanswered.

Let us try to unravel this mystery of nature. First, let us look and see if the atoms that make up **everything** in nature are all identical. Or do they differ from each other in their atomic weight, or in the number of protons, neutrons and electrons that give rise to their diverse properties, composition and chemical reactions?

Do the atoms of hydrogen, oxygen, iron, gold and uranium, and the molecules of water, salts, acids and organic substances all have the same impact on the microcosm, the volume of their surrounding? If not, **how** do they differ?

On a macroscopic scale, every material body changes the dimensions and curvature of the space around it. This effect is especially pronounced around the large material bodies of outer space, i.e., the stars. Our scientists are already aware that during a solar eclipse there is a curvature in the rectilinear propagation of electromagnetic light waves from the sun.

This is an example of how **material bodies deform the space they happen to occupy**. Every massive material body of outer space — stars, planets, asteroids, etc. is composed of atoms and molecules that make up the stars and planets. The effect of just a single atom or molecule barely influences the microcosm and is virtually undetectable by modern devices.

How, then does an atom or molecule affect **its own** microcosm? Do the atomic nuclei of hydrogen, gold, and uranium all impact their surrounding space in the same way? Do **organic** and **inorganic** molecules have the same impact? To start with, let us consider the structure of the microcosm. Atomic dimensions range from $\mathbf{10^{-10}}$ to $\mathbf{10^{-8}}$ meters. Nuclear size falls with the range of several Fermi units around $\mathbf{(1 \div 10)10^{-15}}$ meters.

With regard to atomic volume, we are dealing with values of $\mathbf{10^{-30} \div 10^{-24}}$ cubic meters, and a nuclear size of $\mathbf{10^{-48} \div 10^{-45}}$ cubic meters. An atomic nucleus occupies up to one hundred trillionth of the entire atomic volume, while an electron occupies even less volume than the nucleus. Thus, the substance within the atom makes up only the slightest part of its volume, while the remaining portion is “empty”, i.e., 99.999% **unoccupied by any substance**.

The mass concentrated in the atomic nucleus has the same kind of impact on the microcosm as the concentrated matter of a star has on its surrounding

space. We will later consider the effect of a star on space and its consequences. For now, let us focus on how an atomic nucleus affects its own microcosm.

Every atomic nucleus affects the uniformity of space, thereby altering the dimension and curvature of its microcosm. What happens when this occurs? Do all the various atoms produce an identical change in the microcosmic dimensions?

Hydrogen has a minimal atomic weight of two atomic units; the transuranium elements (upwards of 235) represent the heaviest atomic weights. Obviously, the impact of hydrogen on its microcosm will be far **different** than that of the transuranium elements on their surrounding space.

Radioactive elements exert the strongest effect on the structure of the microcosm, but the impact is so powerful as to render their nuclei unstable and trigger their disintegration into simpler, stabler elements. Moreover, the higher their weight, the faster they disintegrate. Some of these elements exist for only a billionth of a second and only in an artificial environment.

What, then, is responsible for the curvature of microcosmic space? If a value of $\Delta\mathbf{L} = \mathbf{0.020203236}$ is required to cause the fusion of the seven types of primary matter (described in Chapter 1), it follows that the atoms thus created give rise to spatial-dimension values of the mathematically opposite sign — that is, for example, a minus (–) instead of a plus (+). This leads to a **partial secondary curvature of the space**. In other words, **each atom thereby decreases the microcosmic space by a certain value of** $\Delta\mathbf{L}'$.

The hydrogen atom induces the smallest change in its microcosmic space by a specific value of $\Delta L'$. The hydrogen atom produces the smallest change, $\Delta\mathbf{L}'\mathbf{min} = \mathbf{-0.0000859712}$ while the greatest change $\Delta\mathbf{L}'\mathbf{max} = \mathbf{-0.02020296}$, is induced by radioactive elements. With the latter, however, the change in microcosmic dimensions is quantitatively comparable, but opposite in sign to that which was necessary for the original creation of mass from the merging of the various primary matters.

$$|\Delta\mathbf{L}'| \approx |\Delta\mathbf{L}|$$

where:

$\Delta\mathbf{L} = \mathbf{0.02023236\ldots}$

and

$\Delta\mathbf{L}'\ \mathbf{max} = \mathbf{-0.02020296\ldots}$

This is precisely why radioactive elements disintegrate into simpler ones: the process of disintegration proceeds more rapidly as $\Delta\mathbf{L}'\ \mathbf{max}$ approximates $\Delta\mathbf{L}$ (**Fig. 13**).

Let us recall from Chapter 1 that the shared properties of the physical sphere created by the merger of the seven kinds of primary matter interact with the etheric sphere, composed of six. This interaction is expressed as the "coefficient of interaction," **α**. As noted above, different atoms vary in the degree to which they effect changes in their microcosmic dimensions. The hydrogen atom has a minimum impact

on its surroundings, and accordingly, possesses the smallest coefficient of interaction, α_{1min}; the transuranium elements exert the maximum impact on their surroundings and therefore have the highest coefficient of interaction, α_{1max}.

Thus, each atom, by its own mass, (to a greater or lesser degree) **ruptures the qualitative barrier between the physical and etheric levels and opens a channel between them**.

The smallest channel is created by the hydrogen atom (α_{1min}) the largest by the transuranium elements (α_{1max}) (**Fig. 14**). Primary matter **G** separates from the other primary matters (the inverse process of the original fusion) and flows through the channel from the physical to the etheric level. Consequently, atoms gradually lose G-matter, become unstable and disintegrate into simpler, more stable elements. In other words, the concentration of **G**-matter relative to the other six kinds of primary matter diminishes with time. **Atomic disintegration** takes place when there is a critical loss of G-matter. The new atoms resulting from the disintegration have considerably less activity in the channels between their physical and etheric levels and consequently, have more stable structures.

If one were to suppose, for example, that transuranium elements do not disintegrate, then a qualitatively new process would arise. **G**-matter would circulate between the physical and etheric levels but in excessive quantities. However, tranuranium elements, lacking that surplus, lose type **G**-matter from their nuclei and disintegrate as a result. This is of significance in understanding the possibility of non-organic living forms, to be discussed in a later volume.

Up to now, we have been looking at the behavior of inanimate substances. Now we have reached the point of understanding and **solving the mystery of living matter and its origin**.

There are several elements in nature that possess four valence electrons, enabling them to create combinations of atoms in the configuration of long chains of identical atoms. In this configuration, each atom uses two out of four of its valence bonds to position its electrons. This enables other atoms and even radicals to attach to the vacant bonds. These atoms are — carbon, silicon, and phosphorus. The most dynamic of all is **carbon**, which becomes **the basis of all organic life**. Also, it happens to be one of the commonest elements on Earth.

In the primeval ocean, a high concentration of carbon atoms abounded, along with other elements, providing the building blocks for organic molecules. But special conditions were needed for joining the long chains together, namely, an active energy source to impact the stability of the carbon atoms and trigger a new combination of carbon atoms into forming chains. That source was provided by lightening electrical discharges in the atmosphere. This powerful energy discharge gave rise to conditions favoring the combination of carbon atoms into new and different sequences, as follows:

| | | | | |

$$— C — C — C — C — C — C —$$
$$| \quad | \quad | \quad | \quad | \quad |$$

From such chains, molecules were derived, possessing a molecular weight of a hundred, a thousand or even ten thousand atomic units. In turn, these molecules were able to interconnect and form even larger molecules. While the atomic weights of inorganic molecules do not exceed three hundred to four hundred units, the organic molecules have virtually **no limit to their molecular weight.**

As a consequence, a carbon nucleus connected to such a molecule creates a channel between the physical and etheric levels greater than those produced by transuranium elements ($a_1$max) and do not disintegrate like the latter (see **Fig. 14**).

Thus, conditions arise for a heavy flow of **G**-matter from the physical to the etheric level. With molecules of very high molecular weight, like those of **DNA** and **RNA**, $\boldsymbol{\alpha_{1max}}$ becomes compatible with conditions leading to the overflow of other types of matter as well. By contrast, though similar conditions for overflow prevail with the transuranium elements, the primary matters that form their nuclei also overflow, causing disintegration of these heavier elements and the formation of simpler, stabler elements.

In the case of organic molecules, **what is it, actually, that disintegrates and starts flowing through the channel between the physically solid and the etheric levels ?**

Organic molecules like **DNA** and **RNA** do not disintegrate by themselves, nor do the types of matter that formed them flow over to the etheric level. What is occurring here? Where and how does the new quality appear, that becomes the basis of organic life? (See **Fig. 15**).

Let us recall — the organic molecules, both simple and complex, arose in the primeval ocean as a result of the atmospheric electrical discharge. After they were formed, inorganic molecules still remaining in the water kept moving chaotically (Brownian movement).

All inorganic molecules and the simplest organic molecules have a coefficient of interaction, $\boldsymbol{\alpha_1}$ considerably smaller than that of the nucleic acids ($\boldsymbol{\alpha_{1DNA}}$) and ($\boldsymbol{\alpha_{1RNA}}$). In water, these chaotically moving molecules, atoms and ions migrate toward the zones of influence, $\Delta\mathbf{L'}_{\mathbf{DNA}}$ and $\Delta\mathbf{L'}_{\mathbf{RNA}}$, created by the **DNA** and **RNA** molecules, respectively. There they start disintegrating into their constituent primary matters. This occurs because in the zone of influence of the much larger **RNA** and **DNA** molecules, the smaller simpler molecules, atoms, and ions simply cannot exist.

Using channels created by **DNA** and **RNA** molecules, primary matters, released as by-products of the disintegration, flow onto the etheric level of Earth. The etheric sphere, you will recall from Chapter 1, was created by the fusion of six primary matters (ABCDEF) out of the seven kinds of matter available and lacks only **G**-matter. Therefore, the **DNA** and **RNA** structures (which are projections of their microcosmic

curvature on the etheric level) start filling up specifically with the only type of matter lacking on the etheric level, i.e., type G.

The flow continues until the concentration of G-matter on the etheric level approximates the concentration of G-matter on the physically solid Earth level. As a result of this process, **the etheric bodies of DNA and RNA** are then formed and the qualitative barrier between the physical and etheric levels completely disappears. A total identity of the physical and etheric levels of Earth is then achieved within the **DNA** and **RNA** molecules.

An example of a similar process can be found in the law of communicating vessels (**Fig. 16**). Organic molecules, especially **DNA** and **RNA**, create a channel between the physical and etheric levels sufficient to permit the free flow of primary matters from the physical to the etheric level (see Fig.16, right).

But organic molecules, even with their new qualities (i.e., an etheric structure and the circulation of primary matters), are not yet alive; they merely possess **the conditions necessary for the origin of life**. We may speak of life only when a combination of several organic molecules acquires another new quality — the ability to replicate.

The first living structure is the virus, the most primitive life form, a transitional form between the living and non-living. In a water environment, the virus behaves like a living compound; when dehydrated it appears lifeless and is, in effect, a crystal, a condition in which it can survive indefinitely. When it is returned to a watery environment, the virus changes from a crystal to a primitive life form (**Fig. 17**). Understanding viral behavior as alive under one set of conditions and as lifeless under another, provides the comprehension and solution to life's great enigma which orthodox science has hitherto been powerless to solve.

What is the nature of this phenomenon?

It is essentially as follows: **the viral structure in a water environment creates a minimal channel between the physical and etheric levels, which mediates the disintegration of simple organic and inorganic molecules. This creates conditions for the primary matters — the disintegration by-products — to flow over from the physical to the etheric level — a chain of events which leads to the formation of an EXACT REPLICA of the virus on the etheric level.**

When heated, the weak bonding between the atoms of a viral RNA molecule and its OH– and H+ groups breaks. This results in water loss (dehydration), a decrease in atomic weight, which reduces the curvature of the viral microspace, and a decrease in the diameter of the channel between the physical and etheric levels. With the drop in the viral microspace curvature, even the simplest organic and inorganic molecules no longer disintegrate. The dehydrated viral RNA then behaves just like any other organic or inorganic molecule (Fig. 17, left).

When, however, the virus returns to a water environment, its RNA molecule reattaches the OH– and H+ groups. The cumulative atomic weight becomes critical, the degree of microspace curvature surrounding the molecule increases

— causing the disintegration of the simpler organic and inorganic molecules and the release of their primary matters, which then flow over to the etheric level (Fig. 17, right). On the etheric level, an exact replica of the virus is created out of type G-matter. This is the first qualitative distinction that permits us to consider the virus the earliest primitive living organism.

The second qualitative distinction is the ability of the virus to replicate its structure — to create a double of itself on the physical level — a function that is linked to the quality of the spatial structure surrounding it.

The **RNA** molecule is composed of two chain-like spirals: the atoms within the chains are very strongly bonded together, while the atoms attaching the two chains to each other are very weakly joined.

The viral **RNA** molecule is a prerequisite for the development of the new quality — replication — that characterizes life.

Viruses first arose in the ocean. The fluid movement caused their displacement from one location to another, exposing them to various external conditions, including different levels and types of radiation.

This changed the atomic structure of the viral **RNA** so as to cause the bonding between the spirals to weaken. Even minor changes in the external environment were sufficient to rupture the molecular bonds and divide a viral **RNA** into two chains, quite separate from each other. Then, out of the plethora of molecules surrounding it, each link of the chain could attach to its vacant electron bond only those molecules that were mirror images of itself. The latter molecules, known as **nucleotides**, i.e., adenine, thymine, cytosine, and uracil, then united to reproduce an exact copy of the second missing chain, so that instead of one viral **RNA** molecule, two identical **RNA** molecules appeared. A necessary precondition for this to occur was the availability of just the right kind and amount of nucleotides and water.

At this point, we must emphasize one very important peculiarity that sets viruses apart from other, more sophisticated organisms. **At the moment the molecule splits into two spirals, its microcosmic curvature decreases and the channel between the physical and etheric levels closes again. Only after each of the spirals is finished building its mirror image does its atomic weight return to critical, causing the channel between the physical and etheric levels to reopen.**

We will consider this mechanism in greater detail later when describing the process of cell division. Meanwhile, let us return to our description of the stages of the origin of life. A virus, as we stated before, is **the simplest organism**, an **RNA** molecule encased in a protein membrane. This membrane insulates the **RNA** molecule from its outer environment, buffering the impact of external factors and creating a state of maximum stability. It also slows down the motion of organic and inorganic molecules through it, thus creating a "microclimate" of its own around the RNA molecule. The viral protein capsule is, in effect, a prototype of the cell membrane. In the course of further evolution, various changes occurred — mutations in the RNA structure — due to the impact of various forms of radiation, temperature, pressure, and ac-

tive chemical substances. This changed the properties of the viral structure and the extent of its influence on its microspace.

Few of the many mutations were positive — perhaps one in one thousand. But over time, the cumulative effect of the positive changes gave rise to new properties. The membrane around the RNA molecule also changed. The appearance of a multi-layered membrane created a more stable environment around the **RNA** molecule. As a result, changes in external conditions exerted a weaker influence on the composition and condition of the membrane's inner environment. The appearance of the fat layer, serving as an armored protection of the protein layers around the **RNA**, and later, the **DNA** molecule, reduced the influence of the outer environment to a minimum. Now only abrupt changes in the environment, destroying the membrane, could affect the inner environment of the organism.

Furthermore, the fat layers of the membrane, being endowed with hydrophobic, i.e., water–repellant properties, reduced the circulation of cellular substance to a minimum, further enhancing the stability and relative independence of the inner from the outer environment. From this moment in the process of the evolution of life we may speak of the emergence of the **"protocell."**

Further evolution as a consequence of random and accidental mutations resulted in the appearance of the first **monocellular organisms**. Some of these simple monocellular organisms were silicon-based. Structurally inflexible and very sensitive, silicon-based organisms were unable to adapt to the rapidly changing conditions of the environment. They gradually disappeared and were replaced by carbon-based organisms.

All systems strive to obtain maximum stability and equilibrium. Under the impact of the external environment, the earliest monocellular organisms were partially destroyed, losing intracellular organic substances and suffering damage to the cellular membrane itself. Only systems that could independently regain stability and restore structural integrity were able to survive and continue evolving. This required the replenishment of their losses.

Since the primeval ocean had very low concentrations of organic substances, it was very difficult for monocellular organisms to extract what they needed to restore their integrity. Let us recall the mechanisms involved in the formation of organic substances from inorganic molecules of carbon, oxygen, nitrogen, hydrogen, etc. This reaction takes place when water, saturated by inorganic molecules and atoms, is struck by electrical discharges generated by the differential of static electrical charge between the Earth's atmosphere and surface.

Electrical discharges curve the microspace around these substances, creating the conditions for the bonding of carbon atoms in chains and the emergence of organic molecules.

Synthesis of the simplest organic compounds must occur inside the monocellular organisms themselves to enable them to restore and preserve their structure. The synthesis of organic out of inorganic molecules is possible after a

change in microcosmic dimensions of a value of $\Delta L \approx 0.020203236$. Neither simple nor complex living organisms are able to create an electrical discharge comparable in magnitude to that obtained from the atmosphere. In the course of evolution, however, the simplest monocellular organisms evolved an intermediate version, which provided the required value of ΔL.

Remember that each molecule, each atom, changes its microcosm by a certain value. The maximal change is caused by organic molecules. Very large organic molecules like those of DNA and RNA make such a strong impact on their microcosm that simple organic molecules in their vicinity disintegrate rather than synthesize into larger structures. A change in microcosmic dimensions by a value of $0 < \Delta L \leq 0.020203236$ is necessary for the synthesis of organic from inorganic molecules. Such an impact on the microcosm is effected by intermediate-sized organic molecules.

Since the required molecules in monocellular organisms need to be only one tenth the size of **RNA** and **DNA** molecules, the problem should be readily solved. However, the situation is not that simple. Every molecule changes its microcosm and this change is **permanent** as long as the molecule itself remains intact. But, for the synthesis of organic molecules, the microcosmic dimensions must **fluctuate with an amplitude** of:

$0 < \Delta L < 0.010101618$, **and be periodic**.

For this to occur, molecules within monocellular organisms must be **able to respond to even minimal external environmental stimuli** by fluctuations in their microcosmic dimensions of $0 < \Delta L < 0.010101618$. At the same time environmental radiations must be able to penetrate their membranes unimpeded without destroying the monocellular organisms.

The external factors meeting all these demands are the low thermal and optical radiations of the sun. Other segments of solar radiation, such as x- and gamma radiation are destructive to organic compounds and organisms. What situation, then, can provide organic substances and organisms with the softer, lower frequency radiations from the sun, while simultaneously filtering out the harsher, higher frequency solar radiations?

Again, the solution is provided by water. Sea water absorbs x-rays and gamma radiation and **allows the passage** of the sun's thermal and optical radiations, which readily penetrate the membranes of monocellular organisms.

Therefore, the following conditions are both necessary and sufficient for the cellular synthesis of organic substances:

a) the presence of organic molecules within monocellular organisms, which can readily change their structure in response to changes in external factors, leading to fluctuations in microcosmic dimensions within a range of:

$0 < \Delta L < 0.010101618$...

b) the presence of external factors, such as low frequency thermal and optical radiations from the sun, that will cause the required changes in molecular structure without destroying the molecules of monocellular organisms.

In the course of evolution the exact molecule that meets the requirements was developed — **chlorophyll**.

While absorbing certain frequencies of the optical (photonic) and thermal radiation of the sun, chlorophyll molecules change their structure, creating new, but very unstable compounds. These compounds disintegrate as soon as the effect of the thermal and optical radiations ceases: this is precisely what causes the fluctuation in microcosmic dimensions so necessary for the initiation of the synthetic process within monocellular organisms.

Absorption of the photons of solar radiation by chlorophyll molecules causes fluctuations in the microcosmic dimensions of the latter. The process is as follows: as the chlorophyll absorbs photons, the electrons jump to other orbits. When this occurs, the chlorophyll molecule attaches **OH–** — **H+** groups to the new electron bonds. This causes fluctuations in the molecular weight of the chlorophyll molecule with consequent fluctuation in the dimensions of its microspace. This chain of events creates the proper conditions for initiating the synthesis of organic compounds. During the process of synthesis the chlorophyll molecule loses its accumulated potential and returns to its former stable condition, ready to initiate a new cycle of photon absorption. This process, **photosynthesis**, is marked by the absorption of carbon dioxide ($\mathbf{CO_2}$), and the release of oxygen ($\mathbf{O_2}$) as a by-product.

Thus, in the course of evolution, thanks to the chlorophyll molecules and through the absorption of sunlight, the simplest monocellular organisms **acquired the capacity to synthesize the organic compounds** necessary for the restoration of their structure and life.

Additionally, by the synthesis and accumulation of organic substances inside their structure, the simplest monocellular organisms provided the requisite amount of organic molecules for the process of **duplication** — i.e., **cell division**.

First, let us recall what happens in a simple, monocellular organism, like (non-viral) **DNA**. When a monocellular organism accumulates the critical mass of organic molecules, this changes the microcosmic dimension within the cell, triggering cellular instability. Primary matters begin to flow from the physical to the etheric level, initiating cell division.

As in the virus, the spirals of the simple DNA molecule also diverge in the division process, each to recreate its own mirror image. However, unlike the virus, after splitting off from each other, each spiral creates its own channel between the physical and etheric levels. And both channels remain open during the buildup of mirror images. With the completion of the full structure, a supercritical microcosmic curvature appears, triggering the disintegration of the structure. This causes the primary matters which comprise the mass of the structure to overflow onto the etheric level. As disintegration of mass proceeds, and the amount of mass decreases, the channels originally

created by it narrow, and the flow of primary matters between the levels gradually returns to normal.

However, during the time of the greatest flow of primary matters between the levels, the concentration of G-matter becomes several times higher than normal on the etheric level. This is followed by a **reversal of flow of G-matter** back **from the etheric to the physical level** through the channel. In this process of reversal of flow the etheric structure of the DNA molecule recreates itself on the physical level, thus restoring its complete physical structure. The system now attains a state of equilibrium: two physically stable **DNA** molecules with balanced channels between the physical and etheric levels. The understanding of this process is crucial for fathoming **the mystery of the origin of life on Earth**.

What exactly is the process of cell division, and how does it occur? Let us explore and try to understand this mechanism, which is essential for the continuation of all life. Let us consider the process of division in the case of a complex cell. First, **either through photosynthesis or by assimilation of substances from the external environment, organic substances concentrate within the cell; this concentration becomes critical, the cell loses its stability, and the division process begins**.

The cell's centrioles diverge to opposite poles of the cell and became the foci around which the division process begins (**Fig.18**). Protein filaments draw the chromosomes out of the original cell nucleus toward the centrioles, and this initiates the formation of two new nuclei (**Fig. 19**). Initially the new nuclei each contain half the set of required chromosomes. Each nucleus will create a channel to the etheric level. Together these channels are virtually equal in size to the channel created by one whole nucleus. The dimension of the cell's microcosm remains essentially unchanged and the balance of the flow between the physical and etheric levels remains the same. (Fig. 19: the levels of fluid in the communicating vessels are similar.). Each chromosome of each nucleus recreates its mirror-image out of the organic substances accumulated in the cell. This is a manifestation of the natural tendency of any system to achieve a state of maximum stability.

Upon completion of the process, two nuclei are created inside one cell, each with a channel through which primary matters flow to the etheric level. The presence of two nuclei within the cell creates a curvature of its microcosm that renders the cell unstable. Its constituent organic substances start disintegrating and the released primary matters flow over to the etheric level (**Fig. 20**). As the process continues, the amount of primary matter flowing from the physical to the etheric level is much greater than the amount flowing to the physical from the etheric level (Fig. 20: note the levels of the communicating vessels.)

Accompanying the process of the cell's physical disintegration, **two etheric bodies of the cell** are created on the etheric level since **each single nucleus also creates an identical microcosmic curvature on the etheric level**. (**Fig. 21**). When this occurs the amount of primary matter, especially **G**-matter, which flows to the etheric level, becomes excessive on that level (Fig. 21). Upon complete disintegration of the former physical cell, its constituent organic molecules, **the building blocks** for new

cell creation, remain. When the flooding of primary matters from the physical level over to the etheric level ceases, the excess amount of **G**-matter from the two new emerging etheric cells starts flowing via the same channels from the etheric to the physical body and creates a projection of the etheric cell on the physical level (**Fig. 21a**). This creates an additional microcosmic curvature on a projection area at the physical level, resulting in the synthesis of the required molecules out of the biomass of the former cell **(Fig. 22**). The synthesis of the necessary molecules and their placement will be in the order designated by the template given by the cell's etheric bodies. An analogous and very similar process is **the magnetization and distribution of iron filings along the lines of force of a magnetic field**. Upon completion of the synthesis, two completely new cells are formed with the image and likeness of the former cell, and a balanced flow of primary matters between the physical and etheric levels is achieved (**Fig. 23**).

Now let us return to what happens to monocellular plants. As a result of cell division and the photosynthetic process two new cells accumulate organic substance. When this substance achieves critical mass the cells begin to divide. Four identical cells then appear, which, upon amassing organic substance, begin dividing on their own. Now eight identical cells are created, then sixteen, thirty-two, sixty-four, and so on. As a result, the growth rate of monocellular organisms unfolds in geometrical progression.

For purposes of definition we will call organisms which synthesize organic substances through photosynthesis **"vegetable organisms." The growth rate of the amount of the simplest of these — phytoplankton — is defined by a biological efficiency factor (BEF).** This refers to that **portion of sunlight per square unit of the organism's surface, which is absorbed and utilized for the synthesis of organic substances.**

For phytoplankton the BEF is 2-3 %. The absorption of sunlight is a necessary condition for photosynthesis. However, sunlight does not penetrate more than 300 feet below the surface of the primeval ocean. Therefore, phytoplankton only actively grows close to the ocean's surface, gradually producing a solid carpet of growth. (A given area of ocean surface exposed to sunlight can support only a limited amount of phytoplankton). The motion of water at the surface transports some of the phytoplankton to the lower depths, where the sunlight either does not penetrate or is insufficient to support the life of monocellular plants. They cannot move on their own and depend completely on the circulation of the water. Most of the phytoplankton die because of the above conditions, creating a large mass of organic substance during the disintegration process. Yet, some of the organisms that were able to adapt to the new conditions accumulated organic substances from the environment rather than synthesizing them from the surrounding sea water. When, however, they were able to return to the sunlit surface of the ocean, these organisms again began to synthesize organic substances. Such organisms have survived to the present day.

The best-known representative of monocellular organisms with dual means of obtaining organic substance is the **Green Euglena** (**Fig. 24**). But some of the latter be-

came increasingly unable to find their way to the ocean's surface. They lost their ability to synthesize organic substances and, once again, became **predators** of vegetable organic mass. Herein lies **the origin of the two main types of living organisms — animal and vegetable**.

All monocellular organisms are vulnerable to the vicissitudes of the environment and must adapt to survive. One of the means of adaptation was the evolution of an extension of the cell membrane, the flagellum that enabled the organism to move through its environment. At a certain moment in evolution several monocellular plants became entangled while their unengaged flagella kept moving freely, causing the entire bundle to navigate as a single unit. A typical representative of such an organism is **volvocales Volvox** (**Fig. 25**). In the course of further evolution such aggregates with their membranes so conjoined were far more resistant to environmental impact than an individual cell, and they became the next stage in the evolution of life.

The cells most deeply embedded in the interior of the aggregate were surrounded on every side by other, more superficial cells, thus rendering the deeper cells practically impervious to the influence of the environment, in contrast to the surface cells which remained very much exposed. As a result, in the course of evolution, various cells in the aggregate began to specialize in different functions. The obvious consequence of this differentiation was the development of further dissimilarities in cellular appearance and structure.

These functional distinctions gradually became increasingly apparent. **The differentiation of form and function among the various cells of one complete cellular aggregate** was then established, which, in turn, was subordinated to the requirements of the organism as a whole — **the multicellular organism**. The further developmental stages of these organisms may be found in any standard text on evolutionary biology.

Let us now focus our attention on the qualitative differences between the various types of cells that comprise a single multicellular organism. What are the qualitative features determining differences in cellular function and structure? They are as follows:

First, the curvature of the microcosm inside the cell changes, causing the disintegration of complex intracellular organic molecules. The spatial curvature reaches the astral level and the released primary matters begin to flow through the channel to that level. On the astral level, **cells of the astral body** begin to form an exact duplicate of the cell's etheric body (**Fig. 26**) from the same G-matter as the cell's etheric body. This creates **the lower astral body of the cell**. Further changes in cellular function and structure in the lower astral body of the cell results in the curving of its microspace by the value, $\Delta L'$. When this value approximates

$$\Delta \mathbf{L'}_2 \approx \mathbf{-2 \times 0.020203236\ldots}$$

it initiates a secondary curvature of space which obliterates the second qualitative barrier, the barrier between the astral and physical levels of the planet. When the channel breaks through the barrier, **G** and **F** matters flow from the physical to the as-

tral level. Thus **the complete astral body of the cell** is formed out of two kinds of primary matter (**Fig. 27**).

During this process the velocity and amount of the circulating primary matters between these levels keeps changing, giving rise to new qualities, properties, and potentials on the different qualitative levels of the cell.

The next change in the cell's physical structure occurs when the entire cellular system — physical, etheric and astral — alters the microcosmic dimensions by a value of $\Delta \mathbf{L'}_3$, thereby creating a secondary transformation of microcosmic space to accommodate three kinds of primary matters.

$\Delta \mathbf{L'}_3 \approx \mathbf{-3 \times 0.020203236\ldots}$

When this occurs, the third qualitative barrier, the barrier between the planetary physical and first mental levels disappears. Primary matters flow to the first mental level via the cellular channel and **the cell's first mental body** is formed in consecutive order out of the three kinds of primary matters **G**, **F**, and **E** (**Fig. 28**).

The synthesis of the astral and first mental bodies is related to cellular structural changes causing changes in dimension of the cellular microcosm. Consequently, cell differentiation in multicellular organisms involves not only structural and functional differences on a physical level, but also the synthesis of astral and, depending upon the cell, first mental bodies, by various types of cells.

It should be noted that the smallest amount of spatial curvature is caused by a cell on the etheric level, and the greatest amount, on the first mental level:

$$\Delta L'_1 < \Delta L'_2 < \Delta L'_3$$

This creates a difference in the velocity of primary matters circulating between the levels. This fact alone creates qualitative distinctions among cells with different spiritual bodies, as manifested by differences in their properties and functions.

Complex organized multicellular organisms have several types of cells:

a) **bone and cartilaginous tissue cells**, which have **only etheric bodies**.

b) **connective and adipose tissue cells**, having **etheric and lower astral bodies** (from one kind of primary matter, G-matter).

c) **muscle tissue cells of different kinds**, having **etheric and complete astral bodies** (from two kinds of primary matters, G and F).

d) **blood cells**, having **etheric, full astral, and first mental bodies** (from one kind of primary matter, G).

e) **nerve tissue cells of the sympathetic and parasympathetic system**, having **etheric, full astral bodies** (from two kinds of primary matters, G and F) and **first mental bodies** (from two kinds of primary matter, G and F).

f) **nerve tissue cells of the brain and spinal cord** having **etheric, astral, and first mental bodies** (from three kinds of primary matters, G,F,and E).

Special types of cells, **sexual cells**, possess **one half the set of chromosomes in the nucleus and, in addition to their physical bodies, possess only etheric bodies**.

Differences in the speed of circulation of primary matters through the cell's various spiritual levels lead to differences in the speed of the evolutionary development of the cell's various spiritual bodies. Understanding this is essential for understanding cellular aging.

A healthy young cell is in balance on all of its levels. That is, the speed of evolutionary development in the cell's physical, etheric, astral, and mental bodies are all identical to each other (Fig. 28). The primary matters freely circulate between the cell's bodies and the cell is able to function at maximum activity.

A physical cell is constantly exposed to the impact of the external environment. Some of the toxins produced in the process of its metabolism are not released and their accumulation eventuates in the physical cell's becoming increasingly inert and its structure partially destroyed. As this occurs the curvature of the cell's microcosmic dimensions decreases and gradually the secondary transformation between the cell's physical and first mental bodies starts to disappear.

A decrease of the curvature of a cell's microcosmic dimension by the value of $\Delta L''_3$ leads to a narrowing of the

$$\Delta L''_3 = 0.020203236\ldots$$

channel between the cell's physical and first mental bodies and a selective discontinuation of the flow of primary matters to the latter (**Fig. 29**). The further impact of the external environment, coupled with the effects of the toxic products of cellular metabolism, results in a gradual reduction of the cell's microcosmic curvature. When this value becomes:

$$\Delta L''_2 = +\ 2 \times 0.020203236\ldots$$

the flow of primary matters (except for G-matter) to the cell's astral level stops and it loses its properties and qualities. Concomitantly the physical cell becomes dehydrated (**Fig. 30**).

With the complete cessation of the circulation of all cellular substance on the physical level, there is also a termination of the circulation of primary matters between the cell's physical and etheric levels. This is the point of **physical death of the cell** (**Fig. 31**). As the physical cell decomposes, the complex molecules which make up the cell nucleus dissociate into simpler molecules. This leads to a further decrease in the cell's microcosmic dimensions. When that value equals

$$\Delta L''_1 = +\ 3 \times 0.020203236\ldots$$

the original spatial dimension corresponding to the physically solid sphere is restored (**Figs. 32**, **33**, **34** show the different stages of the cell's physical disintegration).

Following the disintegration of the physical cell, the etheric, astral, and first mental bodies of the cell retain their integrity for a while and remain intact by virtue of their shared qualities and the interaction and circulation of G-matter common to

them. The activity of all these processes is a thousand times less effective than when the spiritual bodies were interacting with the physical body. If negative external factors affecting these levels are absent, **the system containing the etheric, astral, and first mental bodies of the cell can continue to exist for a considerable length of time**.

Let us bear in mind that we have been considering the cell of a **multicellular organism with a complicated structure** and, consequently, all the above should be looked at from the standpoint of the organism as a whole, which we will now do.

All processes in multicellular organisms occur synchronously and interdependently. There exists a unified system of cooperation among all the cells of the entire multicellular organism on all levels, physical, etheric, astral and first mental. It is impossible to consider cellular functioning independent from that of the entire organism. If, for some reason, a cell or cell group drops out of the communication system, the entire organism is disrupted. The resultant dysfunctions (diseases) lead to the disintegration and death of the organism. We will examine these processes later.

A healthy multicellular organism is a unified system that operates harmoniously not only on the physical level: the etheric bodies of its cells are also a unified, balanced system, which we will call **the organismic etheric body**.

Likewise, the astral bodies of the cells create their own system on the astral level — **the organismic astral body**. Similarly, the first mental bodies generate an analogous system on the first mental level — **the first mental body of the organism**.

And, in their turn, the physical, etheric, astral and the first mental bodies of an organism constitute a unitary system, which is in effect a living organism — living matter, LIFE. When the unitary nature of this system is fragmented, so is that of the life process, to be restored only when the wholeness of the system is reinstated.

Nerve cells and the brain hold a special place in the system of life. Because of their level of development, nerve cells of the brain have a dominant position in multicellular organismic functioning; they affect, control, and orchestrate the functions of all the other types of cells in the organism. They provide well-balanced functioning of all the cells in an organism's physical body — a necessary condition for the life of the organism and the unity of the physical, etheric, astral, and first mental bodies.

It should be noted that neurons have mental bodies only in some complex multicellular organisms; however, the neurons are developmentally dominant over all the other types of cells in an organism. Each neuron, in particular, and the brain as a whole, in all multicellular organisms, generates an energy field (**a "psi–field"**) that controls all the functions of an organism.

Additionally, the brain, through the psi-field, monitors other functions, without which the life of the organism would be highly problematic. One of these is to keep the functions of the etheric, astral and first mental bodies of an organism in safety and balance. Just as a cell has a protective membrane to shield it from environmental impact, so does each living organism elaborate **a protective shield** — a kind of psi-field

precipitate, generated by its brain and cerebral neurons. This shield protects the organism's physical and spiritual bodies from the negative impact of the external environment and other living organisms.

The other functions of the neurons and the brain are the processing and analysis of information and the reacting to events taking place in the external environment of the organism. This is possible because processes on the upper astral and the first mental levels run several multiples of ten times faster than those on the physical level. On the higher levels of evolution of highly structured organisms, **intelligence** emerges.

In the next chapter we will, in greater detail describe the psi-field. What is its role in the evolution of life, in the evolution of a species? How does nature attain harmony in balancing the population of a species of living organism with the constraints of its ecological system? What is **an ecological system, and what kinds of inner self regulatory mechanisms does it contain?**

Chapter 3. Psi-fields in nature and in the evolution of intelligence

Most living forms from the simplest to the most advanced have a nervous system, the basis of which is the nerve cell or neuron[11]. Nervous systems are distinguished by the number of neurons they possess, the extent of their interneuronal interaction, and the complexity of the organismic structure governed by the neurons. **The more complex** the organism's nervous system **the more complicated its behavioral system** as manifested by its conditioned and unconditioned reflexes. At a certain level of development of the nervous system a new quality arises in living organisms — **realization of their existence and a dawning understanding of the laws of life. The rudiments of intelligence appear. A new quality of life emerges — rational activity. HOMO SAPIENS is an example.**

The qualities and properties of the nervous system are determined by **the number of neurons present, the structure of the nervous system and the quality of its evolutionary development**. In living organisms complex behavioral reactions require **large numbers of mutually interactive neurons while simple behavioral reactions require only a small number of neurons**. It is logical to assume that in order to attain a certain degree of complexity in its interaction with its environment, a given organism needs to have a requisite minimal number of mutually interactive neurons. Similarly, **a minimal number of mutually interactive neurons are necessary for intellectual activity or for certain types of reasoning.** Let us consider the possibilities arising during the evolution of life for creating a system with **the critical number of neurons essential for the emergence of intelligence.**

a) Such a system could develop if the nervous systems of many different organisms join into one single system. The simpler the nervous system of a single member of the species, the greater the number of members that must be united in a single system in order to manifest intelligence.

b) In certain species, the presence of a critical number of neurons in individuals of that species permits the emergence and evolution of intelligence.

For example, biologists conducted a series of experiments on termites. The termites were released into a defined area, and it was observed that their population gradually increased.

Before their population reached a critical number, their behavior was chaotic and senseless. After the population exceeded a certain critical number, the behavior of the termites changed dramatically: their actions now became harmonious and intelligent. Some of the termites began building a mound, and interestingly, they did so simultaneously, from all sides. The construction process was so precise that all the

[11]Even single-celled organisms, such as the ameba, have sensory and motor functions, though they lack a centralized nervous system.

inner tunnels of the mound dovetailed into one another with the amazing accuracy of a fraction of a millimeter. Other termites delivered the materials necessary for construction. Another group supplied the colony with food. Soldiers also appeared, etc. A well organized and adjusted life became evident.

Similar colonies have also been observed in ants and bees. It is interesting that these insects do not live outside their colonies. In their dwellings they maintain a certain optimal microclimate and microflora. The colony regulates its size and assigns the number of individuals required to perform certain tasks, according to its needs. For instance, if a beehive has too many drones, the excess number is destroyed. The sentinel bees admit only members of the hive, etc.

What is the essence of this natural phenomenon? Let us try to find an explanation. The nervous system of an individual insect existing outside of the colony is incapable of performing the complex behavioral reactions regularly observed in the colony. If such functions were genetically programmed, they would be manifest outside the colony as well — to say nothing of the awkward question: **who endowed their genes with such capacities in the first place?**

For complex behavioral reactions to occur in these colonies, a huge number of neurons interacting within a unified system is required. How can this be explained? Nature has found a most original way of solving this problem. The nervous system of each member of a species — termite, ant, bee, etc. — generates a **"psi-system"** which creates a protective shell around the member — since an individual member's reaction are quite primitive and limited (**Figs. 35** and **36**). **When there is a higher than optimum density of termites living in an area, the psi–field generated by each termite begins to destroy the individual protective shields of the other termites** (**Fig. 37**).

When the density of individual termites reaches a value critical for the species, **the individual protective shells completely disintegrate resulting in the creation of a single protective shield common to the entire colony** (**Fig. 38**). Now each individual has an open psi-field and becomes **a part of the shared, unified nervous system of the entire colony**. For each species there is an optimum number of individuals included in each "family" or colony. There is also a minimum number of individuals necessary for the emergence of **a common psi-system** that can form the foundation for the entire train of complicated behavioral reactions that identifies a fully functioning colony. Likewise there is an upper limit of the number of individuals that can make up a functioning colony. The greater the number of individuals truly functioning within the colony, the more complex and sophisticated are the behavioral reactions seen in the colony. What parameters determine the upper limit of the number of individuals sharing a joint psi-field?

a) **the extent of the joint psi-field** which determines the size of physical territory needed for survival, and controlled by the colony; its living space.

b) **the density of the colony's unified psi-field** that is in effect a result of the mixture of all individual constituent psi-fields. This indivisible joint psi-field has **a critical density**. Increasing the density beyond the critical point results in adverse ef-

fects on the colony with suppression of functioning and, ultimately, destruction of individual members within the colony.

c) **incomplete attunement of the individual psi-systems with one another**, which in the case of excessive numbers, may lead to a lack of coordination within the entire colony and make it **non-viable**.

The optimum quantity of individuals in the colony is regulated by the colony itself. Thus, **the psi-system (nervous system) of an individual termite, ant, or bee, is only a single unit in the far larger psi-field of the entire colony**. Similarly, with multicellular organisms it would be correct to consider the entire colony as a **superorganism**, since only this type of a colony is viable and able to adapt to changes in the environment. Individual members of a colony **cannot** act on their own, just as individual cells of a multicellular organism cannot exist alone. The shared psi-systems of a colony can solve fairly complicated tasks that arise in the struggle for survival. This has allowed species possessing such psi-fields to survive and preserve themselves over the course of almost three billion years.

While the superorganismic state is advantageous to individuals of the species that comprise the state, such a system blocks the individual of the species from attaining the level of development necessary for individuation (the separating out of oneself from the surrounding environment). This occurs because of the following reasons:

1. Each individual moves freely within the territory occupied by the colony, so, accordingly, **the interactive force between the psi-field of the individual and that of the shared psi-field of the colony changes constantly**.

2. In contributing to the shared psi-field of the colony each individual utilizes only a neurophysiological "reserve", which is activated when the organism is threatened. Normalization and regulation of individual organismic functions are maintained by other neurons of the central nervous system. **One result of this split in function is a decrease in the life span of the individual**.

3. The interaction between the psi-field of the individual of the species and the shared psi-field of the colony takes place in a volume of space. This does not permit optimum interaction between the individual and the colony because of the constantly changing external and internal conditions of the space dominated by the shared psi-field.

4. The movement of an individual of the species is **random**, making it **impossible for each individual's psi-field to specialize its functioning in the interest of the evolutionary development of the entire colony**.

5. The species is unable to select and preserve significant experience in its entirety from generation to generation because of the short life-span of each individual.

6. The absence of neuronal structures, which would allow the transformation of primary matters and the synthesis of psi-fields with the necessary properties.

7. The inability of an individual's neurons to evolve to a level which provides the qualities essential for the origin of intelligence.

Due to the above reasons the evolutionary progress of these colonies has not taken place and intelligent civilizations of ants, bees, and termites have not originated on our planet. On other planets, however, where other, more favorable conditions exist, it is quite possible.

The nature of termite, ant, or bee colonies is in perfect accordance with the Hegelian theory of the "absolute idea," but there are no other species with permanently active joint psi-fields on planet Earth.

There are, however, species that temporarily function as **superorganisms**. **What is the basis for their existence and what is their evolutionary development?** In most species of living organisms psi-fields are "closed" to a greater or lesser degree. In the evolution of the species, the protective shield of the psi-field of each member served to **buffer it from the influence of psi-fields of other members of the same or different species**. Otherwise, **weakening of the shields could have disrupted the colony's balance, reducing its biological activity and bringing it to extinction. This actually happened to many species in the course of their evolution**. The evolutionary progress of a species is manifested by the flexibility of its reaction and its adaptability to environmental change.

This capacity became rooted and encoded in the genes and passed on to succeeding generations as a starting point for the further evolution of the species. Evolutionary change led to **harmonious changes in the inner world of its constituent members**. Also transformed were the structure and functions of its cells, including the neurons, creating (in the case of positive mutations) conditions conducive to evolutionary development. Every species that survived developed **defense mechanisms, protective psi-field shields**, which created the most favorable conditions for the evolutionary development of each individual of the species.

What, then, triggers the individuals of a species to dissolve their protective shield, share their psi-fields and temporarily become a **superorganism**?

1) When there is a threat of extermination of the entire population of the species by natural adversities such as droughts, floods, earthquakes, etc.

2) When there is a violation of the ecological balance between a species and its environment.

3) When it is necessary for a large segment of the members of a species to migrate over long distances.

With regard to point 2 above, each population has its own territory, its own area of habitation (**S**). On that area a certain number of individuals of the species can live without disturbing the ecological balance of the habitat system (**n**). Thus, a certain quantity of population is constantly maintained by the internal mechanisms of the population itself. What kinds of mechanisms are they? What forces are in action that determine the number of members existing in balanced relationship to their occupied

territory? We can illustrate these concepts with rabbits, where an interesting phenomena was observed when a serious disproportion arose between their numbers and their environment.

Fluctuations in the birth rate of rabbits and the influence of external factors lead to **fluctuations in their population density**. In the case of unfavorable external factors **the population densities decrease and become less than optimum** for other functions ($\mathbf{N^-}$). With the return of a more favorable external situation the birth rate increases and in a while the population density returns to optimum (**Fig. 39**). When the population density **increases beyond the optimum level** ($\mathbf{N^+}$), processes arise within the colony leading to **an increase in the death rate and a decrease in the birth rate**, in time returning the population density to an optimal level (**Fig. 40**). What is the mechanism acting within each population that triggers these effects and **WHO** or **WHAT** sets it in action?

Rabbits eat grass, consuming **the vegetative biomass** that grows on the territory occupied by the population. **The amount of biomass is dependent on the weather, solar activity, the availability of water, etc.** In other words, **a given territory of the surface of the planet can produce only a certain amount of biomass in a given period of time**. By eating the grass, each rabbit decreases the amount of growing biomass. To maintain normal life and health a rabbit will eat a certain amount of vegetative biomass, $m_{(n)}$. The entire population will consume $\mathbf{m_{(n)} \times n}$ amount of the growing biomass. If the population is excessive, there is a definite possibility that the entire vegetative biomass in a given area will be consumed. The area will become a desert, soon leading to the demise of the rabbits.

To ensure the existence of the ecological system over a long period of time, the following condition must be met: **the vegetative biomass reproduced on a given territory per unit of time must be equal in volume or greater than the vegetative biomass consumed by living organisms** — in this case, rabbits. It is logical to assume that, given $\mathbf{N^-}$ number of rabbits and an excess amount of reproducing biomass this would favor an increase in the birth rate of rabbits through a change in several physiological parameters.

However, it is not immediately apparent why in the opposite case, that of an overpopulation of rabbits, there will be a decrease in birth rate and an increase in the death rate. But this does happen even when the vegetative biomass, for a certain time, up to several years, is capable of supporting the life of an $\mathbf{N^+}$ population and a high birth rate. It is difficult for us to imagine that rabbits would consciously reason that they will have nothing to eat in the following year and would therefore cut their consumption of food, or think about regulating the size of their families. What then happens in this case? What functions monitor and regulate the quantity of rabbits and the population of other species living on a given area? Let us try to analyze this phenomenon and understand another enigma of nature.

The psi-field, **ω**, emitted by every individual of a colony is interactive with that of every other member of the colony and affects the processes taking place in each individual organism. Let us suppose that there is an optimum density of the popula-

tion's shared psi-field, which ensures an optimal existence for the individuals of the species and the maintenance of ecological balance.

$$W=\int_{n}\int_{s} k_{(N;S)}\omega dSdN \quad (1)^{12}$$

where

W — is the shared psi-field of the population,

S — is the area of the natural habitat of the population,

ω — is the psi-field emitted by one individual of the species,

k(N;S) is the coefficient of interaction between individual psi-fields within the population.

The colony with a higher than optimum population generates a shared psi-field that is excessively dense while the colony with a lower than optimum population generates a lower-density shared psi-field.

$$\Delta W^{(+)}=\int_{N^{+}}\int_{S} k_{(N;S)}\omega dSdN \; - \; \int_{n}\int_{s} k_{(N;S)}\omega dSdN$$

(2) — (greater than optimum density).

$$\Delta W^{(-)}=\int_{n}\int_{s} k_{(N;S)}\omega dSdN \; - \; \int_{N^{-}}\int_{S} k_{(N;S)}\omega dSdN$$

(3) — (less than optimum density).

An excessively dense psi-field, $\Delta \mathbf{W}^{+}$, depresses the physiological processes of each individual organism.

Hormonal disorders increase and pituitary and thymus activity become blocked, leading to a decrease in the birth rate and a reduction in life span. A psi-field density

[12] The complete derivation of the formula for species self-regulation may be found in Appendix 1.

$\Delta \mathbf{W}^{-}$, that is too low, stimulates the same processes resulting in an increase in the birth rate, etc.

It is precisely the shared psi-field of the population W, generated by all individual species of the population, that is the monitoring mechanism regulating the balance between the population of the species and the ecological system.

The coefficient of interaction, $k_{(N;S)}$, denoting the extent of interaction between the psi-fields within the population is very important. The coefficient of interaction depends upon **the number of individuals comprising a population and the size of the natural habitat occupied by the population**. For most species the important range is:

$$0 < k_{(N;S)} < 1$$

There are, however, situations where this parameter can have a negative value or where it can be larger than 1 (one). Let us consider the natural phenomena that affect $k_{(N;S)}$ causing the values of this parameter to change.

In times of severe drought, when members of different species are in danger of extinction, an interesting phenomenon takes place. All the individuals of the species crowd together, numbering millions, and sometimes billions of individuals (locusts, termites, etc.). These population masses, "superorganisms," with a $k_{(N;S)} = 1$ manifest very interesting behaviors. In this situation the individual psi-field completely disappears and is replaced by the shared psi-field of the entire colony. In the case of rats and mice, they move in a huge mass, overcoming all obstacles to reach a place where there is no drought and where the population can survive. The interesting aspect of this phenomenon is as follows:

1. When the migrating species meets an obstacle like a brook, river, or gully, etc., thousands, and at times, hundreds of thousands fill the obstacles with their bodies and die, while the remaining millions, using the bridge of their own species, continue moving forward. It is interesting that in the superorganismic state the instinct of self-preservation is completely absent. Each individual becomes like the cell of a huge organism that can afford the unnoticed loss of thousands, and, at times, hundred of thousands of "cells" for the sake of saving itself.

2. The migration of the superorganism, of the entire colony, takes place over a distance of tens, sometimes even hundreds of kilometers, to reach territories that are safe for habitation. The migration of this entire mass of living organisms navigates in the correct direction, even though no individual of the species has ever before left its previous territory. **How** does the aggregate of individuals **know which way** to go, or how to get to a region where none of the migrating individuals has ever been before?

Let us try to explain this phenomenon. The rapid increase in temperature, absence of water, and decrease in food supply for several days affect an animal through its cortical receptors, as well as influencing other brain functions, including the individual's protective psi-field, **ω**. Unfavorable natural conditions create a prospect of physical death for any or all members of the entire population in its natural habitat. Because of its limited capacity the brain of a single individual is unable to handle

such a complicated situation. Therefore, in the case of any adverse natural phenomenon, **a change in the condition of the cortex** occurs — **an inhibition of the reflexes which generate and monitor the protective psi-field of the individual**. As the individual's protective psi-field disappears, the coefficient of interaction, $k_{(N;S)}$, becomes equal to one and the individual's nervous system becomes incorporated as a component element in the shared nervous system of the superorganism.

In most species the superorganism phenomenon occurs only in extreme situations. When normal conditions are reinstated, the condition of the nervous system of the individual returns to normal and the superorganismic state is discontinued, $k_{(N;S)} < 1$. During evolution the acquisition of the superorganismic state enabled certain species to survive and adapt to changing states of natural conditions.

In the superorganismic state the cumulative density of the population's psi-fields enables the shared nervous systems to solve qualitatively new tasks, such as orientation in space during migration over long distances. This is accomplished at the price of damage to individuals, who are part of the superorganism. If the condition is not prolonged, after reinstatement of the normal protective psi-field, the organism gradually returns to normal.

The superorganism phenomenon manifests periodically in a number of species. Most of the time it is related to cyclic changes in the climate. An example may be found in the phenomenon of birds migrating across great distances. As ornithological research has shown, in six cases out of ten, a flock of migrating birds is led to a wintering place by young birds making their first flight and unaquainted with the route. What is interesting is that a single bird, even if experienced, or a small group of birds, would never dare to set out for the wintering place alone. They may die of hunger or freeze to death, but nothing can make them embark on such a flight. Why does this occur?

In the course of evolution birds developed the ability to create a superorganismic state. It manifests before the start of the migration period. The basis of this phenomenon is an internal annual biological cycle stimulated by temperature fluctuations (cold spells), diminishing daylight, and reduction of the quantity and quality of available food. The influence of natural conditions leads, within a certain range, to variations in the times of flight. In the spring and summer time, when weather conditions are favorable for such life events as the hatching and rearing of chicks, the brain of each individual creates a protective psi-field providing the most favorable condition for the functioning of the organism as a whole (**Fig. 41**). The annual biological cycle leads to a weakening of the individual's protective psi-field, a necessary condition for the manifestation of the superorganismic state, which in the case of migratory birds, is reduced in intensity to the point of near vanishing by the fall season (**Fig. 42**).

The traditionally offered belief that natural life threatening factors are sufficient to trigger inner annual biological cycles is contradicted by the fact that abrupt temporary cold spells fail to motivate birds to leave for their wintering places, even though some of them, by remaining at home, will die.

Thus, changes in biochemical processes within the cells of an organism (especially in the nerve cells of the brain) trigger changes in the structure of the psi-fields emitted by the neurons and also shifts in the organism's psi-field as a whole. The psi-field changes from a closed to an open structure, i.e. the coefficient of interaction, $k_{(N;S)}$, approaches unity.

In each species of bird, a minimum number of individuals is necessary for the emergence of the superorganism state. In this state a flock of birds (sharing their nervous system) can orient themselves by the sun and stars, compute a flight trajectory, and calculate the optimum rate of travel. In doing so, the shared nervous system in the superorganismic state can work with a number of random factors — the force and direction of the wind, changes in flight velocity dependent on atmospheric conditions, etc. (**Fig. 43**).

An individual of the species would be incapable of performing all of these complicated actions. An individual's nervous system enables it to solve problems related to everyday activities and normal functions of the organism. The degree of development of an individual's nervous system corresponds to the complexity of existing conditions in the habitat of the species. Thus, in the process of evolution, many species developed the ability to create a mutual nervous system of the population as a whole (the superorganismic state) in situations where the capabilities and actions of an individual did not permit it to solve problems encountered in suddenly-developing survival challenges.

The evolutionary process has also created species whose individual members have a nervous system structure capable of solving complicated tasks. Such a structure is a system of billions of interactive neurons, concentrated in one individual. The interaction between neurons comprising this system is maximum and the coefficient of interaction approaches 1 (one). At the same time, the entire system is maximally insulated and impervious to the impact of other psi-fields — (the coefficient of interaction between it and other such systems, $k_{(N;S)}$, approaches zero).

This happens as a result of the protective (insulating) psi-field created by the individuals of the species. Where you have such complex psi-fields, maximum insulation is necessary to permit the acquisition and consolidation of the individual's experience for transmission to future generations **through changes in the genetic code and direct training**. The presence of an individual, complex psi-field, containing billions of interactive neurons, makes it possible to create specialized functions, thus securing life-support processes and related behavioral responses for the processing and storing of information about the internal and external milieu. At a certain stage in the gathering of information and the development of such a psi-system, comes the ability to analyze the information and implement intelligent action and responses to the processes unfolding in the environment.

As this occurs, a large number of neurons begin specializing in the transformation of one kind of matter into another, in the creation of holograms and the synthesis of the individual's etheric, astral, and mental bodies. The synthesis and development of these bodies is only possible at a **particular level of evolutionary devel-**

opment of the cerebral neurons. This happens only in the presence of a critical quantity and quality of information entering the brain through optical, auditory, tactile and olfactory channels via a variety of neural signals.

These signals make a change in the qualitative state of the external and internal milieu of the receptor neurons. The neurons collect this information in aggregates of various kinds of matter**; this leads to quantitative and qualitative changes in organic and inorganic molecules and in the ions contained inside the neurons. Ultimately, the result is a change in the value of the cell's microcosmic curvature. When the curvature reaches a value of $\Delta L'_2$, the qualitative barrier between the physical and astral levels opens**. Primary matters then flow over to the astral level and start the development of **the neurons' astral body** (Chapter 2).

In human beings, a child's brain should absorb a certain critical amount of information, preferably of high quality. A variety of many kinds of information should be absorbed before the age of 4 to 6 years for the overall development of the brain. If the brain does not receive a critical, minimal amount of information by the age of 4-6 years, its neurons fail to fully develop etheric bodies. Only full development of the etheric body can provide the necessary changes in a neuron's microcosmic curvature to open the qualitative barrier between the etheric and astral levels. A brain without a fully developed etheric body **cannot evolve any further**. It can provide all the biologically necessary requirements of an organism, but it would be **impossible to discern any signs of intelligence in the thinking and actions of such a child**. The condition just described occurs in only two situations:

a) When the child's brain **does not receive at least a minimal quantity and quality of information from the external environment, or the quality and quantity of the information that is received is not sufficient to change the qualitative structure of the cerebral neurons**. An example illustrating this point can be taken from the real life cases of the "Mowgli," small children, who, by chance, are raised by wild animals. Their behavior and life style are entirely consonant with the behavior and life style of the animals that nurtured them. When such children are brought into human society, they continue behaving like animals and are never able to acquire human behavioral traits.

b) Sometimes it is **impossible** for a child's brain **to develop normally because of genetic problems or the existence of various types of infections and their secreted toxins present in the cerebrospinal fluid**. This results in inborn or acquired mental retardation with varying degrees of severity. In some cases there is no development at all, or when it does occur, it is so far below normal that it also eventuates in mental retardation.

However, if the brain receives the required quantities and qualities of information in time, the necessary change in the microcosmic curvature of the neurons is effected and the qualitative barrier between the etheric and astral levels disappears. This initiates **the formation and evolutionary development of the astral bodies of the cerebral neurons**. Upon completion of the development of the neuronal astral body, the microscopic curvature of the neuron changes by a value of $\Delta L'_3$ (Chapter 2)

and the qualitative barrier between the astral and mental levels of the cerebral neurons disappears.

Conditions are then established **for the formation and evolution of the mental bodies of the neuron**. Along with the evolution of each of the bodies (etheric, astral, and mental) the properties of the physical neurons change significantly as does the ability of the brain to store and process information that is coming to it from the internal and external worlds.

The evolutionary development of psi-fields is associated with the establishment of self awareness and individuality. Such individuals obtain the ability to affect nature in a variety of ways and develop various methods of exerting that influence. They then reconstruct their habitat into forms more suitable for themselves, unfortunately, too often disturbing the ecological balance in doing so. There is a maximally acceptable limit of the capacity of an ecological system to tolerate intervention. When it is exceeded it usually results in a violation of the system's integrity.

Intelligence in the full meaning of the word can be identified as such only when the evolutionary development of the species leads it to an understanding of its unity with nature and to activity which does not result in the destruction of the ecological system, but rather effects harmonious changes in nature without throwing it off balance. Ultimately this causes periodic evolutionary changes in ecological systems.

Several species of living organisms on planet Earth have complex psi-fields. All are classified together in one subclass — the higher mammals. Two particular species, **dolphins** and **humans**, have a special place in this subclass. Human beings (Homo Sapiens) are the only intelligent species possessing a complex psi-field whose evolutionary development **has been and still is accompanied by the changes they make in their ecological system**. Unfortunately, rather than a state of harmonious unity, human beings are in a "state of war" with nature, characterized by infrequent armistices. It is to be hoped that harmony will be achieved in the near future.

The special position of man in our ecosystem is an immediate consequence of his behavioral peculiarities. First of all, he is a social, upright creature. The availability of a pair of "free" limbs, i.e. arms — enabled man during his evolutionary development to create work tools, the improvement of which eventually resulted in the ability to affect and change the environment according to human needs.

His social form of existence allowed man to solve another problem — the accumulation and transmission to subsequent generations of needed information (first in oral and later in written form). This knowledge, this accumulated experience, was not just the product of a human family, or tribe, but, in keeping with the evolution of the human race, stemmed from thousands, hundreds of thousands, in fact, millions of people over many generations.

The amount of accumulated information grew larger and larger from generation to generation as the qualitative content of the information kept changing. As they absorbed the experience of prior generations, the newer generations moved to the next,

higher level of evolutionary development. When mankind invented various kinds of mass information media — print, radio, television, the internet, etc. — an abrupt qualitative leap in development took place. This effect has been particularly noticeable in the last one hundred years. It is an enormous amount of anecdotal or observed information that is basically correct and is, in each particular instance, essentially true and consistent with reality. But the theoretical explanation of observed natural phenomena is based upon an erroneous logical foundation resulting in **"rational man's" bringing nature to the brink of catastrophe**. If the catastrophe does happen, the result will mean not only the death of mankind as a species of living nature, but the virtual devastation of the entire ecological system.

Once again it should be pointed out that a **human being is not born intelligent, but rather has only the potential of becoming intelligent**, provided that the brain absorbs all the necessary amounts of information in the form of knowledge and experience, of beliefs, laws, and moral codes accumulated by mankind. On the basis of all this information and his particular thought processes man then synthesizes his own "Ego."

Where there is a harmonious evolution of the personality, a human individual can obtain a level of consciousness and capability consistent with **a true and harmonious merging with nature**. A question arises at this point — if many species of living organisms have acquired the ability to create a superorganismic state in critical situations in the course of their evolution, **is it possible to effect this phenomenon in humans and, if so, under what conditions**?

A human being has a complex psi-field containing fourteen billion neurons, which, if appropriately developed, provides the ability to solve practically all problems that he might encounter. In addition, the neurons of the human brain possess the highest possible degree of interaction between themselves. Such a quality of interaction is impossible to achieve in the superorganismic state for the same reasons that it manifests in termites, bees, and ants, etc. In such a situation the superorganism, the hegelian "absolute" is not a developmental advance, but is, for many reasons (to be described in a later volume), a regression. Additionally, in the normal development of a human being the protective field created by the brain provides total insulation of the human psi-field from external influence. And in most cases it takes a push outward from within the psi-field to open that protective shield. This, however, requires two conditions:

a) A **high concentration of people occupying a small space. When this occurs each person's psi-field impacts those of the people around him, and, conversely, the surrounding psi-fields adversely affect the individual's protective shield.** As a result, **a person's capacity to derive protection from his psi-field is substantially reduced**.

b) When the protective capacity of the human psi-field is diminished, **an emotional instability is experienced within, usually negative in tendency**. When the emotional level reaches overload, **the protective field becomes unstable and breaks down: every person in the group ceases to be an individual, as his brain surren-**

ders to the "mob mentality". So all one has to is just "steer" the raging mob in the "right" direction and it blindly follows all the directives of whoever is manipulating it. This is how psi weapons manifest and operate.

In the history of mankind — both ancient and modern — we see many examples of such behavior. Interestingly, **in mob mentality, a human being often does things he would never consciously do in a normal state**. Most often the behavior exhibited in a mob even contradicts his ethical and moral principles.

If we then consider the fact that man uses **only three to five percent of his brain neurons for conscious activity**, while the other ninety-five to ninety-seven percent remains dormant, it is easy to imagine the following situation:

If, by chance, someone **possesses a "key" to access that ninety-five to ninety-seven percent of dormant brain power and knows how to open the "door," he alone, or a group of perpetrators, can control and manipulate countless numbers of people**. When this happens, those exposed to such control feel nothing at all, act blindly and fail to understand **why** and **what** has made them behave so irrationally.

It is a very powerful and horrendous weapon, much worse than radiation, bombs, chemical or bacteriological weapons, because people subjected to its effect do not even suspect that they are under its influence. Thus, there is perfect impunity for **those who use it**. Most often they are the ones who **try to convince their victims that the very idea of such an influence is absurd and nonsensical**. They also wax very persuasive, **hiding behind false ideologies and false logic — knowing full well what they do**. **The psi weapon is the most inhuman of all existing in the world today, and if it ends up in the hands of evil forces, we can all get ready to believe in the imminent approach of "judgment day."**

Thus, in humans, the superorganism state can arise spontaneously — from the impact of negative emotions inflaming a crowd of people, or from psi weapons aimed at the human psi-field, for the purpose of control and manipulation.

Summary

Nature formed three types of psi-fields of living organisms.

1. A permanently functioning complex psi-field consists of a colony of individuals of the same species. The size of such a colony is contingent upon the complexity of the problems faced by its psi-field and the complexity of each individual's psi-field. The psi-field of a single member is an open system: $k_{(N;S)} \rightarrow 1$. The psi-field of the colony is composed of a superimposition of psi-fields of all individuals comprising the colony. The shared psi-field of the given system is a constantly functioning superorganism, a closed structure under conditions normal for its existence. Examples are termites, bees, and ants, etc.

2. A temporarily functioning complex psi-field consists of a colony of individuals of the same species. The size of the colony depends upon the complexity of the problem needed to be solved by the shared psi-field and upon the complexity of the

individual members' psi-fields. The reasons for the emergence of such temporary superorganismic psi-fields, are as follows:

a) A capability acquired during the process of evolution ensuring the survival and evolution of the species. Example: migratory birds.

b) Sudden, life-threatening changes in natural events: this applies to practically all species. Normally the psi-field of each individual is a closed system: $\boldsymbol{k_{com(N;S)} \rightarrow 0}$. Under the impact of changing natural events that threaten death to the entire population, the structure of each individual's psi-field changes. The closed system transforms into an open system: $\boldsymbol{k_{com(N;S)} \rightarrow 1}$. Upon reestablishment of natural conditions that are normal for that species, the structure of each individual's psi-field reverts to its original state.

3. A permanently active complex psi-field is an interactive accumulation of several billion neurons concentrated in one individual. The psi-field of each neuron is an open system: $\boldsymbol{k_{(N;S)} \rightarrow 1}$, whereas the shared psi-field of all neurons is a closed system: $\boldsymbol{k_{com(N;S)} \rightarrow 0}$. Interacting neurons create a shared protective psi-field ensuring the stable functioning of the system as a whole. The human psi-field possesses the capacity for self-perfection and evolutionary development. From the day of birth the human brain actively absorbs all information accessible to its sensory organs. Along with the accumulation of information a qualitative change takes place in the structure of the original neurons. The attainment of a certain quantitative level of information induces a qualitative leap in the evolution of the human brain. Individuals begin to differentiate themselves from their surrounding environment, acquiring the ability to understand processes in themselves and in nature. The human brain becomes an instrument for studying and understanding nature and for self-perfection.

The amount of information necessary for a qualitative leap in development cannot be accumulated during even a thousand life times. This is the aggregate experience of hundreds of generations, millions of people. Only the absorption of all the information accumulated by mankind can give the human brain the ability to advance in its evolution.

In attempting to give meaning to these phenomena, one may well ask: if the psi-fields regulate processes within each species, in both normal and extreme conditions of existence, what mechanisms, then, regulate processes taking place in the ecological system as a whole?

Chapter 4. Formation of the ecological system of planet Earth

The first life appeared in the primeval ocean for a variety of reasons (Chapter 2). Most crucial was **the absorption and neutralization of lethal fractions of solar and cosmic radiation by sea water**. Of equal importance was **the rich harvest of simple and complex organic molecules, generated by atmospheric electrical discharge from the existing concentration of inorganic molecules present in the sea**.

The sea water was constantly being saturated by gases from the Earth's primitive atmosphere, an atmosphere consisting of large quantities of carbon dioxide, sulfurous gases, nitrogen and hydrogen. These were the essential conditions for the beginning of life. (See Chapter 2 for a detailed description of corresponding qualitative processes which took place in the primal ocean).

After viruses, **the first living organisms were simple monocellular organisms. Through the process of photosynthesis these early life forms were able to absorb the visible spectrum of the sun, thereby synthesizing within themselves the organic compounds necessary for their vital activity**. To achieve photosynthesis, these primitive organisms harvested the needed organic compounds entirely from sea water, where, as we noted above, they were created through atmospheric energy discharge.

Photosynthesis is an evolutionary advance that gave an enormous impetus to the development of life on the planet.

The first vegetable organisms — still very primitive — utilized only a fraction of the sunlight radiating onto the ocean's surface. Phytoplankton, for example, absorbs about **1.5– 2%** of radiated sunlight. The growth rate of vegetable biomass is a function of its Biological Eefficiency Factor (BEF).

Phytoplankton conquered the primitive ocean, which then became the home of the simplest monocellular plants. During photosynthesis phytoplankton absorbed carbon dioxide dissolved in sea water while concurrently releasing oxygen as a by-product. At night (when photosynthesis was impossible), phytoplankton lived on the organic compounds which were synthesized during the day.

These compounds served to replenish the organism and maintain its structural integrity and activity. Additionally phytoplankton was able to break down organic compounds and, in the process, (the opposite of photosynthesis), absorb the oxygen dissolved in the sea water as a by-product of photosynthesis. Thus, **during any process where organic compounds dissolve, oxygen is absorbed and carbon doxide is released simultaneously as a by-product**.

Animal microorganisms (except for Green Euglena and similar organisms) **could not arise in the primeval ocean, even under ideal conditions, until phytoplankton and later, more developed plants, saturated the ocean's surface with sufficient oxygen to support their life**. (Animal organisms evolved from the same

simple plants we have just described). Therefore, **the first and simplest ecological system can be considered to exist only from the moment when living organisms capable of absorbing organic compounds appear. An ecological system is nothing but a balance between all forms and species of living organisms and their habitat**.

With the appearance of multicellular living organisms, **the next qualitative stage of life development began**. Perfecting themselves in a merciless struggle for survival, multicellular organisms, initially vegetable organisms, acquired new qualities, such as **the ability to distribute and assign various life-support functions to groups of its constituent cells**. Thus cell specialization, geared to the biological needs of the entire organism, came into being. This greatly enhanced the cellular activity of the multicellular plants that were capable of photosynthesis. The **BEF**, already up to four percent in algae (the multicellular plants of the primeval ocean) increased as well.

With the appearance of multicellular plants the next growth spurt of biomass began in the primeval ocean. This in turn, **led to a rapid rise in the number and diversity of animal multicellular organisms. The animal multicellular organisms by virtue of their tremendous activity, in their struggle for survival, began to dominate the plants**.

Nevertheless, they still were dependent upon the quantity of biomass created by plants through the process of photosynthesis. Gradually, three main groups of animal multicellular organisms emerged:

1) **herbivorous**;

2) **carnivorous** (consumers of herbivorous animal organisms);

3) **omnivorous** (consumers of both plants and animals).

The evolutionary development of plants led to the robust development of animals. The ecological system became more and more sophisticated and diverse. What supported the harmony and balance between all species of living organisms inhabiting an ecosystem, and how was this effected?

Psi-fields, emitted by every living organism, became the basis of the mechanism of self-regulation of the entire ecological system. Self-regulation evolved within every species of living organism. (This mechanism was explained in detail in Chapter 3). Gradually the oxygen from the sea water created by photosynthesis reached the atmosphere, and increased in concentration. During atmospheric electrical discharges a certain amount of atmospheric oxygen was transformed into ozone, eventually creating **an ozone layer** of the planet in the stratosphere. The ozone layer became a protective screen against the harsh solar and cosmic radiation. As time went by, the ozone layer gradually grew larger and finally became thick enough to reflect the greater part of that radiation. **Conditions for the development of life on the planet's land surface were thus created**.

Plants then began to explore the land, at first developing at the outer edge of the mainland, then moving deeper and deeper into it. Wolf-claws and club moss (Lycopodia), horse-tails and Filicinae were the first conquerors of the land. The first terrestrial plants developed in an atmosphere far richer in carbon dioxide than the sea water, a fact which lent further impetus to the development of photosynthesis. By this time, the **BEF** of these plants had reached five percent.

Animals followed the plants onto the land. The first terrestrial animals originating in the course of evolution were amphibians, choanate, or lobe-finned fish. The formation of an ecological system on land had begun. The development of life upon land had a much more vigorous character. Gigantic horse-tails, ivies and ferns created an enormous quantity of vegetable biomass. Only large animals were able to consume such huge plants. A time of giants had come to the Earth. After amphibians, mammals, which had a variety of evolutionary advantages, appeared on the land and soon began to dominate.

A reign of giants — dinosaurs — prevailed for hundreds of millions of years. But, as a result of photosynthesis, enormous amounts of atmospheric gases were removed from the atmosphere to build up the planet's biomass, and the concentration of atmospheric carbon dioxide in the atmosphere began to decrease. The carbon dioxide amassed in the atmosphere before the appearance of life, was gradually used up by giant plants over hundreds of millions of years.

The "reserve" of the planet's carbon dioxide began to decrease, though it continued to enter the atmosphere through volcanic eruptions and as a product of the metabolic activity of living organisms. Little by little, Earth's tectonic activity diminished, and less gaseous material, including carbon dioxide was released into the atmosphere. As a result, the giant plants on land began to die off and ultimately their quantity became insufficient to sustain the dinosaurs whose numbers also gradually declined.

Better developed vegetable organisms — gymnosperms, whose **BEF** had reached seven percent, began to replace the giant plants — ivies, horse-tails and tree-ferns. While conditions were favorable for their growth and development, the giant plants had inhibited the development of the gymnosperms, but with the death of these giants, gymnosperms obtained the freedom to develop.

These plants were significantly smaller than their predecessors. The animals, which replaced the reign of giants were rather modest in size as well. Yet, from the standpoint of evolution they were better developed animals. The descendants of dinosaurs and amphibians became inhabitants of the new world, as the survivors of the former dominant species.

The emerging angiosperms (enclosed-seed organisms) which had a **BEF** of up to ten percent, had emerged by then, but did not supplant the gymnosperms, as the latter had done earlier with ivies, horse-tails and tree-ferns. They simply adapted to different climate belts of the planet. Also, the gymnosperms proved to be better adapted to severe climatic conditions and, therefore, inhabited the cooler portions of the planet.

In the course of formation of the Earth's flora, its fauna developed abundantly as well. **The latter type of ecological system has lasted up to the present day**.

Nature has not yet been able to create a vegetable organism with a **BEF** exceeding ten percent. In the early stages of the development of our ecosystem the appearance of new types of plants led to an energetic transformation of the animal world, but with the emergence of the angiosperms this process came to an end. In the beginning, unoccupied ecological niches were filled with new species that appeared in the course of evolution, but after all **the vacant niches were taken, a new species could survive only by displacing another from its established base**. This resulted in a qualitative evolution of animals on the planet. This evolution then moved to still **another qualitative level**, the normal development of which led inevitably to **the emergence of intelligence**.

This is precisely what occurred and still occurs on many planets of the cosmos. An intelligent species, **Homo Sapiens**, also appeared on our planet Earth. But **HOMO SAPIENS CAME FROM OUTSIDE** our planet and populated an ecological niche that was previously occupied by Neanderthals, who appeared in the natural course of the evolution of life on our planet. By virtue of the fact that Neanderthals were more numerous, better adapted to earth conditions and much stronger, Homo Sapiens, in his initial stages of development, was totally unable to evict them by himself. Extraterrestial agents did this for him and artificially transplanted man into a biological niche on Earth. In a later volume we will discuss how this happened and the agents responsible for it.

At this point I should like to emphasize just one specific attribute of **living organisms**, which they must have in the course of their evolution in order **to develop intelligence**, namely, they **must be omnivorous**. The reason is simple. Any organism, without harming itself, can break down a certain amount of externally ingested poison. The critical dosage is idiosyncratic for each individual of the species. If exceeded it will compromise the various functions or systems of the organism. For example, **vegetable poisons**, which can be found, in some degree, in every plant, **negatively affect the cells of neurons**. So it is no accident that cells, similar in structure to neurons, cannot be found in plants. The doses of vegetable poisons eaten by herbivores, that is, plant-consuming animals, exceed the amount that these animals are capable of metabolizing. The excess of vegetable poisons adversely **affects the evolution of neurons and makes it impossible for neurons of these animals to acquire a mental body**, without which the manifestation of **a certain level of intelligence is impossible**.

Carnivorous animals ingest such enormous quantities of ptomaine and other animal poisons that they are unable to metabolize them completely. Ptomaine so profoundly alters their metabolism that the cerebral neurons of these animals cannot receive the requisite quantities of elements essential for the formation and development of mental bodies.

Omnivorous animals ingest both vegetable and animal poisons with their food. But the quantities eaten are within the range that allows them to completely break

down the ingested poisons. This permits conditions favorable for **the development of neurons with mental bodies, and therefore intelligence**.

Thus, **the vegetable forms of life are the foundation for any ecological system**. What, then, determines the quantity of vegetable biomass in an ecological system? How much vegetable biomass is necessary for its survival? The basic and decisive features for any ecological system are the following:

a) the strength of solar photonic radiation (sunlight) reaching a unit of surface per unit of time, within a certain allowable range, which if exceeded, is lethal to all living creatures.

b) the BEF of vegetable organisms, that is, the fraction of sunlight absorbed by plants and utilized for the synthesis of organic compounds.

c) the quantity of plants of different types.

d) the quality of plants of one type.

Expressed mathematically we have the following equation:

$$\int_0^s \int_0^i \int_0^j W(t)\, \Psi(ij)\, n(ij)\, ds\, di\, dj = m^{ij}{}_p(t) \quad (4)$$

where:

$\mathbf{m^{ij}{}_p(t)}$ — equals the quantity of vegetable biomass synthesized per unit of time by all plants growing on a unit of the planet's surface. Herbivorous animals consume a portion of that vegetable biomass, and in turn, synthesize from it, after appropriate metabolic activity, the following amount of biomass:

$$\int_0^s \int_0^a \int_0^b m^{ij}{}_p(t)\Psi(ab)n(ab)dsdadb=m^{ab}{}_p(t) \quad (5)$$

where:

$\mathbf{m^{ab}{}_p\ (t)}$ — equals the biomass of herbivorous animals, synthesized per unit of time per unit of area.

Carnivores, in turn, consume herbivorous animals. The biomass that carnivorous animals synthesize from the quantity of herbivores eaten, after appropriate metabolic processes, yields the following:

$$\int_0^s \int_0^c \int_0^q m^{ab}{}_p(t)\Psi(cq)n(ab)dsdcdq=m^{cq}{}_p(t) \quad (6)$$

where:

m^{cq}_{p} (t) — equals the biomass of carnivorous living organisms, synthesized per unit of time per unit of area. We should note that all species, which consume both living and dead herbivorous organisms, are classified as carnivores. We may now construct a mathematical model of an ecological system, using the above-mentioned equations (4), (5) and (6), as follows:

$$m^{ij}_{p}(t) + m^{ab}_{p}(t) + m^{cq}_{p}(t) = const_{\Psi} \quad (7)$$

Biological research has shown that ten percent of the biomass from plants becomes biomass for herbivores and ten percent of the biomass from herbivores becomes biomass for carnivorous animals.

We may render this equation in a slightly different but more obvious form by extracting the common factor from the brackets and substituting the value for each item:

$$\int_{0}^{s}\int_{0}^{i}\int_{0}^{j} W(s)\Psi(ij)n(ij)dsdidj[1+\ldots+\ldots]=const_{\Psi} \quad (8)$$[13]

From equation (8) we note that the entire spectrum of nature's living forms, as well as their qualitative and quantitative composition is determined by:

a) the amount of solar radiation striking a unit of the planet's surface per unit of time;

b) the **BEF** of vegetable organisms, i.e., the extent to which sunlight is absorbed and transformed into vegetable biomass. The coefficient **Ψ(ij)** is distinctive for each type of plant and can vary within the following range:

$$0 \leq \Psi(ij) \leq 1$$

The most developed types of vegetable organisms on Earth have a **BEF** of ten percent. Thus, the complexity and diversity in form and type of a given ecological system depend, primarily, on two parameters: **W(s)** and **Ψ(ij)**

Let us consider that the amount of solar radiation striking a unit of the planet's surface per unit of time changes very slowly, and gradually diminishes from the moment of life's origin on the planet to the present time; and that, furthermore, during this same time period a more sophisticated, more perfected ecological system replaces the simpler system. We may then arrive at the following conclusion:

The BEF is the basic parameter determining the diversity of form and type which constitute an ecological system. Equation (8) is the fundamental law of the evolution of living matter. Moreover, the regular appearance of diverse life forms (not just proteinaceous) on many different planets obeys this fundamental law.

However, solar radiation is not the only source for the origin of life, as it occurred on planet Earth; other currents of primary matters around other planets in

[13] The complete derivation of the formula for ecological systems may be found in Appendix 2.

space will also lead naturally to the appearance of distinctive life forms. **The diversity of life forms is natural**.

Aside from that, the conclusion from equation (8) is that the possibility exists for artificially creating plants with a **BEF** that exceeds that of the angiosperms, (the enclosed seed-plants), which possess the highest **BEF** on the planet, i.e., ten percent.

This will provide us with the key to controlling the evolution of our ecological system, the opportunity to create qualitatively new ecosystems, and the solution of many environmental and other problems which beset mankind!

Chapter 5. Evolutionary cycles on planet Earth: the multidimensionality of life

The qualitative distinction between living and non-living matter is **in the structure of organic molecules which make up the cells of any living organism**. These molecules are constantly oscillating and changing the microcosmic dimensions of the cell: **When a certain critical value in dimension is reached, the qualitative barrier between the physical and etheric levels disappears and primary matters flow from the physical to the etheric level**. A duplicate of the cell on the physical level is formed on the etheric level out of **G** matter (mechanism explained in Chapter 2). This process is the synthesis of **the etheric body of the cell**.

At a certain stage of evolution multicellular life forms appear, every cell of which functions autonomously for the benefit of the organism as a whole. All such cells stem from an abundant pool of the simplest, most primitive cells. A well-balanced system is one in which all cellular functions are coordinated into a physically solid system — **the physical body of the multicellular organism**. What happens, then, to the etheric bodies of the cells of a multicellular organism?

The basis of life for a monocellular organism is **harmony between the cell's physical and etheric bodies, characterized by a circulation of primary matters between the two levels**. For a multicellular organism the basis of life is not only harmony between the physical and etheric bodies of each separate cell, but **a harmony, as well, between the etheric bodies of all the cells which make up that organism**. In other words, the etheric bodies of its cells create a solid system on the etheric level as well — **the etheric body of the multicellular organism** (**Figs. 44** and **45**).

Life is a balance of the processes between an organism's physical and etheric bodies. As multicellular organisms evolved, their physical cells began to specialize in various functions necessary to support the life and vitality of the entire organism. With further evolution, the cells performing the various functions were modified both internally and externally. This led to the appearance of **different types of cells in an organism**. The difference in structure of these cells led to a change in their influence on their cellular microcosm: As a result, certain types of cells acquired new spiritual qualities. The change in microcosmic size resulted in **the opening of the qualitative barrier between the cell's physical and astral bodies**. The union of the astral bodies created by each cell resulted in a unitary astral body of the entire multicelled organism.

An astral body formed from one kind of matter, **G**, is called **the lower astral body** (**Figs. 46**, **47**), and that formed from two kinds of matter, **G** and **F**, is called **the higher astral body** (**Figs. 48**, **49**).

Before the development of the higher astral body, the evolution of living matter passed through many evolutionary stages and, in the process, created a multitude of diverse organisms and forms. A few species managed to acquire higher astral bodies;

those whose neurons formed a solid concentration within the organism's skull, **a brain**, consisting of many billions of neurons (a human brain has fourteen billion).

All species with higher astral bodies belong to the class of **superior mammals**, i.e., **elephants, dolphins and homo sapiens**. And only members of the human species, because of their special qualities and brain development have the opportunity to acquire other spiritual bodies on different planetary levels (i.e., **first, second, third, and fourth mental bodies**).

As the human brain assimilated and qualitatively interpreted the immense volume of information accumulated by the human race during its entire existence on planet Earth, the brain changed in structure and function (mostly on the etheric and astral levels). At the same time the etheric and astral bodies of the neurons became denser, "heavier." With the organism's acquisition of a complete (lower and higher) astral body this led to the disappearance of the next qualitative barrier, that between the physical and first mental planes of the planet.

At this point, the synthesis and development of a first mental body begins (**Figs. 50** and **51**). The process involves the consecutive synthesis of three forms of primary matter, **G**, **F**, and **E**. With man's further harmonious spiritual development, the first mental body increases in density, which, at a certain stage of development, leads to an opening of the next qualitative barrier, that between the physical and second mental levels of the planet. This permits the elaboration of a second mental body from four consecutive kinds of matter — **G**, **F**, **E**, and **D** (**Figs. 52** and **53**).

Later, under similar conditions of harmonious development, a third mental body evolves from five kinds of matter, — **G**, **F**, **E**, **D**, and **C** (**Figs. 54** and **55**), and finally a fourth mental body develops, from six kinds of matter — **G**, **F**, **E**, **D**, C, and **B** (**Figs. 56** and **57**). All qualitative barriers of the planet now disappear for a person with the complete development of the fourth mental body. **For that person's spirit, the planetary cycle of evolution ends and the stage of cosmic evolution begins**.

The Yogis mistakenly believe that "Nirvana" — the consummate union with the "Absolute" — represents the highest evolutionary achievement of man. In reality this is only the end of the Earth cycle of evolution and the beginning of the cosmic cycle of evolution. We may liken it to when a person, about to leave home, pauses in the hallway, and after opening the door decides that his journey is over. **This idea halts a being's evolution and development**.

In the course of man's proper evolutionary development, the structure of his spirit approximates ever more closely that of his physical body (Figs. 44-57). This is the state most conducive for the functioning of the physical and spiritual bodies as **a single harmonious unit**. The presence of mental bodies endows man with enormous mental power. Such power enables one to influence the process of nature on both local and planetary levels; by thought alone to influence and control the processes unfolding in human society; to see and hear the past, present and future; to influence and shape the future of an individual or the entire human race; to travel in space and traverse the entire universe. The power of thought alone makes all these things possible and many, many more. Such power can only develop in someone with **innocent**

thoughts, a pure soul, and a generous, open heart — because only a person following the correct evolutionary path, the path of benevolence, can attain those higher levels.

Evil, despite its illusion of power, is **unable to evolve**. The imaginary power of evil lies in its pervasiveness: the majority of people cannot perceive what is happening on other levels of reality[14].

Thus, we have examined all the stages of evolutionary development encountered in living organisms, from the simplest to the most complex, on all levels of the planet — etheric, astral, first, second, third and fourth mental levels. Every living organism possesses an essence or spirit. The minimum number of spirit bodies is one (the etheric) for simple, primitive organisms, and the maximum is six (etheric, astral, first second, third, and fourth mental bodies) for the most highly evolved humans. As long as any organism is alive, its physical body and spirit constitute a unity. What happens, then, to the spirit of an organism when it dies either from natural causes or through violence? What happens to the spirits of all living organisms who are still alive today or of species that existed during the four billion years of life on Earth?

Millions of living species have emerged and disappeared as life evolved on earth. A certain number of them still occupy ecological systems on the planet today. But billions and billions of species existed and became extinct. What happened to the spirits of those organisms? Perhaps spirits perish with the death of the physical body! If so, under what conditions? If not, what happens to them after the death of the physical body and where do they go? What happens to them after death? What becomes of the spirits of extinct species and what happens to the spirits of species still living in Earth's ecological systems?

Let us examine this interesting phenomenon of nature and turn over the next page of **life's mystery**.

At the moment of death the protective psi-field of an organism is destroyed. The primary matters released during that process erupt, opening a number of qualitative barriers between the various levels of the planet. An energetic channel opens and the spirit of the deceased organism moves through that channel to the planetary level identical to its structure. The spirits of the simplest living organisms (the majority) move to the etheric sphere. The spirits of all other organisms, depending on their level of evolutionary development, move to different sublevels of the planet's lower astral sphere. The spirits of more highly developed species move to various sublevels of the planet's higher astral sphere. Only the spirits of a small number of humans move to the earth's mental spheres.

When living organisms conceive, an energetic eruption, matching the energy potential of the organism, opens a channel through a number of barriers between the planetary spheres. The channel then pulls in a spirit genetically consonant with the

[14] The highest power in the universe reveals itself in its harmonious and benign influence on natural processes and human affairs.

species. After the energy of the eruption occurring at conception dissipates, the barriers close. Following conception the spirit creates a physical body for itself out of the biomass it now occupies, the more complex organisms requiring longer periods of time. The cycle is closed... (**Fig.58**).

What happens, then, to the spirits of millions of living species that vanished from the Earth in the course of evolution? What happens to the spirits of extinct species at the moment of death? Like the spirits of all other living creatures, they move through the opened channels to the appropriate levels of the planet. But for them there will be no energetic eruption at conception because there is nothing on a physical level to create that eruption. The extinct beings **have lost their biological foundation**. Without a physical body none of them are capable of active evolution because only the disintegration of physical tissue provides the currents of primary matter necessary for the vitality and development of the spirit. Lacking a physical body, a spirit is left without a source of energy. Whatever energy it can utilize from its spiritual bodies is only enough **to preserve its integrity**. The spirits of extinct species, trapped in this dilemma, adapted to other levels of existence in a variety of ways. We will call such spirits **"astral animals."**

For sustenance some astral beings took **to exploiting and devouring other spirits with weakened or non-existent protection**. Others sucked energy from spirits of extinct organisms as well as from the spirits of organisms which were still alive and developing on the physical sphere of the planet.

Other extinct animal spirits learned **to create a symbiotic relationship with organisms that are still living and developing on the physical level** (Chapter 6). Often the extinct spirits are structurally much simpler than the creatures they symbiotically inhabit. However each partner in the relationship benefits from this kind of adaptation. At the moment of human conception a spirit enters a fertilized egg (a zygote), which is a simple one-celled structure. But a spirit with a complex organization has a qualitative structure much different from that of the simple zygote. Because of this disparity, the rate of primary matter flow between the zygote and the spirit is so slow that the spirit would require a lengthy interval to build itself a new physical body from the biomass furnished by the zygote. How then can the problem of the structural disparity between growing biomass and spirit be overcome? Very simply!

Let us take, for example, the development of the human zygote. At the moment of the energetic eruption that accompanies conception, a spirit which is a genetic match to the species of the zygote (human, in this case) binds itself to the zygote. At the same time, one or more extinct animal spirits from the lower planetary levels closest to the (primitive) qualitative level of the zygote also enter. The zygote begins to develop and takes on a physical resemblance to the extinct animal spirit. The presence of the latter greatly benefits the zygote during the spirit's residence within it: the zygote develops until the biomass finally reaches a qualitative level equal to that of the inhabiting animal spirit. At this point, the inhabiting spirit undergoes a process similar to death: an energetic eruption opens a channel to the appropriate level for that spirit and it leaves the biomass. After the first spirit leaves, a new spirit from a

significantly more advanced species, and qualitatively attuned to the growing biomass, enters the biomass. This process repeats itself several times until the spirit, genetically identical to the species of the biomass (human in this case), can penetrate and harmonize with it, to create a physical body for itself in its own image.

All entities involved benefit from this arrangement: the extinct spirits use the developing biomass for a certain period of time, acquiring, in the process, energetic potential for themselves, but also improving and enhancing the development of the biomass host. The spirit with human genetics gains the opportunity to create a new physical body for itself much more rapidly than would otherwise occur. Because its qualitative structure is significantly different from that of the zygote, the more highly developed (in this case, human) species would rapidly reach extinction without this symbiotic process: the evolution of life would simply be impossible; highly organized life forms would not be born and, of course, the appearance of intelligent life would never come to pass.

Other extinct astral beings found different ways to adapt to new modes of existence through the use of so-called **"energetic vampirism."** How does this come about? Let us recall that all living things have a protective psi-field around them that ensures optimal conditions for sustaining multicellular life forms and protecting them from the influence of other psi-fields. In addition, the psi-field holds a large supply of energy derived from the primary matters released from disintegrating food ingested by the organism. When energy vampires find a creature with little or no psi-field protection, they penetrate the shield, invade its spiritual structure and steal a portion of its life energy, the energetic potential generated by the victim's physical body. This hastens the exhaustion and deterioration of the victim's physical body and leads to premature death either violently or from natural causes. Energetic invasion of this kind can be either intermittent or continuous. To effect such penetration, astral beings must break through the qualitative barrier between the physical and etheric levels of the planet, and, in some cases rupture an additional barrier — that between the etheric and astral levels. Only some astral beings have the energetic potential required to acomplish this.

Another factor is the thickness of the barrier, which varies according to the time of day. It is maximum during the day and minimum at night, especially between midnight and 4:00 a.m. Thus most energy vampires are **night predators**. (This phenomenon will be explained in a later volume.) The density of the barrier also depends upon variations in the energetic structure of different places on the planet's surface. In planetary regions of positive geomagnetic influence the barrier between the planetary spheres is most dense and strong, while in regions of negative geomagnetic zones the barriers may be very weak or completely absent, even during the day.

All organisms living within the bounds of such zones are subject to negative influences including the predation of astral vampires. This weakens and exhausts an organism, and may lead to its untimely death if it dwells too long in the negative zone. That is why a person whose bedroom is located within such a zone, sleeps poorly, is easily enervated, and within a brief time succumbs to serious illness, most often can-

cer, due to the deformation of the spiritual structures occurring in weakened zones (Volume 2 covers cancer in more detail).

In summary — spirits of extinct animals, i.e., astral animals, acquired several new qualities in the course of adapting to living conditions on other levels of the planet:

1) the ability to consume and exploit the life energy of organisms having a minimal or no protective shield.

2) the ability to foster the embryogenesis of creatures on the physical level through the successive symbiotic activity of various spirits from different evolutionary levels.

3) the development of energetic vampirism, by means of which spirits of extinct animals invade the physical bodies and spiritual structures of life forms possessing little or no psi-field protection on the physical level.

And so it came to pass that life on other levels of the planet took on novel and somewhat different forms — along with the emergence of some new and qualitatively distinctive ecological systems (**Fig. 59**).

Chapter 6. The evolution of the spirit, the organism and intelligence

The evolution of living matter leads to the appearance of organisms with **complex, multicellular psi-fields**. The development of such psi-systems results, at a certain level of development, in **self-awareness**. Thus, initially there is a primitive intelligence which, when developed, leads to an interaction between intelligent beings and nature. The complexity of a psi-system and its potential for evolution depend upon a critical, minimum **quantity of neurons and their degree of mutual interaction. But, how then, does the brain acquire the ability to think?**

The paradox is that **the brain neurons themselves cannot think**; they simply **provide the substructure for thinking** by generating energetic potentials and elaborating spiritual structures. For thinking on the most primitive level, neurons must have functioning etheric and astral structures on those levels. The process of more advanced thinking takes place on the **neuronal mental level**. But, **the development of the spirit is impossible without the proper development of the physical body**. Let us explore this more thoroughly, because it is the key to understanding the development of intelligence.

We shall begin with the incarnation of the spirit. When the sperm and ovum unite, a channel of energy erupts and penetrates through to the different spiritual levels (**etheric, astral, and mental**) of the planet. In accordance with **the level reached**, a spirit inhabiting that level enters the channel. What factors, then, determine the amplitude of that eruption?

1. The genetics of the parents.

2. The parents' level of spiritual development.

3. The geographical site of the conception.

4. The astronomical orientation of the stars and planets at the moment of conception.

5. The emotional state of the parents at the moment of conception.

6. The presence of any toxins, (such as alcohol, nicotine, or narcotics) in the parents at the moment of conception.

7. The ecological conditions of the environment where conception occurred.

Stronger and healthier genetics in the parents increase the amplitude of the eruption. The surface of a planet has **regions of positive, negative and neutral energies**. Thus, the amplitude of eruption will **depend upon the quality of the energy at the site of conception**. **Positive energy will increase it, and negative energy will decrease it**. There are currents of energy coming from the stars, planets, and space, which **can also be positive or negative**. Furthermore, **different types of genetic structures react differently to the energy currents coming from the Earth and from space**. The same energy currents can have a positive influence on one type of

genetic structure and a negative influence on another. Regions of the planet differ in their energetic make-up and can cause positive or negative influences upon a particular genetic structure. If the parents, at the moment of conception, have deep and strong feelings for each other, their love will produce a powerful eruption of positive feelings, which, in turn, will increase the amplitude of the eruption. If the parents are lacking in such feelings and have only a physical attraction to each other, the eruption resulting from conception will be low in amplitude. When conception is the result of a depraved sexuality, the amplitude will be even lower. Narcotics, alcohol, nicotine and other toxins in the parents' bodies create a powerful negative field, which decreases the amplitude of eruption. When the parents are chronically under the influence of toxins, the eruption is so weak that the channel reaches only the lower astral or etheric level. In that case, a poorly developed spirit will materialize and the child will be mentally compromised. Also, poor environmental conditions result in a weakening of the parents' organism and sex cells thus decreasing the intensity of energetic eruption during conception.

The spirit that enters the fertilized ovum at conception has **a complex structure consisting of etheric, astral and mental bodies**. The zygote (fertilized egg) has **the simple structure of a unicellular organism and possesses only an etheric body** (in addition to its physical body). The qualitative structures of the spirit and zygote are so different that it is **impossible** to harmonize them. The zygote must develop to the point where the qualitative structures of both its etheric and acquired astral body permits it to harmonize with the spirit.

How is this possible? How can human embryonic cells develop through the necessary evolutionary phases? During the process of development of life on the planet, numerous species of living organisms were forced out of their ecological niches by those that could better adapt to the changing conditions (Chapters 4 and 5). The displaced species lost the opportunity to develop on the physical level of our planet, but their etheric and astral bodies still existed on the planetary etheric and lower astral levels, where they were incapable of significant development.

As described in Chapter 5, these species found several ways to accelerate their development. One was through the establishment of a symbiotic relationship with a physical embryo. Spirits at different levels of evolutionary development consecutively enter the embryonic biomass and evolve the embryo to the level where that spirit (which is genetically identical with the embryo) can harmonize with the embryo and create the appropriate physical body. **Butterflies** are the most obvious example of that process in nature. Everyone enjoys the beauty and grace of butterflies, though caterpillars often invoke opposite feelings, like revulsion. How then, does it happen, that the unsightly caterpillar gives birth to the beautiful butterfly? It is achieved through the process of metamorphosis, which is still an enigma to modern biology. Can we shed some light on its solution?

The metamorphosis of a butterfly is one of the most outstanding examples of **the symbiosis of two species in one bio-mass**. A butterfly, before its death, lays eggs, from which caterpillars hatch belonging to the class of Annelids.

Caterpillars, by consuming plants, rapidly gain biomass, which then disintegrates within the cocoon. From that biomass the butterfly's etheric body forms a physical body. Following the formation of its physical body, the butterfly leaves its pupa and the metamorphosis is complete (**Fig. 60**). Butterflies consume nectar and pollen from flowers, then, prior to death, lay their eggs, from which the caterpillars hatch. The cycle then repeats itself.

If butterflies hatched directly from eggs they would be very small and would soon die. For their growth, they need an abundance of food — nectar and pollen, which are difficult to find at that time of year. And, even if they could find the food, such minuscule creatures could not survive. Unable to fly on their own — to satisfy need or whim — they would be swept away by any passing breeze and consigned to an untimely death. Caterpillars, on the other hand, can live on blades of grass, shrubs and trees, voraciously consuming the leaves of plants and rapidly gaining the biomass required to create a butterfly.

Thus, two different species of living organisms can consecutively live in a single biomass. Such symbiosis of species permits the creatures to survive through a life cycle. There are many types of insects which similarly demonstrate the symbiosis of two distinct species, e.g., mosquitos, bees, termites, etc.

The same scenario may also be seen on other qualitative levels of evolution. In their biological development, frogs (amphibians) have two evolutionary phases — tadpole and frog. In the tadpole phase, the etheric body of a fish spirit inhabits the biomass. But the complete transformation of the bio-mass into a fish does not take place because the biomass has the genetics of a frog. The evolutionary development of the fish spirit within the frog biomass continues until the developing biomass attains structural and qualitative levels higher than that of the fish spirit. At this point the etheric body of the fish exits the biomass, which it has developed, and the etheric body of a frog enters. The transformation of the biomass into the image of a frog's etheric body slowly unfolds. First the front, then the rear legs begin to grow, the tail drops off, the internal organs are modified and the external appearance changes. Certainly, many scientists are aware of these phases, but no satisfactory explanation for the process has been forthcoming. Indeed, it appears to be just taken for granted. To say, as does classical biology, that, "ontogeny recapitulates phylogeny" really explains nothing at all. Our natural environment is uniquely rich with life forms and mysteries. All that we need do is look more deeply inside ourselves and into nature, and the solutions to many of its mysteries will be revealed.

Naturally, a question arising in many minds is, "Who or what is responsible for these evolutionary changes and how do they happen?"

The evolutionary development of living nature is reflected in genetics. The etheric body of the symbiosing creature and that of the biomass into which the creature enters are qualitatively identical at the moment they merge. Then, however, their speed of development differs. If the biomass has a more evolved genetics than that of the etheric body of the merging creature, they slowly move out of harmony with each other. At the culmination of this process the etheric body of the symbiosing creature

leaves the biomass to be replaced by the etheric body of a different guest creature, one that is qualitatively more in harmony with the genetic structure of the developed biomass.

At the moment of exit of the inhabiting spirit, energy erupts to form a channel that penetrates the qualitative barrier between the planetary physical and etheric spheres. The guest creature's etheric body moves via that channel from the planetary physical to the etheric level, to be replaced in the biomass by the etheric body of a creature with the same genetics as the host.

On higher levels of life's evolution, mammals and reptiles, the process is somewhat more complicated. During uterine development, mammals have several consecutive replacements of lower-level spirits within the embryonic biomass. The spirit of a creature with a low level of evolution is replaced by one with a higher level of evolutionary development. Replacement continues until the rate of evolutionary development of the guest's etheric body and that of the host's biomass are the same. During this process the physical body of the embryo resembles that of the etheric body of the guest spirit.

What is the process in **human beings**? First we should note that there are two evolutionary phases in humans — **intrauterine and extrauterine**. Later it will become clear why we need this distinction. The spirit of most humans is comprised of several spiritual bodies — etheric, astral, and one mental body. With higher levels of spiritual development there can be several more mental bodies. When the spirit has developed **four mental bodies** its **earth** cycle of evolution is complete.

As mentioned earlier, an energy channel utilized by the spirit to enter the fertilized ovum opens at the moment of conception (**Fig. 61**). The channel disappears after the spirit enters, and the qualitative barriers between the spiritual levels close (**Fig. 62**). The fertilized ovum (zygote) represents the simplest living organism. The qualitative structures of a unicellular organism and the human spirit cannot be in harmony because the structure of a human is that of a complexly organized multicellular organism.

The first thing that happens in the development of the zygote is the rapid multiplication of cells resulting in quantitative growth. This continues until the number of zygote cells reaches the minimum quantity permitting the entrance of the etheric body of a fish — a multicellular organism. Following harmonization, the etheric body of the fish begins to develop within the human biomass. This explains why a human embryo initially resembles **a fish**.

The embryonic cells of a human develop much more rapidly than the etheric body of the fish. Therefore, after approximately one month, the etheric body of the fish leaves the human embryo to be replaced by the etheric body of a species with a higher rate of development, i.e, **an amphibian**. The biomass of the embryo harmonizes with the etheric body of the amphibian, and, concomitantly, embryonic cells disintegrate, specifically those that were previously created in the image of a fish. When this occurs, large quantities of waste cells and the by-products of cellular disintegration enter the mother's bloodstream through the placenta.

This is the most vulnerable time for a miscarriage. Within the third month, for the same reasons as detailed above, the etheric body of the amphibian leaves the embryo. A new eruption takes place and the etheric body of the amphibian is replaced by that of **a reptile**.

Now the embryonic biomass harmonizes with the etheric body of the reptile: embryonic amphibian cells disintegrate, and the waste by-products are released into the mother's circulatory system. After this adjustment the human embryo resembles a reptile and its biomass rapidly gains in volume: The embryo grows from a length of one centimeter at one month of age to 9 centimeters at three months.

During the fourth month of human embryogenesis, the etheric body of the reptile leaves the embryo to be replaced by the etheric body of **a mammal**. The embryo harmonizes with the latter, and again, waste products enter the mother's bloodstream.

In the fifth month the qualitative physical and spiritual structure of the embryo permits the etheric body of **a human spirit** to harmonize with the embryo and enter it. As before, with the disintegration of embryonic tissue accompanying the release of the previous spirit, large quantities of proteinaceous waste materials enter the circulatory system of the mother.

In the sixth month of development the embryonic rudimentary tail dissolves and physically, the embryo takes on the form of the human etheric body, completing the process by the time of the actual birth of a healthy and normal child. (**Fig. 63**).

As noted above, it is not until the fifth month of development that the etheric body of the human spirit enters its embryo and harmonizes with it. Until then there is a qualitative barrier between the embryo and the spirit, which is bound to the embryonic biomass, but cannot enter it. The entrance of the human etheric body into the embryo and the harmonization of the two is made possible because of the consecutive transformations within the biomass of the bodies of **a fish, amphibian, reptile, and mammal, which raise the qualitative structure of the human embryo to a new level**. Thus, **human embryogenesis repeats the pattern of natural development from a unicellular organism to one that is multicellular and complex in organization.**

At the moment of conception, a human spirit bonds to the fertilized ovum and guides embryogenesis for the duration of its development inside the womb. If a miscarriage occurs (most likely at those times when the mother's organism is flooded with waste products from the disintegration of embryonic tissue) then the spirit loses the opportunity to create a new physical body for itself. An energy channel does not appear during miscarriage as it does with the death of a developed human being. Thus, **the spirit would be unable to return to the same planetary level from which it came at the moment of conception.** If it is a highly developed spirit (one with at least one mental body) it will be able to use its high potential to create an energy channel and escape to a planetary level where it can survive. In this case, however, it must give up some of its energy potential and therefore drop down to **a lower level** of spiritual development. A spirit which, developmentally, does not possess at

least one mental body is **easy prey for the creatures living on the etheric and lower astral levels**. This is a fact of life.

Astral animals consume the spiritual bodies of spirits (**Fig. 64**). **As a result the spirit dies**. **The destruction of the spirit means that all evolutionary experience and abilities acquired throughout all incarnations disappear forever. This is EVOLUTIONARY DEATH.**

When a person dies, his spirit moves through an energy channel to one of the Earth's levels and after some period of time it can reincarnate to create for itself a new physical body. In a new body a spirit can continue its evolution. This illustrates the qualitative distinction between the death of a physical body and the death of a spirit. There is great truth at the basis of Catholicism's belief that **abortion is the worst sin of all**. **It is a far more serious breach of natural law than murder. In abortion there is the greatest danger of permanent destruction of the spirit**. It is not simply a matter of removing a relatively unformed piece of physical tissue lacking any human resemblance. **It is a matter of the spirit's being deprived of the biomass that was meant to be used to create a new physical body for itself. In performing an abortion, both the woman and her physician take on heavy karma.**

Abortion ruins a woman's immune system and severely disturbs the balance of her hormonal system. Very often an abortion is the basis for future oncological disease.

Let us return to the process whereby the spirit creates a new body for itself. In order to create a physical body, the spirit must use up part of its energetic potential. When this occurs, its qualitative structure regresses to a lower level of evolution. As the child develops, however, the spirit is restored to its previous, higher level. After birth a child's physical body continues to grow and evolve. Simultaneously its spiritual bodies — etheric, astral, and mental evolve. It is, however, **impossible** for astral and mental bodies to develop normally until the spirit has reestablished its etheric body at the same level as it was at the moment of its entry into the ovum.

This can happen only if the child's brain absorbs an appropriate, minimal amount of information. Information acquired by the brain transforms the qualitative structure of its neurons, endowing it with a new capacity — **rudimentary intelligence**. In order to accomplish this a child's brain must absorb the minimum necessary amount of information during **the first three to five years** of life. This is the time when the restoration of **the etheric body** occurs. If, by that time, the neurons of the brain do not complete the evolution of their etheric bodies it will be impossible for them to begin to evolve **astral bodies**. The brain of such a person **will never obtain the ability to think** even though it may be anatomically and physiologically healthy.

Upon completion of the restoration of the etheric body, the qualitative structure of the brain's etheric structures is completed as well. If the etheric structure of the brain does not develop to a certain critical level, the **brain loses the opportunity to form and develop its astral body and later, its mental bodies**, the very existence of

which gives humans the ability to comprehend the world around them and their place in it. For this reason alone, a child, like a sponge, absorbs all information during his first four to eight years of life without any concern about its origin or significance. He starts to comprehend that information when he **begins to develop the astral bodies of his cerebral neurons**. The window for complete formation of an astral body is fourteen to eighteen years. If by that age the neurons of the brain can evolve to a mental level, then the spirit will develop and restore the mental bodies of the person as well. If, however, the astral body has not completely formed by **the age of fourteen to eighteen years**, **the spirit, in its present incarnation, has lost the opportunity to move to an evolutionary level higher than the one it had before entering the fertilized ovum.** In this case, **the life of this person will only produce a sterile evolution.**

Proper development leads to the formation of **mental** structures of the cerebral neurons and to the attainment of **a first mental body**. When the brain's mental structures develop to the same qualitative level as possessed by the spirit before entering the biomass, **a person will acquire previously inaccessible memories of his spirit and of previous incarnations, such as when and where he used to live, who he was, and what he did in past lives.**

With proper development in prior years, **a mental body will be completely formed by the age of thirty to thirty-three years** (**Fig. 65**). If a person's development was harmonious and complete, his etheric, astral and mental bodies will create **a harmony** among themselves. That harmony creates a qualitative spurt in the development of a person's spirit. Such a person rapidly starts to evolve spiritually, and consecutively acquires **second, third, and fourth mental bodies**. The development of superior mental bodies gives an individual tremendous spiritual and mental powers, which **allow him to heal others, to profoundly influence nature, and to "see" and affect the past and future.** The power of such an individual can influence not only the fate of an individual, but even the fortunes of a nation, or civilization.

The mental power of that person can affect inorganic nature as well, modifying the weather or an ecological system within a limitless range. But, unfortunately, just a few people in the entire history of mankind managed to reach this extraordinary level of development. **Buddha, Krishna, and Jesus Christ** all had it to some degree. Unfortunately, they were misunderstood and rejected by the people of their time, only to be made into gods afterwards.

All three **left planet Earth in their physical bodies and achieved immortality**, but their knowledge and theories were distorted. Sometimes this occurred out of ignorance, sometimes there was a deliberate perversion of the essence of their message. Religious cults were created, and still exist, to worship these extraordinary individuals. But, as Jesus often cautioned: "***Then, if any man shall say unto you, Lo, here is Christ, or there; believe it not. For there shall arise false Christs, and false proph-***

ets, and shall shew great signs and wonders; insomuch that if it were possible, they shall deceive the very elect."[15]

Millions of people follow the proclamations of the false prophets and cult leaders, sincerely believing in their decency. If all those people could hear these sayings from their source they would be aghast at what has become a horrible perversion of the truth.

The real teachers were called **The Great Enlighteners**. Using the power of their intellect and spirit, they penetrated the mysteries of the universe and wished to bestow all the treasures of their knowledge upon mankind. It was not their fault that people refused to accept their knowledge or perverted its essence into an opposite meaning. Let us again recall Christ: "***That seeing they may see, and not perceive; and hearing they may hear, and not understand.***"[16] However, the people of that time were not in the least to blame. The distortion of truth and inability of others to correctly comprehend the knowledge of the Enlighteners have to do with the laws of the evolution of the entire civilization.

The evolution of civilization, like the evolution of the spirit, has certain stages in accordance with processes unfolding in our universe. The Great Enlighteners knew the objective laws of the cosmos, and of civilization's development. It is no accident that their eyes were full of grief and sorrow. What are those laws about and why were these great souls unable to help the people of their time? Let us try to understand it.

To do so we must return to the laws of the evolution of the spirit. The consecutive restoration of the etheric, astral and mental bodies to their level of development prior to the spirit's entry into the biomass, and their further development, depend upon the consecutive acquisition of etheric, astral, and mental structures by the neurons of the brain. Genetic imbalance, disease, and inflammatory processes of the brain and spinal fluid in infancy can compromise the development and restoration of these structures.

If the etheric structure of the neurons in a child's brain is not restored the brain will remain dormant forever, resulting in varying degrees of mental deficiency. If genetic disturbances and/or inflammatory processes are moderate there may be an incomplete restoration of the spiritual structures, with weakening and slowing of the development of the astral, and later, mental structures of the brain. We should note, that for the harmonious development of these structures, it is necessary that primary matters circulating through the spiritual bodies stay **in qualitative and quantitative balance**. **The three currents that establish this balance in normal development are:**

1. **Primary matter currents which form the etheric body**, the spiritual basis of the qualities **of activity and will**.

[15] New Testament, Matthew, Ch.24, verses 23 and 24, King James Version.
[16] New Testament, Mark, Ch.4, verse 12.

2. **Primary matter currents which form the astral body**, the spiritual basis of **emotional states**.

3. **Primary matter currents which form the mental body**, the spiritual basis of **intelligence**.

In brief, these are **the currents of Will, Heart, and Intelligence**. **Their balance, forming a golden triangle, is the basis for the harmonious development of an individual's personality**. **A lack of the currents needed for the formation of a full etheric body will result in passivity and lack of will. A lack of the currents that form an astral body, will lead to a variety of emotional disturbances. A lack of the currents forming a mental body will lead to deficient intellectual development.**

There will also be a shift in the proportions of the primary matters that determine the various aspects of intelligence and a resulting imbalance in intellectual functioning, so that instead of a healthy rounding out of the personality the individual will be skewed in his intellectual preferences and inclinations.

Thus, a balance of the currents of Will, Heart and Intellect is crucial for full development. As long as it exists, a person's entire organism, including his brain, will be well protected against external intrusion and manipulation. The average person uses approximately **three to five percent of his brain, the remainder (ninety-five to ninety-seven percent) being unavailable to him**. The remainder becomes usable only when a person moves to the evolutionary level of the highest mental planes. **This is the spirit's evolutionary reserve.** We will reveal its origin and nature in a later volume. For now, let us note that in addition to great potential benefits, the evolutionary reserve holds great dangers to man, as well. What is the nature of that danger?

When the primary matter currents of Will, Heart, and Intellect are in balance, the brain possesses **a powerful energetic protection from any external psi-influence** at any stage of its development. The relative balance of the currents may be graphed in the shape of a triangle (**Fig. 66**). It is almost impossible, or at least very difficult, to manipulate the brain of one whose currents are balanced. In order **to control a person through his psi-field, i.e., to make him a BIOROBOT, one must first disrupt the harmony of these currents.**

If one of the currents is somehow weakened, then the other two will increase proportionally and the harmony between the three will be disrupted. **This will permit an external entity to influence the unused portion of the brain's neurons (ninety-five to ninety-seven percent), thereby manipulating the subconscious, and through it, the conscious mind.** The target will not feel, see, or hear anything remarkable. **He will behave as if acting on his own free will, while in reality he is executing someone else's program, without even realizing that he is being coerced.** It is **impossible** to implement this robotization on the level of the spirit because **the etheric, astral, and mental bodies are not reactive to such stimuli.**

During the development of an organism, the physical body sustains the spiritual bodies by transforming available primary matters. Tissue disintegration on the physi-

cal level releases these matters, which are then utilized to create and evolve the etheric, astral, and mental bodies of the spirit. The physical body has antennae for absorbing primary matters directly. Humans possess **seven of these antennae, or chakras. This corresponds to the number of bodies one must create in order to complete the Earth cycle of evolution so that one can begin the cosmic cycle of evolution.**[17]

Openness of **the sexual chakra** (orange, Fig. 66) is necessary for the development of the **etheric body**, which determines a person's **physical strength** and the energy level available for all **activities**, including sex. We will call the currents for the development of the etheric body **the currents of Will.**

The solar plexus chakra (yellow) mediates the development of **the astral body**, which determines a person's **emotional make-up** and creative abilities. Let us call the currents for developing the astral body **the currents of the Heart.**

The heart chakra (green) implements the development of **a first mental body**, which determines the level of a person's **mental development** and **the scope of his intellect**. We will call the currents for developing a first mental body, **the currents of Intelligence.**

When **harmony exists between the currents of will, heart, and intelligence, i.e., harmony between the etheric, astral and first mental spiritual bodies, a person cannot be manipulated** (Fig. 66). Closing or blocking any one of the seven chakras will disrupt the spiritual harmony and evolution of etheric, astral and mental bodies in varying stages of development.

Let us think about which currents would have to be blocked, which chakra would have to be closed, in order to manipulate or robotize a person. If we close a sexual chakra the currents of Will are weakened and the etheric body will be unable to develop fully. We may wonder, "Of what value to anyone, even those with negative intention, is someone who is weak and incapable of taking action?" The answer, of course, is "None" (**Fig. 67**).

If we close a heart chakra the currents of Intelligence will be weakened. The result will be a physically strong, emotionally aggressive, but mentally inferior person (**Fig. 68**). Such a person could well prove dangerous.

If we close a solar plexus chakra, the currents of the Heart will be weakened. In this case we will have a physically strong, tough, efficiently thinking person, but one who is emotionally deficient with minimal creative abilities (**Fig. 69**). Such a person would be readily manipulated into becoming **a perfect biorobot**, would he not? — a person ready and eager to follow any order with the full power of his mind minus any conscience. Anyone wishing to manipulate a human being for his own selfish purposes could not ask for a more perfect puppet. Thus, **the various means of blocking the solar plexus renders man into compliant robot.** The frozen hardness of the robot is reflected in many folkloric tales depicting characters with hearts of iron, ice, or stone — e.g., "Stone Heart", "The Ice Queen", etc.

[17] For more on this subject see Volume 2.

Apart from robotization, blocking the solar plexus can shrink the astral body or even stop its development. **The resulting disproportion of primary matter currents disrupts and blocks evolutionary development.** It does not matter in the least who perpetrates the robotization: their goal is to control people through their subconcious. Later on we shall return to the problem of the robotization of individuals and of the human race. For now, let us continue our study of the normal development of man and his spirit.

The cells of the physical body regenerate several times over the course of a lifetime. Different types of cells, such as blood, nerves, glands, gonads, lipids, and connective tissue, cartilage and bone have different rates of regeneration. Human blood cells are created by red and yellow marrow and are constantly being reproduced (a necessity for their functioning). Bone cells reproduce once every fifteen years. All the other cells are regenerated within intervals of less than fifteen years.

Therefore, **all the cells in a person's body are replicated every fifteen years. This means that the cellular age of a fifteen-year-old boy and of a ninety year old patriarch are THE SAME**, despite dissimilarities in their appearance. The fact of the matter is that **the aging process is a function of disharmony between the physical body and the spirit bodies**, rather than of aging of the cells. There are hundreds of theories regarding aging, but none of them provide a complete understanding of the phenomenon. By comprehending the mechanisms of aging we will come to an understanding of the possibility of **physical immortality**, the fantasy that has excited human minds for so many thousands of years.

What then, is the reason for aging? The answer is — there is a difference in the speed of evolutionary development between the physical and the various spiritual bodies. When a spirit enters a fertilized ovum, it acquires a physical body corresponding to its level of development. In creating the physical body the spirit uses up some of its energetic and evolutionary potential. This means that at the moment of birth the spirit drops down to a lower evolutionary level than it occupied at the moment of conception. The potential obtained from the spirit by the physical body permits the progressive development of the spiritual bodies through the first three decades of life. Due to different rates of evolutionary development there is, at first, a restoration of the etheric body commensurate with the level the spirit occupied at the time of its entering the ovum. Once the etheric body is restored, the restoration of the astral body begins. Once the astral body is restored, the restoration and further development of mental bodies begin. At a certain time in this process, the rate of evolutionary development of the physical, etheric, astral, and mental bodies becomes equal. A harmony is established between the various bodies, a time when the person's intelligence and creative abilities can peak. At that time the circulation of primary matters between the different bodies is maximally balanced.

The rate of evolutionary development of the spiritual bodies is faster than that of the physical body. This difference increases the longer a person lives (Fig. 65). Furthermore, the speed of development of the various spiritual bodies **is different** for each, leading, in time, to differences in their qualitative structures. When this occurs

the harmonious circulation of primary matters between bodies is disrupted. The quality and quantity of the energy flowing from the physical to the spiritual level changes.

When the differences become very large, the flow of certain kinds of primary matters to the astral and mental levels comes to an end. This process was described earlier on the cellular level in Chapter 2. (A cell with etheric, astral and mental levels is shown in Figure 28).

The etheric body of a cell is formed from a single kind of primary matter, shown in orange, the astral body from two kinds of matter, shown in orange and yellow, and the formation of the first mental body from three kinds of matter shown in orange, yellow and green.

An imbalance in the harmony of matter flow between the different levels results in insufficient quantities of matter reaching the levels necessary for the development of the astral and first mental bodies. As shown in Figure 28, only one kind of matter (shown in red) gets through to these levels and is of no value for their evolution. The nourishment of these levels is cut off, and their development comes to an end. Only the etheric body continues to develop, albeit with a weakened source of potential. **The loss of nourishment to the mental and astral levels leads to compromised thought processes and memory loss.** This is often seen in the elderly and senile as a regression to childhood behavior. The channel between the physical and etheric bodies slowly narrows and the energetic flow sustaining the evolution and life of the etheric body stops. The physical body is unable to nurture all cellular levels and **physical death follows when all the spiritual bodies have lost compatability with the physical body.**

An eruption of energy at the moment of death ruptures the individual's protective shield creating a channel through which **the spirit**, composed of the etheric, astral and mental bodies, exits the physical body (**Figs. 70** and **71**). The amplitude of that eruption depends upon the level of spiritual development reached by the individual at the moment of death. **The higher the level attained during the lifetime, the higher the planetary sphere to which one ascends after death.** If a person, through his lifetime, developed to the level of acquiring mental bodies, he goes to the mental sphere of the planet (first, second, or third mental level). If he has completed the Earthly cycle of evolution and his spirit possesses etheric, astral, and all four mental bodies**, it can penetrate all the planetary barriers, thus escaping from the planet and even the solar system. But, unfortunately, this rarely happens. The completion of the Earth cycle of evolution is only the beginning of cosmic evolution.**

In the yogic philosophy there is a concept of the spirit merging with the "Absolute," the state of Nirvana, as the highest achievable phase of spiritual evolution. But, **the state where all qualitative barriers of the Earth disappears does not signal the end of man's evolution. It only means the first cycle of development is complete and the cosmic cycle of development can now begin.** Standing on the threshold of a new, qualitatively different level of evolutionary development, should only inspire growth, not complacency and self-immobilization. We shall return to this matter later.

For now, let us explore in more detail what happens to a person at the moment of death. If, during his life he has acquired only etheric and astral bodies, after death his spirit moves to the astral plane of the planet. We should stress, however, that **the astral level, itself, has two sub-levels.** What are they?

A person, who has developed a complete astral level composed of two forms of matter (Figs. 48 and 49), will move to **the upper astral level** after his death. In Christianity this level is called "HEAVEN" (**Fig. 72**). Attainment of this level after death is possible only if one has not personally acquired **a heavy burden of "karma"** by perpetating sin or negative deeds during his lifetime.

What is karma? Let us consider a striking example of a heavy karmic burden. A person, for reasons of his own, deliberately kills someone who has **not completed his full development at the time of death.** As a consequence, at death the victim's spirit moves to a level lower than the one that it may have achieved had he lived. This is a **violation of the Law of Life**.

The killer is fully responsible for the victim's loss. Also, in order to kill, a murderer has to become enraged enough to be capable of killing another person. When this happens, currents of negative energy move through the perpetrator's physical, etheric, and astral bodies, flooding the astral body and **transforming** it. The astral body changes, but unfortunately for the worse. Negative emotions can feed only that part of the astral body consisting of a single kind of primary matter (the lower astral body). If the perpetrator's astral body were composed of two kinds of primary matter (thus constituting a higher astral body), **the latter would be destroyed, because negative emotions are not compatible with the structure and quality of the higher astral body.**

Consequently, only the lower astral body develops to an extreme and hypertrophies within the person (Figs. 44 and 45). When an individual kills repeatedly, only negative lower astral currents flow through his astral body.

After death a murderer's spirit can attain only the lower astral level of the planet. Only extinct species, such as dinosaurs and various types and classes of predators, inhabit that level (**Fig. 73**).

Usually such a spirit, if its protective shield is very weak or totally lacking, becomes an easy prey for astral predators. In Christianity **the lower astral level is referred to as "HELL"**, where sinners atoning for their sins, are tortured by devils, etc.

If someone commits a crime that cuts short the evolution of another, but manages to have sufficient spiritual protection for himself, astral predators will be unable to attack him (**Figs. 74**, **75**). However, in his next incarnation the astral body of his spirit will be deformed, which will distort the development of his physical body and manifest as one or more of a variety of very grave illnesses (such as cancer), i.e. **"karmic diseases."**

In addition, on regression to the lower astral level, the perpetrator's deformed astral body is vulnerable to the penetration of currents of primary matter.[18]

These currents serve as **the entrance for creatures from the lower astral sphere, which penetrate into the structures of his spirit and suck out his life energy. Astral vampires can live only upon the energy of others, therefore they do their best to keep their victims alive, but in a weakened condition.**

Very often people with negative karma have strange dreams of being hunted and fleeing from menacing creatures. What does this signify? What are these creatures? Why do they appear only in dreams? What happens to a person and his spirit when he sleeps? Let us address these questions by examining **the nature of sleep** and its functions.

The physical body of a person is the source of potential for the spirit and its evolution.

Biochemical processes, taking place inside the organism split the complex organic molecules obtained from food into simpler compounds. Through the circulation of the blood the simple compounds are utilized by all the cells of the organism, where their disintegration is completed. As a result, organic molecules disintegrate into their original primary matters, which begin to flow from the physical to the spiritual planes. The spiritual bodies accumulate their potential by absorbing primary matters corresponding to their qualitative structure. A reversal of flow of primary matters from the spiritual to the physical levels occurs when their concentration on the spiritual levels reaches saturation. **The circulation of primary matters between the physical and spiritual bodies, is, what we know as LIFE.** Simultaneously the physical body creates the necessary energetic potential for the development of the spirit and its bodies.

The developing bodies of the spirit evolve the physical body through currents of primary matters circulating down from the spiritual to the physical levels. The more dynamic that process, the heavier the burden on the physical body becomes. With the splitting of complex organic molecules, excessive amounts of toxic by-products accumulate in the organism, which if not cleared out, will kill the organism. The human organism, like that of any other life form, has its own cleansing system, consisting of a group of organs and metabolic systems. An organism can purify itself maximally only when it is no longer absorbing new amounts of poisons and toxins that are produced during metabolism.

Every organism has the capacity to neutralize and expel **a certain quantity of toxins** every day. The daily tolerable amount of neutralized poisons varies per individual, and even during one's life it continuously changes. When an organism constantly works without sufficient rest, the concentration of negative substances in-

[18] The proportion of the seven primary matters are different in each spiritual body. When the organism is functioning on a low astral spiritual level it will be vulnerable to the entrance of that specific proportion of primary matters found on the low astral planetary level.

creases proportionally. When the concentration of poisons becomes higher than the organism's tolerance, "free", non-neutralized toxins begin to destroy the organism itself, rapidly rendering it non-functional.

Thus all the cells of an organism must rest in order to be relieved of toxins that accumulate during the day's activity. This occurs when a person **sleeps**, when the spirit leaves the confines of psi-field protection and travels outside the body. By drawing on the energy accumulated from the activity of the physical body, the spirit **opens up qualitative barriers between the planetary levels, then, depending upon the level of its evolutionary development and the conditions of its physical body, it can travel to the etheric, astral, or mental planetary levels**. If the spirit, for some reason, travels to a lower astral or etheric level, it becomes "prey" for predatory astral animals inhabiting these planes. It is similar to a person finding himself in a jungle swarming with crocodiles, snakes, lions, tigers and other predators for which a human is nothing but food. In the same way a spirit, moving to the lower astral level, becomes welcome fodder for astral beings.

In physical reality, an individual can extricate himself from danger by escaping in a car, taking refuge in a shelter, or using some kind of weapon. But a spirit entering the low astral plane while it travels outside the physical body during sleep can only be saved by creating an energetic shield around itself, making it difficult for astral beings to penetrate. If the spirit fails to do this, it must return to its physical body, where it has more powerful protection. Often the threatened sleeper awakens in a cold sweat, remembering a nightmare of falling into a deep, bottomless abyss. Such an abrupt return of the spirit into the physical body is **a protective reaction, saving the spirit from death**. If the spirit cannot return to its body, it will become the prey of astral predators. In that event the individual will be diagnosed as having **"died in his sleep."** People mistakenly believe that this is an easy death. But very often this kind of situation also leads not only to death of the physical body but to **death of the spirit** as well.

What is sleep? What really happens to a person's brain during sleep? The human brain possesses two operational states:

1) A state of wakefulness in which the physical body and the bodies of the spirit are in close and lively interaction. At this time the biopotentials of the brain undergo rapid change and often show wide variations in amplitude.

2) A state of sleep, in which the spirit leaves the confines of the organism's energetic protection. At this time neuronal activities markedly decrease with a slowing and diminution of amplitude of the brain biopotentials.

When a person is tired, many toxins accumulate in his body for which he requires adequate rest and sleep. When a person falls asleep, his brain cannot switch off immediately, by shifting abruptly from one operational state to another. All the systems of the brain need time to prepare for the departure of the spirit. Thus, early in the sleep cycle the brain continues working for some time with the same activity it had before the onset of sleep. After that the stage of actual falling asleep begins (**Fig. 76**). At this point the brain changes its state of functioning so that the spirit can leave

the confines of the physical body's energetic protection (psi-field). This is associated with a slowing of biophysical parameters (Stage 2, **Fig. 77**). When the spirit leaves, all neural processes slow down (Stage 3, **Fig. 78**). After the spirit has completely left the body neural activity reaches its slowest rate of activity (Stage 4, **Fig. 79**).

In this state the brain is not yet ready for a quick return of the spirit into its physical body. But certain situations may arise, when the spirit, escaping from astral predators, must quickly enter the body's protective psi-field. Or, when in a life-threatening situation, a person must quickly awaken himself and be prepared for action. In such cases the brain returns to its normal activity only after some period of time following the entrance of the spirit. And only someone whose brain and organism can quickly return to action escapes falling victim to either astral or earthbound predators. In modern times, except in war, it is unlikely for there to be situations where there is excessive danger from "earthly" predators, but sensitivity in sleep saves many people from astral predators.

But why does the brain not completely shut down when the spirit leaves the body? The continuing activity at this time is made possible because of evolutionary changes. After the complete departure of the spirit from the body, the muscles responsible for eye movement are periodically activated (REM sleep). Neural signals from the eyes reach the brain, activating the appropriate zones of the cerebral cortex (occipital optical zones), permitting the brain to remain minimally alert. The signals resulting from the movement of the eye muscles create a state of partial activation of the brain identical to that found when the spirit first departs from the body (Fig. 79). The physical body and brain, then, are waiting for the spirit and are alerted to quickly return to an active state (**Fig. 80**). During normal sleep, activation of the brain in this way occurs many times, continuously returning the brain to a state of readiness.

Before awakening, when the spirit begins its return to the body, the brain abruptly activates itself (Awakening Stage, **Fig. 81**). Then the brain sequentially moves through the same stages as occurred at the moment when the spirit departed, only in reverse order. When the spirit re-enters the body (**Fig. 82**) the individual awakens (**Fig. 83**).

Now let us return to another crucial issue Ð what happens to us at the moment of death. First, the biochemical substances circulating in the body stop moving; the activity of the cortical and sub-cortical neurons of the brain slows down, as the necessary supply of oxygen and other elements dwindles (**Fig. 84**). The cortical biopotentials begin to mimic the state similar to that found when a person falls asleep (**Figs. 85**, **86, 87**). But that is where the similarity ends between states of sleep and death.

With the cessation of the biophysical processes that sustain life, the protective psi-field weakens and begins to disintegrate within the first two to three minutes after death. With the destruction of its protective field the entire potential accumulated by an organism is abruptly released, an energetic eruption ensues, creating a channel that breaks through the qualitative barriers separating the planetary planes. The spirit ascends through the channel to its appropriate level (**Figs. 88,** 70, 71, 73).

The following analogy will serve as an example to provide a better understanding of the process. Let us consider our planet as if it were a seven-story building. The first floor is occupied by living humans, animals and plants with physical and spiritual bodies. On the second floor dwell creatures with only an etheric body. On the third floor, creatures with an etheric and astral body. On the fourth floor, creatures with etheric, astral and first mental bodies. On the fifth floor, creatures with etheric, astral, first, and second mental bodies. On the sixth floor, creatures with an etheric, astral and three mental bodies. And on the seventh floor, creatures with an etheric, astral and all four mental bodies.

When a human, animal or plant dies and loses its physical body, it ascends to the second floor, then the third, etc., depending upon the level of development that it has reached. It cannot exceed its development by going to a higher floor (level), but it can descend to the lower levels. A departed spirit can always return to the lowest level on which it existed while in the physical state, but it must surrender some of its potential to do so. This happens, for example, if it wishes to manifest on a physical level.

After the spirit ascends to its appropriate level, cords remain, binding it to its dead physical body (**Fig. 89**). A cord connects the spirit's mental body with its physical body. During the disintegration of the neural tissue this connection is weakened and **after nine days the mental body is released from the physical body** (**Fig. 90**). The process of organic decay continues and **after forty days the connection between the astral body and the physical body is broken** (**Fig. 91**). After a year, when the last organic insertions into bone have decayed the connection is **finally severed between a spirit's etheric body and the remains of its dead physical body** (**Figs. 92** and **93**).

Only then is **the spirit completely free from ties to the physical body**. Now it is clear why in ancient tradition relatives observe a memorial for the deceased after nine days, forty days and one year. For example, in some Asian countries and in Buddhist monasteries relatives bring the deceased to a monk for purification of the soul. A monk meditates while in the lotus position in the center of a round hall. During the meditation his spirit leaves his body and enters the body of the deceased, elevates it, and ritually circles it three times around the tranced monk's seated physical body. Then, the monk's spirit returns to its own body and the deceased is buried. It is believed that during the ritual the monk releases the mental, astral, and etheric bodies from their attachment to the physical body of the deceased.

Cremation has been practiced for centuries. During burning, all the organic tissue disintegrates and the spirit of the deceased instantly leaves its dead physical shell. Egyptians, Incas, and Guanchos from the Canary Islands embalmed their dead transforming them into mummies. According to their belief, those who preserve their dead shell shall receive immortality when God again appears on Earth. After embalmment, Egyptians placed their pharaohs and distinguished nobles in a special zone in the center of a pyramid. Within that zone, created by the shape of the pyramid, time virtually stopped. Most interesting is that the cells of mummies, when exhumed on site still

had living qualities. As soon as the mummies were removed from the zone in the pyramid, the remnants of life quickly disappeared.

Another interesting fact concerns the preservation of "sacred" monks within a complex of caves in the Kiev-Pechora monastery, located in Kiev. It is alleged that the skulls and bones of these saints, even today, continue to excrete a liquid that monks consider to be useful in healing. The chemical composition of subsoil waters has created the necessary conditions for the natural mummification of bodies, and currents of energy penetrating through the grounds of the monastery have created certain conditions by which the cells of bone remain alive and continue to excrete a secretion. In this case **the spirit stays connected to the remnants of the physical body and cannot move to other levels of the planet. As long as there is organic tissue, the spirit remains connected to its dead physical shell.**

If a person dies a violent death, **his spirit does not complete an evolutionary cycle in a physical body.** In that situation the spirit always moves to a lower level than if death were due to natural causes. When death is violent the energy eruption and channel are weak and unstable.

If a person has committed suicide, **his spirit cannot go further than the etheric planetary level**, and it often becomes food for astral and etheric animals. In some cases, **when a spirit has sufficient protection from its psi-field shield, it continues to survive among the living.** Sometimes such spirits manifest themselves in various **poltergeist** displays, a phenomenon which still remains a mystery to modern science. It is especially important to note that with suicide, if the spirit survives predation by astral beings, it drops out of the cycle of reincarnation, remaining in a "suspended" condition. Whether they know of it or not, it is for good reason that the Catholic Church considers suicide one of the most heinous sins ever committed, i.e., one bearing the heaviest negative karma.

Let us now review what happens to the physical shell after death. When the last organic compounds of a dead physical body disintegrate, **the spirit is totally free and is ready to evolve further.** When an ovum and sperm merge, an energetic channel appears, through which a spirit from the appropriate level enters the biomass**, and the sequence repeats, itself but on a different level.**

In the light of the foregoing, it is very interesting to look at the circumstances surrounding a person's clinical death. At the moment the spirit begins to leave the body (**Fig. 94, 95**, **96**, **97**), it continues to see and hear everything around it. If in an operating room, the spirit may even try to explain something to the surgeons. When the spirit begins to separate from the body it does not understand why others cannot see or hear it, since it sees and hears everybody and everything. The first few minutes after death are very difficult for almost everybody, because the majority of us are absolutely unprepared for what is happening to us. With the destruction of the protective psi-field, a channel opens and sucks the individual's spirit inside (**Fig. 98**). At this moment, the spirits of departed friends and relatives often come to help the spirit move more rapidly and easily into a new state of being. Or, sometimes, highly developed spirits from mental spheres descend to assist the transition, this "birth" to anoth-

er level of existence. Often, in cases where individuals have later returned to life, they report seeing angels, who came to help them.

If doctors manage to return the physical body to at least minimal activity, the brain awakens to a functioning state and the energetic shell is reactivated. When the brain is reactivated it resembles the waking state (Fig. 81), except that the brain wave amplitude and frequency are larger, preparing the brain for the return of the spirit into the body (**Fig. 99**). The spirit re-enters the body as if awakening from sleep (**Figs. 100**, **101**, **102**) and the person returns to life.

Many people, who have experienced clinical death, remember what happened to them. They describe being in a tunnel of light and experiencing an astonishing array of emotional states. Physicians, however, give a simplistic explanation of the entire account, maintaining that, in states of oxygen starvation a person hallucinates. To this explanation the question remains — why do all people who have experienced clinical death, despite wide variations in age, race, religion and educational level, describe the absolutely same hallucination?

Furthermore, if one turns to the history of mankind and looks at the literature of every epoch and nation, there are descriptions of similar cases with the same details (for example, the legend of "Orpheus and Euridice"). Somehow these "hallucinations" are surprisingly strong and enduring through the ages! So, perhaps they are not hallucinations at all, but a genuine, (even physical) process of a spirit's passage from one place to another. Sooner or later everybody, his wishes notwithstanding, will die and personally traverse this passage.

In most cases, if a spirit has not returned to the body within the first seven to eight minutes after death, irreversible processes take place in the organism and the complete death of the physical body follows. Only people who have experienced clinical death and recovered, can describe what happened to them. And, only when they die will all the others — the doubters who never had such experiences — realize how wrong they were for not believing, but unfortunately, it will be too late to tell the living.

Do we really need to be "non-believers?" Surely it would be more fitting and useful if we try to understand what has been revealed. And then, perhaps, as our final hour nears, the dreaded approach of death will not be the daunting prospect it is for so many, many souls!

Appendix 1. Derivation of the Formula for Species Self-Regulation

The habitat area (i.e., the area of the territory occupied by the population of a given species) can support a certain number of animals (n) without disrupting the ecological balance.

Due to a change in the environment of the habitat, fluctuations in the birth rate occasionally result in an increase in population equal to:

$$N^{(+)} = n + \beta$$

where **β** — eguals the excessive number of individuals responsible for the imbalance in the ecological equilibrium.

Given the same death rate and the same negative factors in the external environment, the death rate increases and the number of individuals in the population approximates a negative value.

$$N^{(+)} - (\beta \pm \Delta n) \rightarrow n \quad (1)$$

where **Δn** — designates an insignificant deviation of the population from the optimum value.

If, however, the number of members of the population is less than optimum, then given the same natural conditions, the birth rate will increase and the population approaches optimum.

$$N^{(-)} - (p \pm \Delta n) \rightarrow n \quad (2)$$

where:

$\mathbf{N^{(-)}}$ — is less than the optimum number of individuals in the population,

p — is the number of individuals in the species less than optimum in the population.

What, then, is the reason for such a reaction by individuals to fluctuations in their numbers?

Let us put forward a number of assumptions and analyze them. Consider the equation:

$$m_{(t)} / m_{(n)} n \rightarrow 1 \quad (3)$$

where:

$\mathbf{m_{(t)}}$ — is the vegetative biomass growing on the habitat area in a unit of time,

$\mathbf{m_{(n)}}$ — is the vegetative biomass necessary to support an herbivorous animal (a rabbit) at an optimum existence,

n — is the optimum density of a population for the maintenance of ecological equilibrium.

Given simple reproduction, equation (3) equals one (1).

Given extensive breeding, equation (3) is less than one (1).

Extensive breeding occurs when the vegetative biomass produced by photosynthesis has not been completely consumed by the herbivorous animals.

Equation (3) represents the system in balance. Fluctuations in the population density can be represented in the following form:

$$m_{(t)} / N^{(+)} m_{(n)} < 1 < m_{(t)} / N^{(-)} m_{(n)} \quad (4)$$

What, then, happens within the population that brings equation (4) to (the status of) equations (5) and (6)?

$$m_{(t)} / [N^{(+)} - (\beta \pm \Delta n)] m_{(n)} \rightarrow 1 \quad (5)$$

$$m_{(t)} / [N^{(-)} - (p \pm \Delta n)] m_{(n)} \rightarrow 1 \quad (6)$$

Let us now try to provide a logical explanation for this phenomenon.

Each individual in the species generates a psi-field; the psi-field generated by one individual is **ω**. Psi-fields generated by individuals in the population interact with one another and affect the processes occurring in their organisms. Let us assume that there is a certain optimum density of the aggregate psi-field of the population which ensures optimum conditions of existence for each individual.

$$W = \int_{n} \int_{s} k(N;s)\omega ds dN \quad (7)$$

where:

W — is the aggregate psi-field of the population .

S — is the area of the population's habitat.

ω — is the psi-field generated by one individual of the species.

k(N, S**)** — is the factor representing the mutual effect of the influence of psi–fields within a population.

Let us introduce a new parameter:

$$P_w = [\int_{n} \int_{s} k(N;S)\omega ds dN] / \int_{s} ds = W/S \quad (8)$$

where:

Pw — is the optimum density of the aggregate psi–field per unit of surface area given an optimum population.

In the same way that we obtained equation (4) we can arrive at the following equations:

$$[\int_{N^{(-)}} \int_{s} k(N;S)\omega ds dN] / \int_{s} ds < W/S \quad (9)$$

$$[\int\int k(N;S)\omega dsdN] / \int ds > W/S$$
$$N^{(+)}\ s \qquad\qquad s$$

Writing the same equation in a somewhat changed form we obtain:

$$\int\int k(N;S)\omega dsdN < W$$
$$N^{(-)}\ s$$

$$\int\int k(N;S)\omega dsdN > W \quad (9a)$$
$$N^{(+)}\ s$$

From the equation (9a) we obtain two correlations defining the movement of the population towards reinstating ecological balance.

$$\int\int k(N;S)\omega dsdN \rightarrow W$$
$$N^{(-)}\ s$$

$$\int\int k(N;S)\omega dsdN \rightarrow W \quad (10)$$
$$N^{(+)}\ s$$

From the above equation we can obtain the parameter of the psi-field density change resulting from the change in the number of members of a population.

$$\Delta W^{(+)} = \int\int k(N;S)\omega dsdN - \int\int k(N;s)\omega dsdN \quad (11)$$
$$N^{(+)}\ s \qquad\qquad n\ s$$

$$\Delta W^{(-)} = \int\int k(N;S)\omega dsdN - \int\int k(N;S)\omega dsdN \quad (12)$$
$$n\ s \qquad\qquad N^{(-)}\ s$$

Analysis of these equation allows only the following conclusions:

1) Any one individual's **psi-field (ω) adversely affects** the condition and functioning of another individual's organism.

2) Each individual's **psi-field** also performs a **protective function**: It blocks and/or significantly diminishes the adverse impact of another individual's psi-field.

3) Given a balance between the number of members of a population and the ecological system as a whole, **the protective function of each individual's psi-field neutralizes the adverse effect** of other individuals' **psi-fields** in the population.

4) Given **an excessive density** of the population's aggregate psi-field, (**W**), the protective function of each individual's psi-field neutralizes **only a part** of the adverse impact of other individuals' psi-fields. The non-neutralized impact of psi-fields on the other individuals in the population has a **depressive effect** on each individual's organism, resulting in a decrease in the birth rate and an increase in the death rate.

5) Given **an insufficient density** of the aggregate psi-field of the population (**W**), part of an individual's potential, its "vital force", previously expended on gener-

ating a protective psi-field, may now be used by the organism to ensure a **maximally efficient mode** of functioning resulting in an increase in the birth rate and a longer life span.

Thus, a simple and reliable mechanism of self–regulation of the members of a population is at work for each species without which an ecological system obviously could not exist.

Appendix 2. Derivation of the Formula for Ecological Systems

Let us now take a closer look at the natural factors that affect the formation and complexity of an ecological system.

In the process of absorbing sunlight falling upon their habitat, vegetable organisms create vegetative biomass through photosynthesis. It should be noted that the more advanced vegetable organisms are capable of assimilating greater amounts of this incidental sunlight resulting in the synthesis of a greater volume of vegetative biomass per unit of time. In other words, **every type of vegetable organism has a specific Biological Efficiency Factor, BEF.**

Thus, **the volume of vegetative biomass depends on:**

a) **the amount of sunlight striking a square unit of area per unit of time.**

b) **the BEF of vegetable organisms.**

c) **the number of vegetable organisms of each type.**

Translating all of the above into the language of mathematical symbols, we obtain the following equation:

$$\int_{o}^{s}\int_{o}^{i}\int_{o}^{j} Ws\chi_{(ij)}n_{(ij)}dsdidj = M^{(ij)}{}_{p}(t) \quad (1)$$

where:

$\mathbf{M^{ij}_p(t)}$ — is the amount of vegetative biomass synthesized per unit of time by all of the vegetable organisms growing on a unit of surface.

Ws — is the amount of sunlight falling upon a unit of the planet's surface per unit of time.

$\chi_{(ij)}$ — is the BEF denoting that portion of the **Ws** assimilated and transformed by each plant (i) of a given species (j).

$\mathbf{n_{(ij)}}$ — is the quantity of the vegetable organisms (i) of a given species (j) growing on a unit of surface.

Please note:

$$0 < j \leq n_{j0}$$

$$0 < i \leq n_{0i}$$

where:

$\mathbf{n_{oi}}$ — is the optimum quantity of plants of each species (j) on a unit of surface satisfying the requirements for ecological balance.

$\mathbf{n_{jo}}$ — is the quantity of vegetable species growing upon a unit of surface.

Part of the vegetative biomass is consumed by herbivorous animals. The biomass of herbivorous animals is accordingly synthesized out of this fraction, following its digestion and metabolism.

$$\int_{o}^{s}\int_{o}^{a}\int_{o}^{b} M^{(ij)}{}_{p}(t)\,\chi_{ab}\,n_{ab}\,dsdadb = M^{ab}{}_{p}(t) \quad (2)$$

where:

$\mathbf{M^{ab}{}_{p}(t)}$ — is the biomass of herbivorous organisms synthe sized per unit of time upon a unit of surface.

$\boldsymbol{\chi_{ab}}$ — is the BEF of the herbivorous animals showing that part of the consumed vegetable biomass transformed into the biomass of an herbivorous organism (a) of each species (b).

$\mathbf{n_{ab}}$ — is the number of herbivorous animals (a) of a given species (b) supported by a unit of surface.

Please, note:

$$0 < a < n_{ao}$$

$$0 < b < n_{ob}$$

where:

$\mathbf{n_{ao}}$ — is the optimum number of herbivorous animals of each species (b) living on a unit of surface satisfying the requirements of ecological balance.

$\mathbf{n_{ob}}$ — is the optimal quantity of species of herbivorous animals living on a unit of surface meeting the requirements for ecological balance.

Some of the herbivorous animals are devoured by carnivores. After disintegration and transformation the biomass of carnivorous animals is synthesized from herbivores.

$$\int_{o}^{s}\int_{o}^{c}\int_{o}^{g} M^{ab}{}_{p}(t)\,\chi_{cg}\,n_{cg}\,dsdcdg = M^{cg}{}_{p}(t) \quad (3)$$

where:

$\mathbf{M^{cg}{}_{p}(t)}$ — is the biomass of carnivorous animals synthesized per unit of time upon a unit of surface.

$\boldsymbol{\chi_{cg}}$ — is the BEF of animals showing which fraction of the consumed biomass of herbivorous animals becomes transformed into the biomass of carnivores (c) of each carnivorous species (g).

$\boldsymbol{\chi_{cg}}$ — is the number of carnivorous organisms (c) of a given species (g) dwelling upon a unit of surface.

It should be noted that:

$$0 < c < n_{co}$$

$$0 < g < n_{og}$$

where:

$\mathbf{n_{co}}$ — is the optimum density of carnivorous animals of each species (g) dwelling upon a unit of surface satisfying the requirements of ecological balance.

$\mathbf{n_{og}}$ — is the optimum density of carnivorous species dwelling upon a unit of surface satisfying the requirements of ecological balance.

Drawing on the mathematical symbols introduced earlier (1), (2), (3) we will now be able to represent the mathematical model of the resulting ecological system:

$$M^{ij}{}_p(t) + M^{ab}{}_p(t) + M^{cg}{}_p(t) = const. \quad (4)$$

After the substitution of the values of items into equation (4) we obtain:

$$M^{ij}{}_p(t)\ \{1 + \int_o^s\int_o^a\int_o^b \chi_{ab}\, n_{ab}\, dsdadb + \int_o^s\int_o^a\int_o^b \chi_{ab}\, n_{ab}\, [\int_o^s\int_o^a\int_o^b \chi_{cg}\, n_{cg}\, dsdcdg\ ]\, dsdadb\ \} = const. \quad (5)$$

Then substituting the value Mijp(t) into equation (5) we obtain:

$$\int_o^s\int_o^i\int_o^j Ws\chi ijn(ij)\ [1+\ldots+\ldots]\ dsdidj = const.$$

Thus we have arrived at the equation for an ecological system.

Appendix 3. List of illustrations

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A. Types of Foundation for Logical Thought.

Fig. 1. The logical foundation when there are possible different responses to the same information.

Fig. 2. The logical foundation of numerous intelligent races, who have correctly comprehended nature.

Fig. 3. The logical foundation of several intelligent races: characteristically it takes the form of a rectilinear structure branching into infinite distance.

Fig. 4. The natural logical foundation of humans if unchanged since birth.

Fig. 5. A theoretical model of the logical foundation used by mankind, based on binary logic.

B. Stages of Planetary Formation.

Fig. 6. The Curvature of Space.

The curvature of space creates conditions permitting the merging of two primary matters, A and B.

Fig. 6a. The Mergence of Primary Matters A and B

Primary matters **A** and **B** merge in a zone of space curvature resulting in the formation of hybrid **AB**. The new hybrid is qualitatively different from the original primary matters from which it originated. The new qualities arise from the former qualities inherent in primary matters **A** and **B**. The merging of matters occurs in that limited volume where the parameters of matters A and B are identical.

Fig. 7. The Mergence of Three Primary Matters.

Primary matters, **A**, **B**, and **C** merge within a zone of space curvature, resulting in the formation of hybrid **ABC**. The new hybrid form of matter is qualitatively distinct from its component primary matters, **A**, **B**, **C**, as well as from hybrid **AB**. The merging of primary matters here takes place within a smaller volume than when two primary matters merge because the parameters of three matters are the same only within a smaller space inside the zone of curvature.

Fig. 8. The Mergence of Four Primary Matters.

Primary matters **A**, **B**, **C**, and **D** merge in a zone of space curvature resulting in the formation of hybrid **ABCD**. Such a hybrid takes less space than hybrid **ABC** for the same reason as given above in Fig. 7.

Fig. 9. The Mergence of Five Primary Matters **A**, **B**, **C**, **D**, **E** in a zone of space curvature leading to formation of hybrid **ABCDE**.

Fig. 10. The Mergence of Six Primary Matters **A**, **B**, **C**, **D**, **E**, **F** in the zone of space curvature with the formation of hybrid **ABCDEF**.

Fig. 11. The Merger of Seven Primary Matters **A**, **B**, **C**, **D**, **E**, **F**, **G** in a zone of space curvature leading to formation of hybrid **ABCDEFG**.

Fig. 12. The Formation of Planet Earth: As a result of the consecutive mergence of the seven primary matters, Earth develops in a zone of space curvature consisting of six material spheres of different qualitative and quantitative composition, located within one another:

1. Physically dense sphere
2. Etheric sphere
3. Astral sphere
4. First mental sphere
5. Second mental sphere
6. Third mental sphere

Fig. 12a. Structural and Qualitative Composition of the Earth's Spheres. The chart shows the differences and similarities of the material spheres of the Earth. Mutual qualities of the different spheres create certain conditions for their interaction. The degree of interaction is denoted by a coefficient of interaction:

1. Physically dense sphere
2. Etheric sphere
3. Astral sphere
4. First mental sphere
5. Second mental sphere
6. Third mental sphere
7. Fourth mental plane, uniform (non-curved) space

α_1 — coefficient of interaction between the physically solid and the etheric spheres;

α_2 — coefficient of interaction between the physically solid and the astral sphere;

α_3 — coefficient of interaction between the physically solid and the first mental sphere;

α_4 — coefficient of interaction between the physically solid and the second mental sphere;

α_5 — coefficient of interaction between the physically solid and the third mental sphere;

α_6 — coefficient of interaction between the physically solid and the fourth mental plane, which is the zone of uniform space. In this space primary matters do not in-

ter act with each other to create new qualities orprimary matters. Primary matters remain unrelated and penetrate each other without any effect.

h — a qualitative barrier between the physically dense and the etheric spheres develops as a result of qualitative and quantitative differences between the primary matters.

i — a qualitative barrier between the physically dense sphere and the astral sphere.

j — a qualitative barrier between the physically dense sphere and the first mental sphere.

k — a qualitative barrier between the physically dense sphere and the second mental sphere.

l — a qualitative barrier between the physically dense sphere and the third mental sphere.

m — a qualitative barrier between the physically dense sphere and the fourth mental plane.

Fig. 12b. Completion of the Formation of Planet Earth.

The merging of the seven primary matters created six kinds of substance that are qualitatively and quantitatively distinct within the zone of spatial curvature. These substances create six material spheres located inside one another. Their creation induces a secondary curvature of space, which neutralizes the primary curvature of space in which the primary matters originally merged. After the creation of the planet the disintegration of a certain amount of material substance occurs, releasing primary matters, which freely circulate and thus create conditions for the synthesis of new substances. The entire system is in a state of steady balance.

1. Physically dense sphere
2. Etheric sphere
3. Astral sphere
4. First mental sphere
5. Second mental sphere
6. Third mental sphere

A, **B**, **C**, **D**, **E**, **F**, **G** — Primary matters

C. The Structure of the Microcosm.

Fig. 13. Atomic Stability and Spatial Curvature.

The stability of the atoms of chemical elements depends upon the atomic weight of their nuclei. The lighter atoms have a minimum impact on their surrounding space: therefore they do not survive for very long in a “free” state. They form combinations of atoms that are more resistant to the impact of external influences.

With an increase in the nuclear atomic weight, an atom's impact on its surrounding space increases so that, among other factors, a greater external influence is necessary for them to form new combinations.

When the curvature of space attains a certain critical value, the smallest external influence will induce a change in the atom's qualitative state and disintegration of its nucleus into simpler, more stable nuclei. This is the process of radioactive disintegration.

There is a certain range of nuclear atomic weight necessary for atomic stability. The most stable elements have an atomic weight ranging from 1 to 200 a.u. (atomic units). Gold, with an atomic weight of 198 a.u. is the most stable element. It does not naturally react with other elements.

The elements with an atomic weight greater than gold are increasingly unstable, and, beginning with uranium, radioactive.

There is also electronic stability when the outer electron levels are completely filled as occurs, for example, in inert gases; elements with electronic stability do not interact with other elements to create compounds.

1. The range of atomic weight of the elements which interact with other elements to create new compounds.

2. The range of atomic weight of the elements which only weakly interact with other elements to create new compounds.

3. The lower limit of atomic weight of elements which have the maximum impact on their surrounding space, where even a minimal influence is sufficient to initiate the process of disintegration.

4. Range of the limits of the atomic weight of the radioactive elements.

5. Splashes of atoms with electronic stability.

Fig. 14. Channels between the Physical and Etheric Levels created by Inorganic Molecules and Atoms.

1. Etheric level of the planet.

2. Channel created by the hydrogen atom.

3. Channel created by the oxygen atom.

4. Channel created by the Mendelevium atom.

5. Channel created by the gold atom.

6. Channel created by the uranium atom.

Fig. 15. Channels between the Physical and Etheric Levels created by Inorganic and Organic Molecules.

1,2,3. Channels created by inorganic and simple organic molecules.

4. Boundary line beyond which the channels of the organic molecules obtain a new quality.

5. Channel between the levels created by **DNA** and **RNA** molecules.

6. Channel created by cell nuclei.

Fig. 16. The Qualitative Distinction between the Channels created by Organic and Inorganic Molecules.

1. Channels created by the inorganic molecules which do not significantly manifest any flow of primary matters from the physical to the etheric level.

2. Channels created by complex organic molecules which manifest a flow of primary matters from the physical to the etheric levels. This creates identical states of the primary matters on the physical and etheric levels.

Fig. 17. The Viral **RNA** Molecule in Different States of Hydration.

1. In the dehydrated state the virus appears as a lifeless form. The channel between the physical and etheric levels is closed.

2. When rehydrated the viral **RNA** molecule attaches OH– — H+ groups to free electron bonds thus creating a curvature of space sufficient for the disintegration of simple molecules and creating conditions for the primary matters resulting from that disintegration to flow to the etheric level.

D. Cell Division.

Fig. 18. The First Phase of Cell Division.

The centrioles diverge to the opposite poles of the cell and protein filaments draw the chromosomes out of the original nuclei.

1. Physically dense cell (Physical body of the cell).

2. Etheric body of the cell.

3. Nuclei of the cell.

4. Centrioles of the cell.

5. Channel of primary matter circulation between the physical and etheric levels of the cell.

6. Golgi bodies.

7. Mitochondria.

8. Endoplasmatic system.

9. Nuclear chromosomes.

Fig. 19. The Creation of Two Nuclei.

Each nucleus has a half-set of the required chromosomes.

1. Physically dense cell (Physical body of the cell).

2. Etheric body of the cell.

3. Nuclei of the cell.

4. Centrioles .

5. Nuclear channels.

7. Mitochondria.

8. Endoplasmatic system.

9. Nuclear chromosomes.

Fig. 20. Creation of a Double Set of Chromosomes.

The two nuclei inside the cell create a double set of chromosomes resulting in a supercritical state for all cellular constituents. Cellular substance disintegrates releasing its primary matters.

1. Physically dense cell (Physical body of the cell).

2. Etheric body of the cell.

3. Nuclei of the cell.

5. Nuclear channels.

7. Mitochondria .

8. Endoplasmatic system.

9. Nuclear chromosomes.

Fig. 21. Creation of a Second Etheric Body.

With the physical disintegration of the cell, the second etheric body of the cell is created. As this occors the concentration of **G**-matter in the etheric body of the cell exceeds that on the physical level.

1. Physical level.

2. Etheric level.

3. Nuclei of the cell.

5. Nuclear channels.

Fig. 21a. Reversal of Flow of **G**-matter.

After complete disintegration of the physical body of the cell, the excess quantity of G-matter in the two new cells formed in the etheric body begins to flow through the same channels from the etheric to the physical level.

1. Physical level.

2. Etheric level.

3. Nuclei of the etheric bodies of the cell.

5. Nuclear channels.

Fig. 22. Projection of the Form of the Etheric to the Physical Body.

Two cellular etheric bodies serve as templates for the synthesis of two new physical cells. The form of the template is projected via the reverse flow of **G**-matter

from the etheric to the physical levels, where it organizes the biomass remaining after disintegration of the cellular physical substance.

1. Physical level.
2. Etheric body of the cell.
3. Nuclei of the etheric bodies of the cell.
4. Centrioles .
5. Nuclear channels.
6. Golgi body.
7. Mitochondria .
8. Endoplasmatic system.

Fig. 23. The Creation of Two New Physical Cells.

Two new physically solid cells are synthesized from two etheric templates. Each cell is an exact replica of the cell prior to its division.

1. Physically solid cell (Physical body of the cell).
2. Etheric body of the cell.
3. Nuclei of the cell.
4. Centrioles of the cell.
5. Channels of the cell.
6. Golgi apparatus.
7. Mitochondria.
8. Endoplasmatic system.

Fig. 24. Green Euglena.

This organism functions as a vegetable organism in daylight and as an animal in the dark.

Fig. 25. Volvox.

Volvox is a transitional form between monocellular and multicellular organisms.

E. The Evolution of the cell.

In the evolution of multicellular organisms cellular differentiation takes place resulting in structural changes and the acquisition of new qualities. This permits a greater impact of the cell on its spatial curvature with the associated possibility of opening new barriers.

Fig. 26. Cell with Lower Astral Body.

The opening of a qualitative channel between the physical and astral levels of the cell is necessary for the formation of the lower astral body.

1. Physically solid cell (Physical body of the cell).

2. Etheric body of the cell.

3. The lower astral body of the cell forms from one primary matter, **G**-matter.

V1 — evolutionary activity of the cell's physical body

V2 — evolutionary activity of the cell's etheric body

V3 — evolutionary activity of the cell's astral body

Fig. 27. Cell with Complete Astral Body.

A cell with physical, etheric, and complete astral bodies, the last formed out of two primary matters, **G** and **F**.

1. Physically solid cell (Physical body of the cell).

2. Etheric body of the cell.

3. Full astral body of the cell.

V1 — evolutionary activity of the cell's physical body.

V2 — evolutionary activity of the cell's etheric body.

V3 — evolutionary activity of the cell's astral body.

Fig. 28. Cell with a First Mental Body.

A cell containing physical, etheric, astral, and first mental bodies in a state of harmony between all levels.

1. Physically solid cell (Physical body of the cell).

2. Etheric body of the cell.

3. Astral body of the cell .

4. First mental body of the cell.

V1 — evolutionary activity of the cell's physical body.

V2 — evolutionary activity of the cell's etheric body.

V3 — evolutionary activity of the cell's astral body.

V4 — evolutionary activity of the cell's first mental body.

Fig. 29. The First Stage of Loss of Integrity of the Physical Body.

Discontinuation of the circulation of primary matters between the astral and first mental bodies results in the beginning loss of integrity of the physical body.

1. Physically solid cell (Physical body of the cell).

2. Etheric body of the cell.

3. Astral body of the cell.

4. First mental body of the cell.

V1 — evolutionary activity of the cell's physical body.

V2 — evolutionary activity of the cell's etheric body.

V3 — evolutionary activity of the cell's astral body.

V4 — evolutionary activity of the cell's first mental body.

(Note loss of circulation of primary matter between the astral and first mental body).

Fig. 30. Second Stage of Loss of Integrity of the Physical Body.

Further decrease in the circulation of primary matters between the astral and the etheric levels results in a progressive loss of integrity of the constituents of the physical body.

1. Physical body of the cell.

2. Etheric body of the cell.

3. Astral body of the cell .

4. First mental body of the cell.

V1 — evolutionary activity of the cell's physical body.

V2 — evolutionary activity of the cell's etheric body.

V3 — evolutionary activity of the cell's astral body.

V4 — evolutionary activity of the cell's first mental body.

Fig. 31. The Final Stage in the Death of the Physical Body.

When the circulation of primary matters between the etheric and physical levels completely stops the physical body dies.

1. Physical body of the cell.

2. Etheric body of the cell.

3. Astral body of the cell.

4. First mental body of the cell.

V1, **V2**, **V3**, **V4** — evolutionary speeds of physical, etheric, astral, and first mental bodies of the cell. (Note that V1= 0).

Fig. 32. The First Stage of Cellular Disintegration.

All primary matters begin to stop circulating between the cell's physical and spiritual levels. Note the loss of circulating **G**-matter between the astral and first mental bodies.

1. Physical body of the cell.

2. Etheric body of the cell.

3. Astral body of the cell.

4. First mental body of the cell.

V1, **V2**, **V3**, **V4** — evolutionary speeds of physical, etheric, astral, and first mental bodies of the cell (Note reversal of V1).

Fig. 33. Cellular Disintegration Continues.

This is marked by the gradual death of the nucleus with closure of the nuclear channel.

1. Physical body.

2. Etheric body.

3. Astral body.

4. First mental body.

Fig. 34. Complete Disintegration of the Cell.

Only fragments of organic molecules remain on the physical level.

1. Physical body.

2. Etheric body.

3. Astral body.

4. First mental body.

V1, **V2**, **V3**, **V4** — Evolutionary speeds of the physical, etheric, astral, and first mental bodies of the cell.

F. Psi–Fields of living Organisms.

Fig. 35. Psi-field Generated by One Termite.

Psi-field generated by one termite on a limited living space, **S**.

1. Termite.

2. Psi–field generated by one termite.

S — the limits of the living space

Fig. 36. Psi-fields Generated by Two Termites.

Psi–fields generated by two termites on a limited living space, **S**.

1. Termite.

2. Psi–field generated by two termites.

S — the limits of the living space.

Fig. 37. Deformation of the Psi-fields of Termites.

Deformation of the psi-fields of termites living on a limited space when the concentration of the termite population, $\mathbf{N^{-}}$, is below a critical number.

1. Termite.

2. Psi-field generated by one termite.

S –the limits of the living space.

Fig. 38. Merging of the Psi-fields of Individual Termites.

The merging of the psi-fields of individual termites into a unified psi-field colony when the concentration of the number of termites, N^+, exceeds a critical limit.

1. Termite.

2. Psi-field of the termite.

3. The limits of the living space.

Fig. 39. Psi-field of Rabbits in Low Density Populations.

The structure of the psi-field of rabbits when their population density, N^-, on the area, **S**, is less then critical.

1. Rabbit.

2. Psi-field of the rabbit.

S — Rabbits' living space.

Fig. 40. Psi–field of Rabbits in High Density Populations.

The structure of the psi-field of rabbits when their population density, N^+, on the area, **S**, exceeds a critical number.

1. Rabbit.

2. Psi-field of the rabbit.

S — Rabbits' living space.

Fig. 41. The Psi-field of Migrating Birds.

The psi-field state of migrating birds (ducks) depends upon the season. During spring and summer the psi-fields of individuals of the species constitute a closed system.

1. Duck.

2. Psi-field of the duck.

Fig. 42. The Impact of Environmental Changes on the Psi-field.

The impact of seasonal environmental changes on the psi-field, such as temperature, daylight, etc. on the structure of the psi-field. The psi-field of the species shifts from a closed to an open state, encompassing, in this illustration, two ducks.

1. Duck.

2. Shared psi-field of the ducks.

Fig. 43. Unified Psi-fields in Critical Conditions.

The psi-ield of each individual unites into a mutually shared global psi-field when environmental conditions for the specific species become critical.

1. Duck.

2. Psi-field of the bird flock.

3. Living area of the species during the summer.

4. Living area of the species during the winter season.

5. Bird migration.

G. Stages of Evolutionary Development of the Human Spirit.

Fig. 44. The Development of the Human Etheric body.

The conditions for the formation and development of the astral body are dependent upon completion of the development of the etheric body.

1. Physical body.

2. Etheric body.

3,**4**,**5**,**6**,**7** — The spiritual bodies that could be potentially developed by a human being during a complete cycle of his spiritual evolution on the planet. (Usually this takes many reincarnations).

h, **i**, **j**, **k**, **l**, **m** — qualitative barriers between the physical, etheric, astral, and first, second, third, and fourth mental levels.

Fig. 45. The Qualitative Structure of the Human Body Following Completion of the Development of the Etheric Body.

1. Structure of the physical body.

2. Structure of the etheric body.

3. **h**, **i**, **j**, **k**, **l**, **m** — qualitative barriers.

4. α_1; α_2; α_3; α_4; α_5; α_6; — coefficients of interaction between the spiritual planes of Earth.

Fig. 46. The Development of the Human Lower Astral body.

The conditions for the formation and development of the higher astral body are dependent upon completion of the development of the lower astral body.

1. Physical body.

2. Etheric body.

3. Lower astral body.

4; **5**; **6**; **7** — the spiritual bodies that could be potentially developed by a human being during a complete cycle of his spiritual evolution on the planet.

h; **i**; **j**; **k**; **l**; **m** — qualitative barriers between the planetary levels.

Fig. 47. Qualitative Structure of the Human Body consisting of Etheric and Lower Astral Bodies of the Spirit.

1. Physical body.

2. Etheric body.

3. Lower astral body.

h; **i**; **j**; **k**; **l**; **m** — qualitative barriers between the planetary levels.

α_1; α_2; α_3; α_4; α_5; α_6; — coefficients of interaction between the levels.

Fig. 48. Evolution and Development of the Complete Astral Body.

The conditions for the formation and development of the first mental body are dependent upon completion of the development of the higher astral body.

1. Physical body.

2. Etheric body.

3. Higher astral body (complete astral body).

h; **i**; **j**; **k**; **l**; **m** — qualitative barriers between the planetary levels.

4; **5**; **6**; **7** — the spiritual bodies that could be potentially developed by a human being during a complete cycle of his spiritual evolution on the planet.

Fig. 49. Qualitative Structure of the Human Body: The Etheric and Complete Astral Bodies of the Spirit.

1. Structure of the physical body.

2. Structure of the etheric body.

3. Structure of the full astral body.

h; **i**; **j**; **k**; **l**; **m** — qualitative barriers.

α_1; α_2; α_3; α_4; α_5; α_6; — coefficients of interaction between the levels.

Fig. 50. Evolution and Development of the First Mental Body.

The conditions for the evolution and development of the first mental body depend upon the completion of development of the higher astral body.

1. Physical body.

2. Etheric body.

3. Astral body.

4. First mental body.

5; **6**; **7** — the spiritual bodies that could be potentially developed by a human being during a complete cycle of his spiritual evolution on the planet.

h; **i**; **j**; **k**; **l**; **m** — qualitative barriers between the levels.

Fig. 51. Qualitative Structure of the Human Spiritual Bodies: The Etheric, Complete Astral, and First Mental Bodies of the Spirit.

1. Structure of the physical body.

2. Structure of the etheric body.

3. Structure of the complete astral body.

4. Structure of the first mental body.

h; **i**; **j**; **k**; **l**; **m** — qualitative barriers.

α_1; α_2; α_3; α_4; α_5; α_6; — coefficients of interaction between the levels.

Fig. 52. The Development of the Second Mental Body.

The completion of development of the second mental body is necessary for the evolution and development of the third mental body.

1. Physical body.

2. Etheric body.

3. Astral body.

4. First mental body.

5. Second mental body.

6, 7. — the spiritual bodies that could be potentially developed by a human being during a complete cycle of his spiritual evolution on the planet.

h; **i**; **j**; **k**; **l**; **m** — qualitative barriers between the levels.

Fig. 53. Qualitative Structure of the Human Spiritual Body: The Etheric, Complete Astral, and First and Second Mental bodies of the Spirit.

1. Structure of the physical body.

2. Structure of the etheric body.

3. Structure of the complete astral body.

4. Structure of the first mental body.

5. Structure of the second mental body.

h; **i**; **j**; **k**; **l**; **m** — qualitative barriers.

α_1; α_2; α_3; α_4; α_5; α_6; — coefficients of interaction between the levels.

Fig. 54. The Evolution and Development of the Third Mental Body.

The completion of development of the third mental body is necessary for the evolution and development of the fourth mental body.

1. Physical body.

2. Etheric body.

3. Astral body.

4. First mental body.

5. Second mental body.

6. Third mental body.

7. The spiritual bodies that could be potentially developed by a human being during a complete cycle of his spiritual evolution on the planet.

h; **i**; **j**; **k**; **l**; **m** — qualitative barriers between the levels.

Fig. 55. The Qualitative Structure of the Human Spiritual Bodies: the Etheric, Complete Astral, and First, Second and Third Mental Bodies of the Spirit.

1. Structure of the physical body.

2. Structure of the etheric body.

3. Structure of the complete astral body.

4. Structure of the first mental body.

5. Structure of the second mental body.

6. Structure of the third mental body.

h; **i**; **j**; **k**; **l**; **m** — qualitative barriers.

α_1; α_2; α_3; α_4; α_5; α_6; — coefficients of interaction between the levels

Fig. 56. The Evolution and Development of the Fourth Mental Body.

After completion of the development of the fourth mental body the spirit is capable of continuing its evolution in the cosmos beyond the constraints of the Earth and its spiritual spheres.

1. Physical body.

2. Etheric body.

3. Astral body.

4. First mental body.

5. Second mental body.

6. Third mental body.

7. Fourth mental body.

h; **i**; **j**; **k**; **l**; **m** — qualitative barriers between the levels.

Fig. 57. The Qualitative Structure of Human Spiritual Bodies after Completion of the Planetary Cycle of Development.

1. Structure of the physical body.

2. Structure of the etheric body.

3. Structure of the complete astral body.

4. Structure of the first mental body.

5. Structure of the second mental body.

6. Structure of the third mental body.

7. Structure of the fourth mental body.

h; **i**; **j**; **k**; **l**; **m** — qualitative barriers.

α_1; **α_2**; **α_3**; **α_4**; **α_5**; **α_6**; — coefficients of interaction between the levels.

Fig. 58. The Spirits of Evolving Organisms on the Planetary Spheres: Their location depends upon their level of evolutionary development.

1. Physical sphere.

2. Etheric sphere.

3. Astral sphere.

4. First mental sphere.

5. Second mental sphere.

6. Third mental sphere.

Fig. 59. The Spirits of Spiritually Evolving Deceased and Extinct Organisms on the Planetary Spheres: Their location depends upon their level of evolutionary development.

1. Physical sphere.

1n; **1p**; **1g**; **1r**; **1s**; **1v**; **1u** — various living organisms inhabit the physical level.

2. Etheric sphere.

2n; **2p**; **2g**; **2g'**; **2r**; **2s**; **2s'** — spirits of spiritually evolving extinct and deceased animals, living on the planetary etheric plane.

3. Astral sphere with two levels — lower and higher astral.

3s; **3s'**; **3u**; **3v**; **3v'** — spirits of spiritually evolving extinct and deceased animals, living on the planetary astral plane.

4. First mental sphere with three intermediate levels.

4v — spirits of spiritually evolving, deceased organisms occupying the first mental plane of the planet.

h; **i**; **j**; **k** — qualitative barriers.

H. Symbiosis in Evolution.

Fig. 60. Symbiosis in the Development of the Butterfly.

The consecutive entrance of two different spirits into one biomass, each providing developmental changes in the biomass. The entrance and functioning of the first spirit is dependent upon the developmental effects on the biomass of the spirit that precedes it.

1. Butterfly egg.

2; **2a**; **2b** — stages of caterpillar evolution.

2'. Spirit of the caterpillar.

3; **3a**; **3b** — stages of the chrysalis.

4. Butterfly.

4'. Spirit of the butterfly.

A — moment of entry of the spirit of the caterpillar.

B — moment of entry of the spirit of the butterfly.

h — qualitative barrier.

H. Intrauterine and Extrauterine Stages in the Evolution of the Spirit.

Fig. 61. Entry of the Human Spirit into the Human Fertilized Ovum during Conception.

The fusion of ovum and spermatozoon result in an eruption of energy that creates a channel opening qualitative barriers between planetary levels. The human spirit enters the ovum through this channel.

1n; **1p**; **1g**; **1r**; **1s**; **1v**; **1u** — variety of living organisms existing on the physical level.

2n; **2p**; **2g**; **2g'**; **2r**; **2s**; **2s'** — spirits of spiritually evolving extinct and dead animals, living on the etheric plane of the planet.

3s; **3s'**; **3u**; **3v**; **3v'** — spirits of spiritually evolving extinct and dead animals living on the astral plane of the planet.

4v — spirits of evolving former living organisms occupying the first mental plane of the planet.

h; **i**; **j**; **k** — qualitative barriers.

Fig. 62. Binding of the Spirit to the Ovum.

The qualitative barriers close after the spirit enters the body and binds to the developing zygote. The stage of development of a new physical body begins.

1n; **1p**; **1g**; **1r**; **1s**; **1v**; **1u** — variety of organisms living on the physical level.

2n; **2p**; **2g**; **2g'**; **2r**; **2s**; **2s'** — spirits of spiritually evolving extinct and deceased animals, living on the etheric plane of the planet.

3s; **3s'**; **3u**; **3v**; **3v'** — spirits of spiritually evolving extinct and deceased animals living on the astral plane of the planet.

4v — spirits of evolving deceased organisms occupying the first mental plane of the planet.

h; **i**; **j**; **k** — qualitative barriers.

Fig. 63. Intrauterine Period of Human Development.

J_0 — level of evolutionary development of invertebrate animals.

J_1 — level of evolutionary development of fish.

J_2 — level of evolutionary development of amphibians.

J_3 — level of evolutionary development of reptiles.

J_4 — level of evolutionary development of mammals.

J_5 — level of evolutionary development of humans.

t_1 — Moment of entry of a fish spirit into the developing embryo.

t_2 — moment of exit of the fish spirit from the embryo and entry of an amphibian spirit.

t_3 — moment of exit of the amphibian spirit from the embryo and the entry of a reptile spirit.

t_4 — moment of exit of the reptile spirit from the embryo and the entry of a mammal spirit.

t_5 — moment of exit of the mammal spirit from the embryo and the entry of a human spirit.

φ_1 — the interval of the qualitative development of the human embryo when the spirit of a fish is present in the human embryo.

φ_2 — the interval of the qualitative development of the human embryo when the spirit of an amphibian is present in human embryo.

φ_3 — the interval of the qualitative development of the human embryo when the spirit of a reptile is present in the human embryo.

φ_4 — the interval of the qualitative development of the human embryo when the spirit of a mammal is present in the human embryo.

φ_5 — the level of qualitative development of the human embryo when the human spirit enters the embryo.

Fig. 64. Ejection of the Spirit from the Embryo during Abortion.

The energy eruption is only sufficient to open a channel to the etheric and lower astral levels. A spirit lacking strong protection becomes prey to astral animals. Most often abortion results in the death of the spirit. (Notations for Fig. 64 are the same as for Fig. 61).

Fig. 65. Post-natal Development of the Body by the Spirit.

Following birth the spirit continues to develop its physical body and simultaneously the organism restores and further develops its spiritual bodies. This process can be positive or negative. The physical body may be unable to support vital functions due to negative internal and external factors. This can result in the spirit's leaving a dead and useless physical body.

1. Physical body.

2. Etheric body.

3. Astral body.

4. First mental body.

J_1 — level of evolutionary development of the spirit's physical body before the entry of the spirit at conception.

J_2 — level of evolutionary development of the spirit's etheric body before the entry of the spirit at conception.

J_3 — level of evolutionary development of the spirit's astral body before the entry of the spirit at conception.

J_4 — level of evolutionary development of the spirit's first mental body before the entry of the spirit at conception.

J_2' — level of evolutionary development of the spirit's etheric body upon departure of the spirit at the moment of death.

J_3' — level of evolutionary development of the spirit's astral body upon departure of the spirit at the moment of death.

J_4' — Level of evolutionary development of the spirit's first mental body upon the departure of the spirit at the moment of death.

$\Delta\tau_1$ — the time interval of the upper limit in years for the window of time in which the etheric body is able to develop.

$\Delta\tau_2$ — the time interval of the upper limit in years for the window of time in which the astral body is able to develop.

$\Delta\tau_3$— the time interval of the upper limit, when the first mental body is able to develop.

J. Harmonious Conditions for the Development of the Human Spirit.

Fig. 66. Normal Balance of Flow of Primary Matters.

The flow of primary matters through the spiritual bodies are in balance when development is normal.

1. Physical body.

2. Etheric body.

3. Astral body.

4. First mental body.

h; **i**; **j** — qualitative barriers between the levels.

Fig. 67. Balance of Primary Matters in Etheric Body Blockage.

The astral and first mental bodies do not develop when there is blockage or interference in the development of the etheric body. The flow of primary matters through the spiritual bodies is unbalanced.

1. Physical body.

2. Etheric body.

3. Astral body.

4. First mental body.

h; **i**; **j** — qualitative barriers between the levels.

Fig. 68. Balance of Primary Matters in First Mental Body Blockage.

In the case of interference or blockage in the first mental body intelligence does not develop. The flow of primary matters through the spiritual bodies is unbalanced.

1. Physical body.

2. Etheric body.

3. Astral body.

4. First mental body.

h; **i**; **j** — qualitative barriers between the levels.

Fig. 69. Balance of Primary Matters in Astral Body Blockage.

When there is interference or blockage in the development of the astral body, the human higher astral body does not develop. The consequent over-development of the lower astral body leads to a deficiency of the higher emotions and excessive display of the lower emotions, such as jealousy, greed, selfishness, sadism, pornography, etc.

1. Physical body.

2. Etheric body.

3. Astral body.

4. First mental body.

h; **i**; **j** — qualitative barriers between the levels.

K. Death of the Physical Body.

Fig. 70. Creation of a Channel.

At the moment of death, energy erupts from the body creating a channel for the spirit to leave the body and move to its appropriate planetary plane (Notation as in Fig. 61).

Fig. 71. Opening of Barriers between Levels.

The qualitative barriers between planetary planes opens to a level equal to the limit of development of the spirit while in the physical body (Notation as in Fig. 61).

Fig. 72. The Barriers Close.

The channel disappears in approximately two minutes, all the barriers close, and the spirit remains attached to the dead physical body only by a thin cord of red primary matter (Notation as in Fig. 61).

Fig. 73. Where there is only a low level of spiritual development the channel reaches only the lower astral level.

Fig. 74. The Channel Disappears.

The channel connecting the spirit with the dead physical body disappears completely only after all traces of organic substance in the human skeleton completely vanish (Notation as in Fig. 61).

Fig. 75. Consumption of the Human Spirit.

Without a protective shield a human spirit in the lower astral level will be surrounded and consumed by astral animals. In such an event that human spirit disappears forever (Notation as in Fig. 61).

L. Stages of Human Sleep.

Fig. 76. First Stage of Sleep: begins when the brain starts to adjust its cycle of operations to a state in which the spirit can move outside the confines of the physical body.

1. Physical body.

2. Protective shield.

A, G, F...etc. — primary matters flowing through specific chakras.

Fig. 77. Second Stage of Sleep: The brain continues to adjust its cycle of operations making it possible for the spirit to leave the body (beginning of the dislocation).

1. Physical body.

2. Spirit.

3. Protective shield.

Fig. 78. Third Stage of Sleep: The spirit leaves the body completely. A cord maintains the connection between the physical body and the spirit so that they remain attached during the entire period of sleep.

1. Physical body.

2. Spirit.

3. Protective shield.

3*. Protective shield of the spirit.

4. Cord linking the physical body and the spirit.

Fig. 79. Fourth Stage of Sleep: The brain is completely adjusted to the spiritÕs being entirely out of the body.

1. Physical body.

2. Spirit.

3. Protective shield.

3.* Protective shield of the spirit.

4. Cord linking the physical body and the spirit.

Fig. 80. Stage of Deep Sleep: The brain remains in a standby state. Periodic eruptions of brain activity prevent the brain from completely switching off.

1. Physical body.

2. Spirit.

3. Protective shield.

3*. Protective shield of the spirit.

4. Cord linking the physical body and the spirit.

Fig. 81. Stage of Awakening: Powerful impulses activate the brain and establish conditions for the spirit to re-enter the physical body.

1. Physical body.

2. Spirit.

3. Protective shield.

3* Protective shield of the spirit.

4. Cord linking the physical body and the spirit.

Fig. 82. Re-entry of the Spirit: The brain generates signals that open the protective shield of the physical body and permits the spirit to re-enter its physical body.

1. Physical body.

2. Spirit.

3. Protective field.

Fig. 83. Spirit and Body Unified: At the moment of awakening all brain processes return to their initial state in which the spirit and the body function as a unified system.

1. Physical body.

2. Spirit.

M. The Stages of Death.

Fig. 84. The Initial Stage of Death: The supply of vital substances for the brain diminishes.

1. Physical body.

2. Spirit.

Fig. 85. The Spirit Begins to Leave the Body: The deficiency of vital substances makes the brain switch to a state of minimal activity similar to that found in sleep. At the same time the spirit begins to separate from the body.

1. Physical body.

2. Spirit.

3. Protective shield.

Fig. 86. Departure of the Spirit: The brain moves to a lower level of activity after all its reserves are depleted. Now the body's protective shield starts disintegrating. The spirit continues to separate from the body.

1. Physical body.

2. Spirit.

3. Protective shield.

3* Protective shield (psi-field) of the spirit.

4. Cord connecting physical body and the spirit.

Fig. 87. Complete Departure of the Spirit: The protective shield of the body continues to disintegrate. The spirit completely separates from the body.

1. Physical body.

2. Spirit.

3. Protective shield.

3*. Protective shield of the spirit.

4. Cord linking the physical body and the spirit.

Fig. 88. The Channel at Death: The destruction of the physical protective shield releases an eruption of energy which opens a channel through which the spirit can travel to other planetary planes.

1. Physical body.

2. Spirit.

3. Protective shield.

3* Protective shield of the spirit.

4. Cord linking the physical body and the spirit.

5. Channel used by the spirit to travel to other planetary planes.

Fig. 89. Three Sub-Channels.

The first cells to die in the physical organism are the cerebral neurons. The channel linking the spirit to the dead physical body consists of three sub-channels or cords linking the physical body to the etheric, astral, and first mental bodies.

1. Physical body.

2. Etheric body.

3. Astral body.

4. First mental body.

5. Cord connecting the dead physical body to the etheric body.

5*. Cord connecting the dead physical body to the astral body.

5**. Cord connecting the dead physical body to the first mental body.

Fig. 90. The cord between the physical body and the first mental body breaks nine days after disintegration of the physical body.

1. Physical body.

2. Etheric body.

3. Astral body.

4. First mental body.

5. Cord connecting the dead physical body to the etheric body.

5*. Cord connecting the dead physical body to the astral body.

Fig. 91. The cord between the physical body and the astral body breaks forty days after disintegration of the physical body.

1. Physical body.

2. Etheric body.

3. Astral body.

4. First mental body.

5. Cord connecting the dead physical body to the etheric body.

Fig. 92. The disintegration of organic substances continues.

1. Human skeleton.

2. Etheric body.

3. Astral body.

4. First mental body.

5. Cord connecting human skeleton to the etheric body.

Fig. 93. The Last Cord Breaks.

After one year all organic substances carrying information about the dead person and his spirit have disintegrated into inorganic substances. The cord connecting the remains of the human to the etheric body breaks.

1. Human skeleton.

2. Etheric body.

3. Astral body.

4. First mental body.

N. The Stages of Clinical Death.

Fig. 94. First Stage.

Clinical death is initiated by a cessation to the brain of the supply of vital substances necessary to sustain the life of the cerebral neurons.

1. Physical body.

2. Protective shield of the physical body.

Fig. 95. Second Stage: The Spirit Begins to Separate from the Body. The deficiency of vital substances makes the brain switch to a state of minimal activity that is similar to the state of sleep. At the same time the spirit begins to leave the body.

1. Physical body.

2. Spirit.

3. Protective shield of the physical body.

3*. Protective shield of the spirit.

Fig. 96. Third Stage: The Further Separation of the Spirit from the Body. The brain shifts to a lower level of activity after all its reserves are used up. The body's protective shield starts to disintegrate.

1. Physical body.

2. Spirit.

3. Protective shield of the physical body.

3* Protective shield (psi-field) of the spirit.

4. Cord linking physical body and the spirit.

Fig. 97. Fourth Stage: Complete Departure of the Spirit.

The spirit has completely left the body and the protective shield of the body continues to disintegrate.

1. Physical body.

2. Spirit.

3. Protective shield of the physical body.

3* Protective shield of the spirit.

4. Cord linking physical body and the spirit.

Fig. 98. Fifth Stage: Loss of the Shield.

The spirit has completely left the body and the protective shield of the body completely disintegrates.

1. Physical body.

2. Spirit.

3. Protective shield of the physical body.

3*. Protective shield of the spirit.

4. Cord connecting the physical body and the spirit.

5. Channel utilized by the spirit to move to planetary levels.

t_1 — moment of origin of the channel that opens qualitative barriers.

t_2 — Period of time from the start of clinical death; until t_2 most cerebral neurons are still alive.

Fig. 99. Restoration of Brain Activity.

When the cortex again starts receiving necessary vital substances the brain begins to recover its normal activity. This creates conditions for the spirit to return to the physical body and for the restoration of its protective shield.

1. Physical body.

2. Spirit.

3. Protective shield of the physical body.

4. Cord connecting the physical body and the spirit.

5. Channel used by the spirit to return to the physical body.

t_1 — moment of the spirit's entry into the channel of transit.

t_2 — moment of the spirit's return through the channel of transit to the physical body.

Fig. 100. Restoration of the Shield.

The protective shield around the physical body becomes restored as soon as the activity of the brain returns to normal.

1. Physical body.

2. Spirit.

3. Protective shield of the physical body.

3* Protective shield of the spirit.

4. Cord connecting the physical body and the spirit.

Fig. 101. The Spirit Returns to its Physical Body.

1. Physical body.

2. Spirit.

3. Protective shield of the physical body.

3*. Protective shield of the spirit.

Fig. 102. Emergence from Clinical Death.

The functions of the entire organism, including the brain, have returned to a normal state. The individual emerges from the state of clinical death.

1. Physical body.

2. Spirit.

3. Protective shield of the physical body.

3*. Protective shield of the spirit.

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The Final Appeal to Mankind

Volume 2

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Other author's books

Spirit and Mind. Vol 1

The Universe plays the eternal game of "numbers". Primary matters merge, galaxies, stars and planets are born or liberated during nuclear or annihilation processes, emmiting a huge amount of "energy" which depends on the value of the exact parameters described as "dimensionality" or "gradients of dimensionality"… Strictly consecutive at any level of our reality, these concepts cross borders of different branches of knowledge and are universally applied to everything, revealing secrets of nature – beginning with what occurs inside of a tunnel of the DNA molecule and finishing with the birth of a star; from the origin of life – up to the evolution of the human spirit; from splitting atoms of transuranium elements – up to the appearance of consciousness and human emotions...

The book contains 100 high-quality author's illustration.

Spirit and Mind. Vol 2

The nature of memory becomes absolutely real and tangible – a mystic aura around it vanishes giving the opportunity to everyone to comprehend and estimate this wonderful and very simple phenomenon of nature. On the basis of the same theory, which explains the nature of memory, the author gives us a possibility to get into the secret of the nature of consciousness. He explains, for example, why the critical amount of information absorbed by the human brain during a limited time becomes a crucial requirement for the origin of intellect. The author "strains" our grey cells and gradually leads us to the understanding of true importance and the nature of consciousness. The unified theory created by the author allowed him to solve an insoluble task. He could unite a great number of natural phenomena, seemingly incompatible, in a single whole, in one harmonious system...

The book contains 82 high-quality author's illustration.

The Anisotropic Universe

Laws of nature are formed at the macrocosmic and microcosmic levels. Man, as a living creature, exists in so-called intermediate world – between macro- and microworld. In this intermediate world he has to deal only with manifestations of natural laws, but not with them as such. As a result, it is almost impossible to create the complete picture of the Universe. This occurs because man intends to use his sense organs to cognize nature. He fails, because human sense organs cannot give him such possibility owing to the fact that they (organs) were created by nature only as a mechanism of adaptation to the ecological niche, which man occupies, not as a tool of cognition...

The book contains 99 high-quality author's illustration.

Russian History Viewed through Distorted Mirrors. Vol 1

As any Russian I always has been interested in the history of my country. In my childhood I red a lot of historical novels, books on history of both Russia and other

countries of the world. As I went on gaining and analyzing historical information available, my heart and mind began to fill with bewilderment and indignation. Every nation on Earth, independently their real role in the destiny of the world, wrote their own Great History using for this purpose both real events, folk legends and some times purely fictitious events. There would be nothing unusual in it but except for just one snag … everything applied to the history of Russia was filled with uncovered hatred of those who wrote its history. According to their opinion the Slavs lived in earthen pits up to the 9th century and were such primitive that even did not have their own state system and had to invite Varangians to govern. Also they lived in horrified ignorance until in the 10th century two saints, Cyril and Mefodiy, created the Slavonic written language on the basis of the Greek language shedding thus the "light of knowledge" on the obtuse Slavs. Also Mongols had kept Russian people in slavery for three hundred years and only when Peter the Great cut through a "window" to Europe and transformed Russia in accordance with European standards, Russia became the Great Empire, etc. Any well-educated person understands perfectly that history is written according to the orders of those in power and is rewritten following their requirements and desire. Therefore, it would be appropriate to ask who were these "historians" and why were they reluctant to create for Russian rulers something similar to that, what had been created for Jewish, Chinese, Greek, Roman and other nations and empires?..

The book contains 42 high-quality author's illustration.

The Mirror of my Soul

An Autobiographic chronicle. Vol 1

There are several reasons why I decided to write my own biography. First, whenever I had occasion to talk about some events of my life, my stories would often come back to me in the form of the most unimaginable "folklore." In fact, my tales took on such "facts" and colorations that even I listened to them with interest. The second reason that impelled to such a "feat" was the fact that every now and then someone would appear and offer to write my biography—and every time something stopped me. Once I even agreed to have an American woman author garner my recollections onto audiocassettes and spent several days with her recording them. But then I changed my mind and gave up the offer.

First of all, I had to expend a lot of time describing and explaining events that had happened to me. Secondly, to my utter astonishment, writers and journalists managed to distort everything despite their having my recorded recollections: this would include exaggerating, distorting facts and sometimes simply telling bare-faced lies. Therefore, when Dmitri Baida, the administrator of my web site, suggested that I write the biography myself, I decided to do just that. And—as the process unfolded, it also became the interpretation of my views on life.

I thought that if my life and my *modus vivendi* were interesting to people, then nobody was more qualified than I to convey what and when things happened in my life, what I thought as to one or another situation, what I felt and experienced. Cer-

tainly, everything that I am about to describe will be highly subjective and will reflect the outer world through my own eyes. But despite all this, I will try to reflect everything with maximum objectivity, as much as possible. As this is my biography, nobody will do it better than I, and if there is any distortion it will be my distortion of my own biography, which is better than distortions made by someone else.

Books in the Process of Writing

Spirit and Mind. Vol 3

In this volume the author continues to discover the secrets of nature. In the center of his attention is the nature of human psychical phenomena. The author shows a range of pioneer concepts concerning psychical phenomena of both man and society, which no one touched upon before. He introduces new concepts, such as geo-psychology of man and evolutional geo-psychology of society. These concepts allow to see the development of earthly civilization and historical events of the past, present and even future under a quite different point of view. Instead of the "chaos" of events and the "tyranny" of individuals, which is favorite historians' subject, we can see the pattern of the events determined by real laws of nature which function in the human society. As a result, we get the opportunity to understand the reasons of social events and phenomena and to see puppeteers, who remained in the shadow for so long and took pains to declare anyone, who suspected about their presence but did not understand natural laws, mad or cheaters. The author also introduces a concept of cosmic psychology of man and explains the influence of space phenomena on the development of our civilization.

Laws of Healing

Modern medicine went astray, losing the "Ariadne's thread" and unable to get out of its own labyrinth. In the middle of the 20th century physicians said that, if they had the most precise devices for diagnostics and necessary medications, they could bring humanity to the golden era of the universal health... They've got all this... But, nevertheless, people fall ill even more than before. Children are born with already damaged immune system; on visiting a hospital or a clinic, a relatively healthy person risks very much to leave them accompanied by a number of diseases, which pretty often lead to deadly end, simply inhaling the air of these "temples of health". In this book the author explains the reasons of this and describes the medicine of the future. And this medicine has been working already and the real results confirm the rightness of new way. In this book the author explains how living organism works, how and why illnesses and pathologies appear. He describes the mechanisms of scanning of the organism, methods of determination of primary causes of diseases, the strategy and tactic of treatment and restoration of the organism to the healthy state, including its genetic correction.