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Elements of Mathematical Connections Theory, Mathematics of Format-Numbers, Some Format-Numbers for S- Morphology, Fundamentally New Approach To Elementary Particles By Format-Numbers

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Abstract

Connection is fundamental to understanding our world. Everything is expressed through connections; an object (matter) is a self-connection in the form of energy closed in on itself; all forms of energy are forms of connection, information, thoughts are forms of connection, in particular, Vernadsky's noosphere is an example of this, and so on. We proceed through connections, then through connection structures. Connections are energy. Connections are more comprehensive than energy, which is a special case of a connection; an object is a special case of energy. That is, dynamic science is more comprehensive than traditional science due to its more general foundations. The format-number defines the hierarchy structure of interpretations, energies, actions, process etc. Digitization of interpretations forms by format-numbers allows the use of digital technologies through appropriate programming. Format-number (2(1, 2, 1), (1, 2, 1)) characterizes the transition of quantum numbers through the tensor product to entanglement. Of course, (1, 2)-interpretation and (2, 1)-interpretation are simplifications; in reality, reality is much more complex. Quantum computers are just the beginning; our dynamic science constructs corresponding pseudo-living energies to achieve desired

goals through network SmnSprt. In science, there are two approaches to studying nature beyond classical science (conditionally, the (1, 1)-interpretation): the approach through quantum mechanics (conditionally, the (1, 2)-interpretation: (1, 2) ((2, 1)) = (1, 1)) and dynamic mathematics (conditionally, the (2, 1)-interpretation) [1, 2]. In contrast to the probabilistic approach of quantum mechanics with dimension doubling for quantum entanglement, we propose a deterministic approach via an energy hierarchy. Both approaches have the same "root": $|||$, *but at two opposite ends: quantum mechanics ((1, 2)-interpretation) by* $|||^{-1}$*by and dynamic mathematics (2, 1)-interpretation) by* $|||$ *and ((1, 2)-interpretation) by* $|||^{-1}$ *and other interpretations with using hierarchical structures of measures, some equations [1, 2]. Therefore, the conclusions are similar, but for different objects and processes. Either we take what we need from emptiness by* $|||^{-\mathbf{1}}$ *or through substitution by* $|||$. *We also demonstrate the possibilities of not only using the effects of quantum entanglement for calculations, but also for manipulating energies, objects, their actions, and processes through the upper level. Let us call the interpretation formats by format-numbers and quantum levels of connections. Elements of format-numbers mathematics were considered partially [1, 2]. And for manipulating these numbers, the interpretation (1, 1) is already suitable, i.e., ordinary traditional science is suitable. This is a different approach to complex processes, not through probability. The format-number of connecting traditional science with our dynamic science is ((1,2), (2, 1), 1) ((1,2) ((1, 1))). (2, 1)*$^{3/2}$ *is the format-number for spirit.* $\overleftarrow{((1,2),(2,1),1)}$*((1,2) ((1, 1)* $_A$*))* $\forall A$ *is a bridge for the transition from our dynamic science to traditional science and vice versa. For now, this is only an introductory article. The first task: to understand hierarchy of energies in the Universe and the principles of functioning of living energy (living organism, in particular, human, subtle energies), and then using these principles to "construct" artificial living energies (let's call them pseudo-living energies). It is possible to significantly expand the horizons of science, in particular physics, by studying the subtle energies in the Universe. Here is studying Energy-space with scalar product and norm of its elements by format-numbers. For this, some aspects are proposed for consideration of Dynamic Science.* $self_{science}^{our\ theory}$ *- science here acts as a space for the application of our theory in the self-format, i.e., any place of science, in particular physics, can act as a place for the "location" of the self. It contains itself (accommodates any action C) in any place of science. On the basis of mathematical uncertainties, new mathematical structures are formed, allowing us to describe processes and objects that are fundamentally not determined by conventional deterministic methods. Objective uncertainties in any case can mean manifestations of processes and objects that are fundamentally not determined by conventional deterministic methods. Since dynamic mathematics places the primary emphasis on the dynamics of energy, rather than on objectivity, the level of approach to studying processes expands.*

Many energies are indeterminate because they are based on uncertainties from the perspective of traditional science—large concentrations of specific energy in a chaotic state. The foundation of dynamic mathematics lies in working with uncertainties, which makes it possible to manipulate these indeterminate energies using direct-accumulative direct-parallel neural networks. Ordinary regular work with them in ordinary science is fundamentally unable to realize their capabilities. Therefore, singular science realized on a neural network - an analogue of the human CNS - will be much more natural. Quantum computers are just the beginning; our dynamic science constructs corresponding pseudo-living energies to achieve desired goals through network SmnSprt. SmnSprt must use format numbers to construct subtle energies, or rather, to access their levels (transform or "shift" ordinary energy into subtle energies, or "shift"). It's clear that the physical part of SmnSprt cannot exist in other worlds except for those close to our world or those whose parts intersect with our world. Unfortunately, we do not have funding to perform the necessary experiments and the practical creation of a technical model of such a neural network. There is a need to develop an instrumental mathematical base for new technologies. The task of the work is to create new approaches for this by introducing new concepts and methods. Our mathematics is unusual for a mathematician, because here the fulcrum is the action, and not the result of the action as in classical mathematics. Therefore, our mathematics is adapted not only to obtain results, but also to directly control actions, which will certainly show its benefits on a fundamentally new type of neural networks with directly parallel calculations, for which it was created. Any action has much greater potential than its result. Social justice is fundamentally impossible as long as education (training) is based on achieving results, and not on the process. It is time for physicists to begin studying not only the manifestations of living energies, but also the living energies themselves, which are by no means expressed through objectivity and ordinary energies, although they are capable of manifesting themselves through a lower level - objectivity and ordinary energies. We, as mathematicians, offer a new corresponding apparatus for understanding nature and studying living energies. Significance of the article: in a new qualitatively different approach to the study of complex processes through new mathematical, hierarchical, dynamic structures, in particular those processes that are dealt with by Synergetics. The significance of our article is in the formation of the presumptive mathematical structure of subtle energies, this is being done for the first time in science, and the presumptive classification of the mathematical structures of subtle energies for the first time. The experiments of the 2022 Nobel laureates Asle Ahlen, John Clauser, Anton Zeilinger and the experiments in chemistry Nazhipa Valitov eloquently demonstrate that we are right and that these studies are necessary. Be that as it may, we created classes of new mathematical structures, new *mathematical singularities, i.e., made a contribution to the development of mathematics. Conventional science changes numbers. Ours changes levels by SmnSprt.*

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Introduction

Connection is fundamental to understanding our world. Everything is expressed through connections; an object (matter) is a self-connection in the form of energy closed in on itself; all forms of energy are forms of connection, information, thoughts are forms of connection, in particular, Vernadsky's noosphere is an example of this, and so on. We proceed through connections, then through connection structures. Connections are energy. Connections are more comprehensive than energy, which is a special case of a connection; an object is a special case of energy. That is, dynamic science is more comprehensive than traditional science due to its more general foundations.The format-number defines the hierarchy structure of interpretations, energies, actions, process etc. Digitization of interpretation-forms allows the use of digital technologies through appropriate programming. It's fairly easy to construct new singularities by format-numbers using the principal compression-expansion (compression into expansion, expansion into compression, compression-expansion into any, compression-expansion into hierarchy, $\binom{\text{self}-\text{type}}{|||-\text{type}}$-compression-expansion into any, $\binom{\text{self}-\text{type}}{|||-\text{type}}$-F(compression-expansion) of any, (compression-expansion)-structure for compression-expansion $\binom{\text{self}-\text{type}}{|||-\text{type}}$-F(compression-expansion) of any, (compression-expansion)-structure for $\binom{\text{self}-\text{type}}{|||-\text{type}}$-G(compression-expansion) etc). That is, numbers can be used not only for calculations but also for constructing new singularities, thereby creating and developing new branches of mathematics and new mathematical tools for science. The article provides measures, norms for interpretation formats and the interpretations themselves. Format-number (2(1, 2, 1), (1, 2, 1)) characterizes the transition of quantum numbers through the tensor product to entanglement. Of course, (1, 2)-interpretation and (2, 1)-interpretation are simplifications; in reality, reality is much more complex. In science, there are two approaches to studying nature beyond classical science (conditionally, the (1, 1)-interpretation): the approach through quantum mechanics (conditionally, the (1, 2)-interpretation: (1, 2) ((2, 1)) = (1, 1))) and dynamic mathematics (conditionally, the (2, 1)-interpretation) [1, 2]. The increase in dimensionality in physical theories is a cost of the (1, 1)-interpretation. (1, 2)-interpretation and (2, 1)-interpretation are projections to (1, 1)-interpretation. That's why Heisenberg's uncertainty relation and observer paradoxes arise, since (1, 2)-interpretation corresponds to a number of constraints (laws) half that of (1, 1)-interpretation. In contrast to the probabilistic approach of quantum mechanics with dimension doubling for quantum entanglement, we propose a deterministic approach via an energy hierarchy. Both approaches have the same "root": $|||$, but at two opposite ends: quantum mechanics ((1, 2)-interpretation) by $|||^{-1}$by and dynamic mathematics (2, 1)-interpretation) by $|||$ and ((1, 2)-interpretation) by $|||^{-1}$ and other interpretations with using hierarchical structures of measures, some equations [1, 2]. Therefore, the conclusions are similar, but for different objects and processes. Either we take what we need from emptiness by $|||^{-1}$ or through substitution by $|||$. In quantum computer the basic actions are executed by upper level $|||^{-1}$ of elementary particles with further (1, 1)-interpretation by probability. At quantum entanglement: (1, 2)-interpretation → (2, 1)-interpretation → (1, 1)-interpretation. Our approach: (1, 1)-interpretation → (2, 1)-interpretation → (1, 1)-interpretation.

Mixed approach: (1, 1)-interpretation → (1, 2)-interpretation → (2, 1)-interpretation → (1, 1)-interpretation. Format-number (2(1, 2, 1), 1) characterizes the transition of quantum numbers through the tensor product to entanglement. Of course, (1, 2)-interpretation and (2, 1)-interpretation are simplifications; in reality, reality is much more complex. All observer problems are related to normal (1, 1)-interpretation, while elementary particles are in the field (1, 2)-interpretation, and only the projections of this (1, 2)-interpretation to (1, 1)-interpretation allows to work with them. But it must be taken into account that, unlike (1, 1)-interpretation, (1, 1)- flow, (1, 1)- time elementary particles are in (1, 2)- flow, (1, 2)- time and we may have some projections of this only, which corresponds to our science and its paradoxes. It's entirely possible to use Entanglement not only in calculations, but also in actions via connections to the upper level, by passing the physical aspect. We also demonstrate the possibilities of not only using the effects of quantum entanglement for calculations, but also for manipulating energies, objects, their actions, and processes through the upper level. Let us call the interpretation formats by format-numbers and quantum levels of connections. Elements of format-numbers mathematics were considered partially [1, 2]. And for manipulating these numbers, the interpretation (1, 1) is already suitable, i.e., ordinary traditional science is suitable. This is a different approach to complex processes, not through probability. The format-number of connecting traditional science with our dynamic science is ((1,2), (2, 1), 1) ((1,2) ((1, 1))). $(2, 1)^{3/2}$ is the format-number for spirit. $\overleftarrow{((1,2),(2,1),1)}((1,2)\ ((1,\ 1)_{A}))\ \forall A$ is a bridge for the transition from our dynamic science to traditional science and vice versa. In fact, both the multidimensionality of space and the hierarchy of space are simply concepts that are convenient for standard classical (1, 1)-interpretation, but which naturally do not correspond to reality. In fact, everything is connections, their various interpretations, in particular in the form of energies, information, matter etc. Here is studying Energy-space with scalar product and norm of its elements by format-numbers. Conventional science changes numbers. Ours changes levels by SmnSprt. The foundation of dynamic mathematics lies in working with uncertainties, which makes it possible to manipulate these indeterminate energies using direct-accumulative direct-parallel neural networks. Ordinary regular work with them in ordinary science is fundamentally unable to realize their capabilities. Therefore, singular science realized on a neural network - an analogue of the human CNS - will be much more natural. Quantum computers are just the beginning; our dynamic science constructs corresponding pseudo-living energies to achieve desired goals through network SmnSprt. SmnSprt must use format numbers to construct subtle energies, or rather, to access their levels (transform or "shift" ordinary energy into subtle energies, or "shift"). It's clear that the physical part of SmnSprt cannot exist in other worlds except for those close to our world or those whose parts intersect with our world.

Connections

Connection is fundamental to understanding our world. Everything is expressed through connections; an object (matter) is a self-connection in the form of energy closed in on itself; all forms of energy are forms of connection, information, thoughts are forms of connection, in particular, Vernadsky's noosphere is an example of this, and so on. We proceed through connections, then through connection structures. Connections are energy. Connections are more comprehensive than energy, which is a special case of a connection; an object is a special case of energy. That is, dynamic science is more comprehensive than traditional science due to its more general foundations. May consider connections space, connections formats space, connections numbers space, quantum levels of connections. etc. In particular, space is an example of connection etc. Connection formats allow you to establish any connections. Any connection can have any formats simultaneously. Setting the desired format is precisely what allows for the manipulation of the connection.

Let q be the 2-connection, i.e., connection between A and B. Let us denote this by $({}^{q}2, 1)$. Then if connection q degenerates into connection A onto itself, the designation for this will be $(1, ({}^{q}2, 1))$ - i.e., automorphism $q(A) = {}_{q}\mathrm{self}(A)$, $\forall\, q(A)$. DNA is the connections of a living organism onto itself in "compressed" formats. Automorphism is a conservation law.

The connection q can have the form of connections set between A and B. For q = ||| we obtain the previously introduced format $(2, 1) = ({}^{|||}2, 1)$. For q = ||d| we obtain the previously introduced format ${}^{di}(2, 1) = ({}^{||d|}2, 1)$. May consider formats: (3, 2), (M, N), (Q, R), ${}^{di}(3, 2)$, ${}^{di}(M, N)$, ${}^{di}(Q, R)$, (M, N, K), $(N_1, N_2, \ldots, N_k)$, $\begin{pmatrix} a_{11} & \cdots & a_{1m} \\ \cdots & a_{ij} & \cdots \\ a_{n1} & \cdots & a_{nm} \end{pmatrix}$, tensor, any structure, any W, any chaotical structure, any fuzzy structure, any partial structure, where M, N, K, $N_1, N_2, \ldots, N_k$ are integers; Q, R, a_{ij} are any etc. May consider the following 3-connection for A, B, C with format (M, N): $(M, N)\left(\begin{pmatrix} A & - & B \\ & \backslash\ / & \\ & C & \end{pmatrix}\right) = A|_{(M, N)}||B|_{(M, N)}||C$, $A_1|_{(M, N)}||A_2|_{(M, N)}||\ldots|_{(M, N)}||A_k$ etc.

$(3, 1)\left(\begin{pmatrix} A & - & A \\ & \backslash\ / & \\ & A & \end{pmatrix}\right) = \mathrm{self}^{3/2}(A)$, $(3, 1)\left(\begin{pmatrix} A & - & B \\ & \backslash\ / & \\ & C & \end{pmatrix}\right) = A|||B|||C$. May consider A|||B|||A, A|||A|||C,

$(3, 2)\left(\begin{pmatrix} A & - & B \\ & \backslash\ / & \\ & C & \end{pmatrix}\right) = A|_{(3,2)}||B|_{(3,2)}||C$, $(r, s)\left(\begin{pmatrix} A & - & B \\ & \backslash\ / & \\ & C & \end{pmatrix}\right) = A|_{(r,s)}||B|_{(r,s)}||C$ etc.

May consider connections by $|_{(M, N)}|d|$, $|_{(M, N)}Q|d|$, ${}^{G}|_{(r,s)}Q||$ etc. May consider the following 3-connection for A, B, C with 3-format $\begin{pmatrix} M & - & N \\ & \backslash\ / & \\ & K & \end{pmatrix}$: $\begin{pmatrix} M & - & N \\ & \backslash\ / & \\ & K & \end{pmatrix}\left(\begin{pmatrix} A & - & B \\ & \backslash\ / & \\ & C & \end{pmatrix}\right)$.

The more highly organized connection q, the more highly organized the connection format. $(3, 2)((A)) = \mathrm{self}^{3/4}(A)$. ${}^{di}(3, 2)((A)) = {}^{di}\mathrm{self}^{3/4}(A)$.

Remark. May consider formats of formats, self-formats, self-connections, connections of connections etc. May consider formats as forms of connections, connection as capacity for its objects, dynamic connection.

Some special connections

Definition. d-capacity is the structure of result of d.

Let us denote the normal self(d) by 2- self(d), for 3- connections we will have 3- self, for N-connections we will have N- self etc.

If d is an action, a process, then self(d) is its spirit.

(2, 1) ((A)) = self(A).

(3, 2) ((A)) = $\mathrm{self}^{3/4}$(A).

^{di} (3, 2) ((A)) = $^{di}\mathrm{self}^{3/4}$(A) [8].

Let us denote the normal self(d) by 2- self(d), for 3- connections we will have 3- self, for N-connections we will have N- self etc.

May consider the connection d between A and B, where B is d-capacity, result of d is d-content, if B is hierarchy, then d-elements of dare hierarchy levels. In the case of d is object: d = (A, A) is self-connection. Any d is connection. May consider the format-number d = (A, B), where B is d-capacity, result of d is d-content, if B is hierarchy, then d-elements of dare hierarchy levels. In the case of d is object: d = (A, A) is self-format-number. An ordinary number is also a connection between a functional value in the form of this number from a class of objects, corresponding to this number (for example, the value of characteristics).

Definition 1.1. The "cascading" connection is connection in which each element is the same connection.

Definition 1. 2. A self-connection is connection in which every element is itself.

May consider the connection (A, B, C), fuzzy connections, partial connections, connection|||anticonnection, connection (A, B)|||anticonnection (A, B) etc.

May consider following concepts SCSrt $\begin{array}{c}\text{connection}\\ g_1\\ \dots\\ g_1\\ \text{connection}\end{array}$, $\begin{array}{c}\text{connection}\\ g_1\\ \dots\\ g_1\\ \text{connection}\end{array}$ SCSrt $\begin{array}{c}\text{connection}\\ g_1\\ \dots\\ g_1\\ \text{connection}\end{array}$, SCSrt $\begin{array}{c}\text{connection format}\\ g_1\\ \dots\\ g_1\\ \text{connection format}\end{array}$, $\begin{array}{c}\text{connection format}\\ g_1\\ \dots\\ g_1\\ \text{connection format}\end{array}$ SCSrt $\begin{array}{c}\text{connection format}\\ g_1\\ \dots\\ g_1\\ \text{connection format}\end{array}$, SCSrt $\begin{array}{c}\text{format}\\ g_1\\ \dots\\ g_1\\ \text{format}\end{array}$, $\begin{array}{c}\text{format}\\ g_1\\ \dots\\ g_1\\ \text{format}\end{array}$ SCSrt $\begin{array}{c}\text{format}\\ g_1\\ \dots\\ g_1\\ \text{format}\end{array}$ etc.

connections D a connections D_{all} all
g SCprt g , g SCprt g ,
a connections D all connections D_{all}

connections D a
g SCprt ϵ nagual (chaos or emptiness), SCprt g ϵ tonal (order),
a connections D

connections D_{all} all
g SCprt corresponds to nagual (chaos or emptiness), SCprt g
all connections D_{all}

corresponds to tonal (order).

SmnSprt must to correspond to this type.

If set is the result of the containment process, then instead of set in the general case for d, we will restrict ourselves to using the concept of result from d. d-capacity is result of d.

May consider d-connections, self-connections, ||d|-result, format

A||d| format B, format $A^{\text{format } A^{\cdots \text{format } A^{\cdots}}}$, self-format, oself-format, pself-format, d-format, self^{N}-connections, self^{α}- connections with format of α, ||d|- connections, ^{G}||d|- connections etc, ∀-connections, ∀-|||, ∀-||d|, ∀- ^{G}||d|, E- connections, E-|||, E-||d|, E- ^{G}||d|, $Q = \begin{pmatrix} ||| & - & ||d| \\ & | & \\ & G||d| & \end{pmatrix}$,

Q…Q…, $Q^{Q^{\cdots Q}}$, $Q_{Q_{\cdots Q_{\cdots}}}$, 3-derivative as $\frac{d^3y}{d(x_1,x_2,x_3)}$, where derivative by all variables is simultaneous action, $\frac{d^3y}{d(b^3)}$ is 3selfderivative (designation: $\frac{d^3}{d}\text{self}_b(y)$), 3-integral $(\int\int\int \ )yd(x)^3$ etc.

May consider example of the new 3-dynamic operator: 3-$\begin{matrix} & 3-\text{Sprt} & \\ c & & a \\ g & q & g \\ d & w & b \\ & s & \end{matrix}$, where a fits into b by g, d expelling from c, q by w to s simultaneously. May consider example of the new n-dynamic operator:

$\begin{matrix} & n-\text{Sprt} & \\ c_1 \ \ldots & c_k & \ldots \ c_n \\ g_1 \ \ldots & g_k & \ldots \ g_n \\ d_1 \ \ldots & d_k & \ldots \ d_n \end{matrix}$ etc.

May consider following singularities:

1. Connection of all connections, designation is ∞-connection,
2. Connection into all connections, designation is i∞-connection,
3. Connection from all connections, designation is fr∞-connection,
4. Connection for all connections, designation is fo∞-connection
5. Etc.

Dynamic Connections Hierarchy

May consider following dynamic operators:

1. $\underset{\text{hierarchy a}}{\overset{\text{connections D}}{g}}$ SHSprt $\underset{\text{connections D}}{\overset{\text{hierarchy a}}{g}}$, which contains hierarchy a into connections D and expels hierarchy a from connections D simultaneously.
2. SHSprt $\underset{\text{connections D}}{\overset{\text{hierarchy a}}{g}}$, which contains hierarchy a into connections D.
3. $\underset{\text{hierarchy a}}{\overset{\text{connections D}}{g}}$ SHSprt, which expels hierarchy a from connections D simultaneously.
4. Etc.

May consider following dynamic fuzzy operators:

$\underset{\text{fuzzy hierarchy a}}{\overset{\text{fuzzy connections D}}{g}}$ SfHSprt $\underset{\text{fuzzy connections D}}{\overset{\text{fuzzy hierarchy a}}{g}}$, which contains fuzzy hierarchy a into fuzzyconnections D and expels fuzzy hierarchy a from fuzzy connections D simultaneously.

SHSprt $\underset{\text{fuzzy connections D}}{\overset{\text{fuzzy hierarchy a}}{g}}$, which contains fuzzy hierarchy a into fuzzy connections D.

$\underset{\text{fuzzy hierarchy a}}{\overset{\text{fuzzy connections D}}{g}}$ SHSprt, which expels fuzzy hierarchy a from fuzzy connections D simultaneously. Etc.

$\underset{\text{fuzzy hierarchy a}}{\overset{\text{fuzzy connections D}}{g}}$ SfHSprt $\underset{\text{fuzzy connections D}}{\overset{\text{fuzzy hierarchy a}}{g}}$, which contains fuzzy hierarchy a into fuzzy connections D and expels fuzzy hierarchy a from connections D simultaneously.

SHSprt $\underset{\text{fuzzy connections D}}{\overset{\text{fuzzy hierarchy a}}{g}}$, which contains fuzzy hierarchy a into fuzzy connections D.

$\underset{\text{fuzzy hierarchy a}}{\overset{\text{fuzzy connections D}}{g}}$ SHSprt, which expels fuzzy hierarchy a from fuzzy connections D simultaneously. Etc.

May consider following dynamic chaotic operators:

connections D chaotic hierarchy a
g SchHSprt g , which contains chaotic hierarchy a into
chaotic hierarchy a connections D

connections D and expels chaotic hierarchy a from connections D simultaneously.

chaotic hierarchy a
SHSprt g , which contains chaotic hierarchy a into connections D.
connections D

fuzzy connections D
g SHSprt, which expels chaotic hierarchy a from fuzzy connections D
chaotic hierarchy a

simultaneously. Etc.

connections D fuzzy hierarchy a
g SfHSprt g , which contains fuzzy hierarchy a into connections D
fuzzy hierarchy a connections D

and expels fuzzy hierarchy a from connections D simultaneously.

fuzzy hierarchy a
SHSprt g , which contains fuzzy hierarchy a into connections D.
connections D

connections D
g SHSprt, which expels fuzzy hierarchy a from connections D simultaneously, self-
fuzzy hierarchy a

fuzzy hierarchy, ||d|- hierarchy, ^{G}||d|- hierarchy etc.

May consider following examples of hierarchical formats interpretations:

1. $FC = \begin{pmatrix} \cdots \\ (n,1) \\ \cdots \\ (n,\ m) \\ \cdots \\ (2,1) \\ (1,1) \\ (1,2) \\ \cdots \end{pmatrix}$,
2. $\begin{pmatrix} \cdots \\ (w,u) \\ \cdots \\ (D,R) \\ \cdots \end{pmatrix}$
3. $^{FC}||FC|$
4. Etc.

May consider following examples of dynamic hierarchical sets:

1. $A_h = \begin{pmatrix} (2,1) - A_h \\ (1,1) - A_h \end{pmatrix}$,
2. $\begin{pmatrix} \text{result of } d - \text{connections by format } (2,1) \\ \text{result of } d - \text{connections by format } (1,1) \end{pmatrix}$,

3. Etc.

Remark. Of course, it is possible without hierarchy through the space of connections with any formats.

Let's consider the norm for 2- connections of the element x = (A, B) of this space:

$||x|| = ||A||(||A||-||B||)$,

for 3- connections of the element x = $\begin{array}{ccc} A & - & B \\ & | & \\ & C & \end{array}$ may consider the norm as the average of the norms for the manifestations of this 3-connection at the level of 2-connections.

Simplest Operations by Format-Values with Interpretations Forms by Containment

Definition 3.1. The format (A, B) of (A, B)-interpretation we will call format-value of (A, B)-interpretation. If format-value is structure with numbers we will call it by format-number.

For example, (2, (5, 3)), (2, 1) etc.

The measure of format-value (A, B) (D) of (A, B)-interpretation for D:

$M_{fv}((A, B)(D)) = (\mu(A) - \mu(B) + 1)\, \mu(D)$.

A format-value, in particular, format-number is the structure of connections.

$(nA, nB) \neq n(A, B) \neq (A, B),\ n \neq 0$.

We denote the addition sign for interpretation forms by $+_{in}$. Addition operation with interpretation forms:

$(A, B) +_{in} (Q, R) = (A + Q, B + R)$

A, Q are homogeneous any, B, Rare homogeneous any.

Remark. In particular, A and Q can be other structurally homogeneous forms. The same applies to B and R.

For example, $(2, 1) +_{in} (1, 2) =(3, 3) = 3(1, 1) = (1, 1)$,

$(1, (2, 1)) +_{in} (1, (3, 2)) = (2, (5, 3))$

The following relationships hold:

1. Commutative law of addition

$(A, B) +_{in} (Q, R) = (Q, R) +_{in} (A, B)$

2. Associative law of addition

$((A, B) +_{in} (Q, R)) +_{in} (C, D) = (A, B) +_{in} ((Q, R) +_{in} (C, D))$.

We denote the inverse operation sign for interpretation forms by $-_{in}$.

The subtraction operation with interpretation forms:

$(A, B) -_{in} (Q, R) = (A - Q, B - R)$.

We denote the multiplication sign for interpretation forms by $*_{in}$.

Multiplication operation with interpretation forms:

$(A, B) *_{in} (Q, R) = (A * Q, B * R)$

A, Q are homogeneous any, B, Rare homogeneous any.

Remark. In particular, A and Q can be other structurally homogeneous forms. The same applies to B and R.

For example, $(2, 1) *_{in} (1, 2) = (2, 2) = 2(1, 1) = (1, 1)$,

$(1, (2, 1)) *_{in} (1, (3, 2)) = (1, (6, 2))$.

The following relationships are held:

1) Commutative law of multiplication

$(A, B) *_{in} (Q, R) = (Q, R) *_{in} (A, B)$

2) Associative law of multiplication

$((A, B) *_{in} (Q, R)) *_{in} (C, D) = (A, B) *_{in} ((Q, R) *_{in} (C, D))$

3) Distributive law of multiplication with respect to addition

$((A, B) +_{in} (Q, R)) *_{in} (C, D) = (A, B) *_{in} (C, D) +_{in} (Q, R) *_{in} (C, D)$

4) Distributive law of multiplication with respect to subtraction

5) $((A, B) -_{in} (Q, R)) *_{in} (C, D) = (A, B) *_{in} (C, D) -_{in} (Q, R) *_{in} (C, D)$

6) $(A, B) *_{in} (1, 1) = (A, B)$

From $(A, B) +_{in} (Q, R) = (C, D) +_{in} (Q, R)$ follows $(A, B) = (C, D)$

7) From $(A, B) *_{in} (Q, R) = (C, D) *_{in} (Q, R)$ follows $(A, B) = (C, D)$.

We denote the inverse operation sign for interpretation forms by $/_{in}$.

$(A, B) /_{in} (Q, R)$ or $\frac{(A,B)}{(Q,R)}_{in}$, $Q \neq 0, R \neq 0$.

The division operation with interpretation forms:

$(A, B) /_{in} (Q, R) = (A / Q, B / R) = (\frac{A}{Q}_{in}, \frac{B}{R}_{in})$, $Q \neq 0, R \neq 0$.

The fundamental property of a fraction

$\frac{(A,B) *_{in} (C,D)}{(Q,R) *_{in} (C,D)}_{in} = \frac{(A,B)}{(Q,R)}_{in}$, $Q \neq 0, R \neq 0$

Operations with fractions

$\frac{(A,B)}{(Q,R)}_{in} +_{in} \frac{(C,D)}{(Q,R)}_{in} = \frac{(A,B) +_{in} (C,D)}{(Q,R)}_{in}$, $Q \neq 0, R \neq 0$

$\frac{(A,B)}{(Q,R)}_{in} +_{in} \frac{(C,D)}{(S,P)}_{in} = \frac{(A,B) *_{in} (S,P) +_{in} (C,D) *_{in} (Q,R)}{(Q,R) *_{in} (S,P)}_{in}$, $Q \neq 0, R \neq 0, S \neq 0, P \neq 0$,

$\frac{(A,B)}{(Q,R)}_{in} *_{in} \frac{(C,D)}{(S,P)}_{in} = \frac{(A,B) *_{in} (C,D)}{(Q,R) *_{in} (S,P)}_{in}$,

$\frac{(A,B)}{(Q,R)}_{in} /_{in} \frac{(C,D)}{(S,P)}_{in} = \frac{(A,B)*_{in}(S,P)}{(Q,R)*_{in}(C,D)}_{in}$,

$((A, B) /_{in} (Q, R))^n = \frac{(A,B)^n}{(Q,R)^n}_{in}$

The following relationship is held:

$\sqrt{(A, B)} = (\sqrt{A}, \sqrt{B})$

For example, $\sqrt{(4, 1)} = (\sqrt{2}, \sqrt{1})$.

Remark. Here is possible to use interpretation forms in the kind of algebraic groups, rings with one, fields and to create corresponding theory etc.

Partially 2-interpretation from 3-interpretation is in the form of (2, 1) and other notations |||. For example,

A|||Q (*),

where, in particular, A and Q can be interpretation forms.

For example, one can obtain an interpretation of A in the form of Q using (*), or even replace A with Q.

Remark. Here is possible to use self-type interpretation forms, |||-type interpretation forms, games-forms and to create corresponding theories etc.

Remark. May consider interpretation forms by Q, where Q may be any not necessarily containment. May consider, for example, more general interpretation form ψ(A, g(B, C)) than scalar form (1, (2, 1)) and where elements connected by another action than containment or, for example, by structural containment into structure C via structure B. May consider more general interpretation form R (A, B), interpretation vector- forms, interpretation matrix- forms, interpretation tensor- forms, interpretation operator- forms etc.

Remark. May consider interpretation programming forms, form-programming.

Remark. May consider pa-interpretations, pa-classifications.

Also, we may consider interpretation forms (A, B) by classical vector algebra:

$\overline{a} = (A, B)$, $\overline{b} = (C, D)$.

1. Condition of collinearity (parallelism) of vectors: $\overline{a}$ and $\overline{b}$: $\overline{b} = \lambda\overline{a}$, где $\lambda \neq 0$,
2. vector lengths $||\overline{a}|| = \sqrt{A^2 + B^2}$,
3. the scalar product $(\overline{a}, \overline{b}) = AC + BD$,
4. transposition $(2, 1)^T = \binom{2}{1}$ – hierarchical |||,

5. multiplication of matrix interpretation and vector interpretation $\begin{pmatrix} a & b \\ c & d \end{pmatrix}\begin{pmatrix} q \\ z \end{pmatrix} = \begin{pmatrix} aq \\ bz \\ cq \\ dz \end{pmatrix}$

6. etc.

For interpretation forms $\bar{a}(t) = (A(t), B(t))$ we may use differential and integral calculus, functional analysis, operator analysis, differential equations etc.

For example, $(\frac{dA(t)}{dt}, \frac{\partial^2 B(x,t)}{\partial x\,\partial t})$, $(\frac{d^3 A(x_1,x_2,x_3,t)}{d(x_1,x_2,x_3)}, \frac{\partial^2 B(x_1,x_2,x_3,t)}{\partial x_2\,\partial t})$. 3-derivative as $\frac{d^3 A(x_1,x_2,x_3,t)}{d(x_1,x_2,x_3)}$, where derivative by all variables is simultaneous action, $\frac{d^3 y}{d(b^3)}$ is 3selfderivative (designation: $\frac{d^3}{d}self_b(y)$), 3-integral $(\int\int\int\ )yd(x)^3$ etc.

The Main Equation

(x, 1) ((b)) = (1, 1) ((a)),

solution

$X = 2\log_{4\|b\|} \| a \|$

The main equation

(x, 1) ((b)) = (2, 1) ((a))

or

$self^{x/2}(b) = self\,(a)$,

solution

$X = 2\log_{4\|b\|_{format}} 4 \| a \|_{format}$,

where $\| a \|_{format}$, $\| b \|_{format}$ are norms a and b by its format, in particular for b is living organism, a is his DNA, when $a_{format} = (q, r)$

$\| a \|_{format} = \sqrt{\| q \|^2 + \| r \|^2}$,

but if q, r are numbers then

$\| a \|_{format} = \sqrt{q^2 + r^2}$, analogously for $\| b \|_{format}$. In the case singular format, for example, $a_{format} = q|||r$ we have

$\| a \|_{format} = \mu(q|||r) = (\mu(q)\mu(r))^{(\mu_{|||}(q|||r)+1)}$, where $\mu_{|||}(q|||r) = ½ - \frac{(\mu(q\cap r) - \mu((-q)\cap r)}{2(\mu(q\cup r) + \mu((-q)\cup r)}$, ∀A, B [6].

The equation

((1,2), (2, 1), 1) (y) = (1, 1) (b).

The solution for b

$b = (1, 1)^{-1}((1,2), (2, 1), 1)\,(y)$

The solution for y

$y = ((1,2), (2, 1), 1)^{-1}(1, 1)$ (b)

Format-number (2(1, 2, 1), 1) characterizes the transition of quantum numbers through the tensor product to entanglement. Of course, (1, 2)-interpretation and (2, 1)-interpretation are simplifications; in reality, reality is much more complex.

The tensor product of format-numbers (A_q, B_r) with (C_w, D_v): $(A_q, B_r)\otimes(C_w, D_v) = \begin{pmatrix} (A_q, C_w) & (A_q, D_v) \\ (B_r, C_w) & (B_r, D_v) \end{pmatrix}$ is manifestation of $(A_q, B_r)|||(C_w, D_v)$ to normal level.

The tensor product of (A_q, B_r) with (A_q, B_q): $(A_q, B_r)\otimes(C_w, D_v) = \begin{pmatrix} (A_q, C_w) & (A_q, D_v) \\ (B_r, C_w) & (B_r, D_v) \end{pmatrix}$.

$(A_q, B_r)\otimes(C_w, D_v)\otimes(Q_S, U_P)$ is a 3-tensor product, don't confuse with $((A_q, B_r)\otimes(C_w, D_v))\otimes(Q_S, U_P)$ $= \begin{pmatrix} (A_q, C_w) & (A_q, D_v) \\ (B_r, C_w) & (B_r, D_v) \end{pmatrix}\otimes(Q_S, U_P) =$ $\begin{pmatrix} ((A_q, C_w), Q_s) & ((A_q, C_w), U_p) & ((A_q, D_v), Q_s) & ((A_q, D_v), U_p) \\ ((B_r, C_w), Q_s) & ((B_r, C_w), U_p) & ((B_r, D_v), Q_s) & ((B_r, D_v), U_p) \end{pmatrix}$

or $(A_q, B_r)\otimes((C_w, D_v)\otimes(Q_S, U_P)) =$ $\begin{pmatrix} (A_q, (C_w, Q_s)) & (A_q, (D_v, Q_s)) & (A_q, (C_w, U_p)) & (A_q, (D_v, U_p)) \\ (B_r, (C_w), Q_s)) & (B_r, (D_v, Q_s)) & (B_r, (C_w, U_p)) & (B_r, (D_v, U_p)) \end{pmatrix}$.

May consider the following interpretation: $(1_o, 2_x)$ (D) is interpretation D in format – 1 object into two places simultaneously. The subject of $(1_o, 2_x)$ ((pself(oself(A))) (request B)) gives direct knowledge for request B, A = CNS of human. If A is elementary particle, then it is done by request B with needed "dynamic scan" to target weight etc. $(1_o, 2_x)$ (D) = $(2_x, 1_o)$ (D), $(1_x, 2_x)$(D) = $((2_x, 1_x)(D))^{-1}$, $(1_o, 2_o)$ (D) = $((2_o, 1_o)$ (D)$)^{-1}$, $(1_x, 2_o)$ (D) = $(2_o, 1_x)$ (D),

May consider different kinds of interpretation by format-value: (B_C, R_U) (A), $\forall$ B_C, R_U, C, U etc.

SCprt $\overset{Q,W}{\underset{P}{g}}$ is $(2_x, 1_x)$ if Q, W, P are capacities. SCprt $\overset{Q,W}{\underset{P}{g}}$ is $(2_o, 1_o)$ if Q, W, P are objects. SCprt $\overset{Q,W}{\underset{P}{g}}$ is $(2_0, 1_x)$ if P are capacity, Q, W are objects. SCprt $\overset{Q,W}{\underset{P}{g}}$ is $(2_x, 1_0)$ if Q, W are capacities, P is object etc.

May consider the following interpretations: $(2_o, 1_o, 2_x)$, $((2_o, 1_o), 2_x)$ etc. $(2_{action}, 1_o)$ can turn on two actions with one object simultaneously. The format-number (2, 1)// (1, 1) designs manifestations of (2, 1)-interpretation to (1, 1)-interpretation. The format-number (1, 2)// (1, 1) designs manifestations of (1, 2)-interpretation to (1, 1)-interpretation. The format-number (2, 1)// (1, 2)// (1, 1) designs manifestation of (2, 1)-interpretation to (1, 2)-interpretation and manifestation of it to (1, 1)-interpretation etc.

Remark. May consider any format-form, where there may be no numbers. May consider format-probability, format-entropy, format-function, format-operator, format-geometry, format-C, C is any, (2, 1)-probability, (1, 2)- probability, (2, 1)- probability, 3-probability, format-number of syntax, format-format, format- syntax, format-number of action, format-number of process, format-number of structure, structure-numbers, complex format-numbers, format-numbers with complex numbers, (2, 1)-containment, (1, 2)-containment, (2(2, 1), (2, 1))-containment, (2(1, 2), (1, 2))-containment, self-(format-number) as hidden, format-number of C, C is any etc. (1, 1)- probability = probability. For example, self-(format-number): self-$((2,1))$ = SCprt $\begin{matrix}(2,1)\\ g\\ (2,1)\end{matrix}$. May consider formats: (3, 2), (M, N), (Q, R), ^{di} (3, 2), ^{di} (M, N), ^{di} (Q, R), (M, N, K), (N_1, N_2, …, N_k), $\begin{pmatrix} a_{11} & \cdots & a_{1m} \\ \cdots & a_{ij} & \cdots \\ a_{n1} & \cdots & a_{nm} \end{pmatrix}$, tensor, any structure, any W, any chaotical structure, any fuzzy structure, any partial structure, where M, N, K, N_1, N_2, …, N_k are integers; Q, R, a_{ij} are any etc. $_{(M,N)}$Sprt$\frac{A}{B}$– A contains into B as element by format (M, N).

Negative formats are for interpretations inorganic beings and for non-living energy structures outside our world: (-1, -1), (-2, -1), (-m, -n) etc. For (-1, -1)- interpretation, the pair of imaginary units in the (i, i)-interpretation corresponds to the root energy. Simple interpretations with prime numbers p and q: (p, q)- interpretation is not a superposition of interpretations.

Remark. Format-numbers may be used for coding actions, processes, objects etc.

Remark. Black hole is self-space as and our Universe, outside its limits, Black hole is perceived as Black hole.

Algebra Beginning of Format-Numbers

Definition 4.0. A group U of format-numbers consists of a set U of format-numbers together with a binary operation $*_{in}$: (A, B) $*_{in}$ (Q, R) = (A * Q, B * R) for which the following properties are satisfied:

((A, B) $*_{in}$ (Q, R)) $*_{in}$ (C, D) = (A, B) $*_{in}$ ((Q, R) $*_{in}$ (C, D))

for all elements (A, B), (Q, R), and (C, D) of U (the Associative Law);

there exists an element e = (1, 1) of U (known as the identity element of) such that e $*_{in}$ (A, B) = (A, B) = (A, B) $*_{in}$ e, for all elements (A, B) of U;

for each element (A, B) of U there exists an element $(A, B)_0$ of U (known as the inverse of (A, B)) such that (A, B) $*_{in}$ $(A, B)_0$ = e = $(A, B)_0$ $*_{in}$ (A, B) (where e is the identity element of U). The order |U| of a finite group U is the number of elements of U. A group U is Abelian (or commutative) if

(A, B) $*_{in}$ (Q, R) = (Q, R) $*_{in}$ (A, B) for all elements (A, B) and (Q, R) of U. One usually adopts multiplicative notation for groups, where the product (A, B) $*_{in}$ (Q, R) of two elements (A, B) and (Q, R) of a group U is denoted by (A, B) $*_{in}$ (Q, R). The inverse of an element (A, B) of U is then denoted by (A, B) − (1, 1). The identity element is usually denoted by e (or by eU when it is necessary to specify explicitly the group to which it belongs). Sometimes the identity element is denoted by (1, 1). Thus, when multiplicative notation is adopted, the group axioms are written as follows:

((A, B) $*_{in}$ (Q, R)) $*_{in}$ (C, D) = (A, B) $*_{in}$ ((Q, R) $*_{in}$ (C, D))

for all elements (A, B) , (Q, R), and (C, D) of U (the Associative Law);

there exists an element e of U (known as the identity element of U) such that e$*_{in}$ (A, B) = (A, B) = (A, B)$*_{in}$e, for all elements (A, B) of U;

for each element (A, B) of G there exists an element (A, B) −(1, 1) of U (known as the inverse of (A, B)) such that (A, B) $*_{in}$ (A, B) −(1, 1) = e = (A, B) −(1, 1) $*_{in}$ (A, B) (where e is the identity element of U). The group U is said to be Abelian (or commutative) if (A, B) $*_{in}$ (Q, R) = (Q, R) $*_{in}$(A, B) for all elements (A, B) and (Q, R) of U. It is sometimes convenient or customary to use additive notation for certain groups. Here the group operation is denoted by $+_{in}$: (A, B) $+_{in}$ (Q, R) = (A + Q, B + R), the identity element of the group is denoted by (0, 0), the inverse of an element (A, B) of the group is denoted by $-_{in}$ (A, B) . By convention, additive notation is only used for Abelian groups. When expressed in additive notation the axioms for a Abelian group are as follows:

(A, B) $+_{in}$ (Q, R) = (Q, R) $+_{in}$ (A, B) for all elements (A, B) and (Q, R) of U (the Commutative Law);

((A, B) $+_{in}$ (Q, R)) $+_{in}$ (C, D) = (A, B) $+_{in}$ ((Q, R) $+_{in}$ (C, D))for all elements (A, B) , (Q, R), and (C, D) of U (the Associative Law);

there exists an element 0 of U (known as the identity element or zero element of U) such that 0 + (A, B) = (A, B) = (A, B) + 0, for all elements (A, B) of U;

for each element (A, B) of G there exists an element −(A, B) of U (known as the inverse of (A, B)) such that (A, B) + (−(A, B)) = 0 = (−(A, B)) + (A, B) (where 0 is the identity element of U). We shall usually employ multiplicative notation when discussing general properties of groups. Additive notation will be employed for certain groups (such as the set of integers with the operation of addition) where this notation is the natural one to use.

Examples of groups:

Example. The set of format-numbers with all integers constituent elements is an Abelian (or commutative) group under the operation of addition. (Additive notation is of course normally employed for this group.)

Example. The set of format-numbers with all rational numbers is an Abelian group under the operation of addition. (Additive notation is of course normally employed for this group.)

Example. The set of format-numbers with all real numbers is an Abelian group under the operation of addition. (Additive notation is of course normally employed for this group.)

Example. The set of format-numbers with all complex numbers is an Abelian group under the operation of addition. (Additive notation is of course normally employed for this group.)

Example. The set of format-numbers with all non-zero rational numbers is an Abelian group under the operation of multiplication.

Example. The set of format-numbers with all non-zero real numbers is an Abelian group under the operation of multiplication.

Example. The set of format-numbers with all non-zero complex numbers is an Abelian group under the operation of multiplication.

Example. The set of format-numbers with all non-zero complex numbers is an Abelian group under the operation of multiplication.

Because of the specific multiplication (which is Cartesian multiplication), format-numbers may be interpreted as Cartesian multiplication of two groups with numbers and traditional mathematical group theory is applicable to format-numbers.

Definition 4.1. Cascading group of the first type is group, in which each of its points can be the same group.

Definition 4.2. Cascading group of the second type is group, in which each of its points can be the same group, in which each of its points can be the same group, ... etc.

Definition 4.3. The cascading field of the first type is field, in which each of its points can be the same field.

Definition 4.4. Cascading field of the second type is field, in which each of its points can be the same field, in which each of its points can be the same field, ... etc.

Definition 4.5. Cascading ring of the first type is ring, in which each of its points can be the same ring.

Definition 4.6. Cascading ring of the second type is ring, in which each of its points can be the same ring, in which each of its points can be the same ring, ... etc.

Definition 4.7. Cascading structure of the first type is structure, in which each of its points can be the same structure.

Definition 4.8. Cascading structure of the second type is structure, in which each of its points can be the same structure, in which each of its points can be the same structure, ... etc.

Definition 4.9. Cascading space of the first type is the space, in which each of its points can be the same space.

Definition 4.10. Cascading space of the second type is the space, in which each of its points can be the same space, in which each of its points can be the same space, … etc.

In these spaces for format-numbers topology can be specified.

May consider $(2,1)^{(2,1)}$, $(2,1)^{(2,1)^{\cdots(1,2)^{\cdots}}}$, $(2,1)_{(2,1)_{\cdots(1,2)_{\dots}}}$.

Definition 4.11. Cascading capacity of the first type is the capacity, in which each of its elements can be the same capacity.

Definition 4.12. Cascading capacity of the second type is the capacity, in which each of its elements can be the same capacity, in which each of its elements can be the same capacity, … etc.

Definition 4.13. Cascading d-capacity of the first type is the capacity, in which each of its elements can be the same d-capacity.

Definition 4.14. Cascading d-capacity of the second type is the capacity, in which each of its elements can be the same d-capacity, in which each of its elements can be the same d-capacity, … etc.

Remark. Cocoon-Space is the Space with own elements in assembler point positions as differ worlds and chaos in other points. Each assembler point position corresponds to its format-number. Energy-Space of human (pself-Space of human) is in generating Energy-Space (pself-Space). self-Space in each point has itself.

Elements of Mathematical Theory of Fuzzy Interpretations by Format-Numbers

We will consider the following format-numbers for interpretations forms

$\tilde{y} = (y_1|\mu_{\tilde{y}}(y_1),\ y_2|\mu_{\tilde{y}}(y_2))$,

where $\tilde{y}$ is the fuzzy set with measure of fuzziness $\mu_{\tilde{y}}$, y_1, y_2 are any fuzzy elements of its.

Simplest Operations with Fuzzy Interpretations Forms by Format-Numbers for Containment

Addition operation with fuzzy interpretation forms by format-numbers:

$(y_1|\mu_{\tilde{y}}(y_1),\ y_2|\mu_{\tilde{y}}(y_2)) +_{in} (b_1|\mu_{\tilde{b}}(b_1),\ b_2|\mu_{\tilde{b}}(b_2)) = (y_1|\mu_{\tilde{y}}(y_1) + b_1|\mu_{\tilde{b}}(b_1),\ y_2|\mu_{\tilde{y}}(y_2) + b_2|\mu_{\tilde{b}}(b_2))$,

$y_1|\mu_{\tilde{y}}(y_1)$, $b_1|\mu_{\tilde{b}}(b_1)$ are homogeneous any, $y_2|\mu_{\tilde{y}}(y_2)$, $b_2|\mu_{\tilde{b}}(b_2)$ are homogeneous any.

Remark 5.1. In particular, $y_1|\mu_{\tilde{y}}(y_1)$ and $b_1|\mu_{\tilde{b}}(b_1)$ can be other structurally homogeneous forms. The same applies to $y_2|\mu_{\tilde{y}}(y_2)$ and $b_2|\mu_{\tilde{b}}(b_2)$.

The following relationships are held:

1) Commutative law of addition

$(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) +_{in} (b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2)) = (b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2)) +_{in} (y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2))$.

2) Associative law of addition

$((y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) +_{in} (b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2))) +_{in} (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4)) = (y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) +_{in} ((b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2)) +_{in} (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4)))$.

The subtraction operation with fuzzy interpretation forms by format-numbers:

$(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) -_{in} (b_1|\mu_{\tilde{b}}(y_1), b_2|\mu_{\tilde{b}}(y_2)) = (y_1|\mu_{\tilde{y}}(y_1) - b_1|\mu_{\tilde{b}}(y_1), y_2|\mu_{\tilde{y}}(y_2) - b_2|\mu_{\tilde{b}}(y_2))$.

The multiplication operation with fuzzy interpretation forms by format-numbers:

$(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) *_{in} (b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2)) = (y_1|\mu_{\tilde{y}}(y_1) * b_1|\mu_{\tilde{b}}(b_1), y_2|\mu_{\tilde{y}}(y_2) * b_2|\mu_{\tilde{b}}(b_2))$, $y_1|\mu_{\tilde{y}}(y_1)$, $b_1|\mu_{\tilde{b}}(b_1)$ are homogeneous any, $y_2|\mu_{\tilde{y}}(y_2)$, $b_2|\mu_{\tilde{b}}(b_2)$ are homogeneous any.

Remark 5.2. In particular, $y_1|\mu_{\tilde{y}}(y_1)$ and $b_1|\mu_{\tilde{b}}(b_1)$ can be other structurally homogeneous forms. The same applies to $y_2|\mu_{\tilde{y}}(y_2)$ and $b_2|\mu_{\tilde{b}}(b_2)$.

The following relationships hold:

1) Commutative law of multiplication
2) $(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) *_{in} (b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2)) = (b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2)) *_{in} (y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2))$.
3) Associative law of multiplication
4) $((y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) *_{in} (b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2))) *_{in} (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4)) = (y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) *_{in} ((b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2)) *_{in} (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4)))$.
5) Distributive law of multiplication with respect to addition

$((y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) +_{in} (b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2))) *_{in} (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4)) = (y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) *_{in} (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4)) +_{in} (b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2)) *_{in} (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4))$

6) Distributive law of multiplication with respect to subtraction
7) $((y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) -_{in} (b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2))) *_{in} (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4)) = (y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) *_{in} (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4)) -_{in} (b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2)) *_{in} (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4))$
8) $(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) *_{in} (1, 1) = (y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2))$

From $(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) +_{in} (b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2)) = (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4)) +_{in} (b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2))$ follows $(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) = (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4))$

9) From $(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) *_{in} (b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2)) = (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4)) *_{in} (b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2))$ follows $(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) = (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4))$.

The division operation with fuzzy interpretation forms:

$(y_1|\mu_{\tilde{y}}(y_1),\ y_2|\mu_{\tilde{y}}(y_2))\ /_{in}\ (b_1|\mu_{\tilde{b}}(b_1),\ b_2|\mu_{\tilde{b}}(b_2))$ or $\frac{(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2))}{(b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2))}{}_{in}$, $b_1|\mu_{\tilde{b}}(b_1) \neq 0$, $b_2|\mu_{\tilde{b}}(b_2), \neq 0$.

$(y_1|\mu_{\tilde{y}}(y_1),\ y_2|\mu_{\tilde{y}}(y_2))\ /_{in}\ (b_1|\mu_{\tilde{b}}(b_1),\ b_2|\mu_{\tilde{b}}(b_2)) = (y_1|\mu_{\tilde{y}}(y_1)\ /\ b_1|\mu_{\tilde{b}}(b_1),\ y_2|\mu_{\tilde{y}}(y_2)\ /\ b_2|\mu_{\tilde{b}}(b_2)) = (\frac{y_1|\mu_{\tilde{y}}(y_1)}{(b_1|\mu_{\tilde{b}}(b_1)}{}_{in}, \frac{y_2|\mu_{\tilde{y}}(y_2)}{(b_2|\mu_{\tilde{b}}(b_2)}{}_{in})$, $b_1|\mu_{\tilde{b}}(b_1) \neq 0$, $b_2|\mu_{\tilde{b}}(b_2), \neq 0$.

The fundamental property of a fraction

$\frac{(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) *_{in} (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4))}{(b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2)) *_{in} (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4))}{}_{in} = \frac{(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2))}{(b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2))}{}_{in}$, $b_1|\mu_{\tilde{b}}(b_1) \neq 0$, $b_2|\mu_{\tilde{b}}(b_2) \neq 0$, $b_3|\mu_{\tilde{b}}(b_1) \neq 0$, $b_4|\mu_{\tilde{b}}(b_2) \neq 0$.

Operations with fractions

$\frac{(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2))}{(b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2))}{}_{in} +_{in} \frac{(b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4))}{(b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2))}{}_{in} = \frac{(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) +_{in} (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4))}{(b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2))}{}_{in}$, $b_1|\mu_{\tilde{b}}(b_1) \neq 0$, $b_2|\mu_{\tilde{b}}(b_2) \neq 0$,

$\frac{(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2))}{(b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2))}{}_{in} +_{in} \frac{(b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4))}{(b_5|\mu_{\tilde{b}}(b_5), b_6|\mu_{\tilde{b}}(b_6))}{}_{in} = \frac{(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) *_{in} (S,P) +_{in} (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4)) *_{in} (b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2))}{(b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2)) *_{in} (b_5|\mu_{\tilde{b}}(b_5), b_6|\mu_{\tilde{b}}(b_6))}{}_{in}$, $b_1|\mu_{\tilde{b}}(b_1) \neq 0$, $b_2|\mu_{\tilde{b}}(b_2) \neq 0$, $b_5|\mu_{\tilde{b}}(b_5) \neq 0$, $b_6|\mu_{\tilde{b}}(b_6) \neq 0$.

$\frac{(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2))}{(b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2))}{}_{in} *_{in} \frac{(b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4))}{(b_5|\mu_{\tilde{b}}(b_5), b_6|\mu_{\tilde{b}}(b_6))}{}_{in} = \frac{(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) *_{in} (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4))}{(b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2)) *_{in} (b_5|\mu_{\tilde{b}}(b_5), b_6|\mu_{\tilde{b}}(b_6))}{}_{in}$,

$\frac{(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2))}{(b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2))}{}_{in} /_{in} \frac{(b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4))}{(b_5|\mu_{\tilde{b}}(b_5), b_6|\mu_{\tilde{b}}(b_6))}{}_{in} = \frac{(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)) *_{in} (b_5|\mu_{\tilde{b}}(b_5), b_6|\mu_{\tilde{b}}(b_6))}{(b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2)) *_{in} (b_3|\mu_{\tilde{b}}(b_3), b_4|\mu_{\tilde{b}}(b_4))}{}_{in}$,

$\left((y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2))\ /_{in}\ (b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2))\ \right)^n = \frac{(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2))^n}{(b_1|\mu_{\tilde{b}}(b_1), b_2|\mu_{\tilde{b}}(b_2))^n}{}_{in}$, $b_1|\mu_{\tilde{b}}(b_1) \neq 0$, $b_2|\mu_{\tilde{b}}(b_2) \neq 0$.

The following relationship holds:

$\sqrt{(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2))} = (\sqrt{(y_1|\mu_{\tilde{y}}(y_1)}, \sqrt{(y_2|\mu_{\tilde{y}}(y_2)}).$

Elements of the Dynamic Mathematics of Entanglement of Elementary Particles

Explains mechanisms of Quantum Entanglement and provides characteristics of Quantum Entanglement for living and non-living connections: processes, actions, energies, and objects. Entanglement of two electrons may try be considered by format-number (2(2, 1), (2, 1)) conditionally. Quantum calculations by their through have format-number ((2(2, 1), (2, 1)), 2(2(2, 1), (2, 1))) conditionally.

Let's designate Quantum Entanglement for format interpretation by format-number (2, 1) for |||. Then Quantum Entanglement between A and B for format interpretation by format-number (2, 1) is A|||B = self (A, B) [1, 2], in particular, self (|||, $|||^{-1}$), A|||A = self (A, A) = self(A) [2].

Manipulations using quantum entanglement were considered in the early stages [1-25]. Quantum Entanglement of microtubule in neurons corresponds to (2(2, 1), (2, 1))-interpretation, Quantum Entanglement of neuron corresponds to (N(K(2, 1), (2, 1)), M(K(2, 1), (2, 1)))-interpretation, …, Quantum Entanglement of human CNS corresponds to (K_1(…,(K_n(K_{n+1}(2, 1), (2, 1)), K_{n+2}(2, 1), (2, 1))), (K_{n+1}(2, 1), (2, 1)), K_{n+2}(2, 1), (2, 1))),…), L_1(…,(K_n(K_{n+1}(2, 1), (2, 1)), K_{n+2}(1, 2), (2, 1))), (K_{n+1}(2, 1), 1), K_{n+2}(2, 1), (2, 1))),…)) interpretation etc. Quantum Entanglement of bacterium corresponds to (N_1(N_3(2, 1), N_4(2, 1)), N_5(N_3(2, 1), N_4(2, 1)), N_2(N_3(2, 1), N_4(2, 1)), N_5(N_3(2, 1), N_4(2, 1)))-interpretation.

Self-Type Structures Generating Energy of Quantum Entanglement

Let's introduce measure: a degree of freedom μ_f for interpretation by maximal number in format-number:

1. $\mu_f(1, 1) = 1$
2. $\mu_f(2_o, 1_o) = 2_o$
3. $\mu_f(1_x, 2_x) = 2_x$
4. $\mu_f(2, 2) = 4$
5. etc.

self-type structures generate energy of upper level (subtle energy of **Quantum Entanglement**):

1. self(A) generates self-energy of A (energy of A closed on itself), which is the law of conservation of energy of object A in fundamental form.
2. self (A, B) = A|||B generates self-energy of connection A with B (energy of connection A with B closed on itself), which is the law of conservation of energy of connection A with B in fundamental form or **Quantum Entanglement** of A with B.
3. self (A, B) = A$|||_q$B generates self-energy of connection A with B by q (energy of connection A with B by q closed on itself), which is the law of conservation of energy of connection A with B by q in fundamental form or **Quantum Entanglement** of A with B by q.

4. self (A, F(A)) = A||| F(A) generates self-energy of field transforming A to F(A) (energy of field transforming A closed on itself), which is the law of conservation of this energy in fundamental form or **Quantum Entanglement** of A to F(A). The examples:

a) H|||2H generates self-energy of field doubling H, in particular, if H is self-energy of DNA.

b) $\mathrm{self}_{De}(\Psi)$ generates self-energy of field: $c^2\rho_3\Psi \equiv -\frac{\hbar}{i}\, i\, \frac{\partial}{\partial t}\Psi - \frac{c\hbar}{i}(\alpha \cdot \nabla)\Psi,\ \forall\ \Psi$, which gives interpretation on normal level by Dirac equation (designation is De).

c) $\mathrm{self}_{Se}(\psi)$ generates self-energy of field: $i\hbar\partial\psi/\partial t \equiv \hat{H}\psi,\ \forall\psi$, which gives interpretation on normal level by Schrödinger equation (designation is Se).

d) Partial self-type structures [1-8] also generate some kinds of energy partially.

e) Fuzzy self-type structures [1-8] also generate some kinds of energy by random interpretations.

f) $\mathrm{SCprt}\ \overset{P}{\underset{2P}{g}}$ generates doubling P. $\mu_f = 2$.

g) $\mathrm{SCprt}\ \overset{x}{\underset{2x}{g}}$ generates doubling place x of space. $\mu_f = 2$.

h) $\mathrm{SCprt}\ \overset{t}{\underset{2t}{g}}$ generates doubling time t. $\mu_f = 2$.

i) $\overset{2P}{\underset{P}{g}}\ \mathrm{SCprt}\ \overset{P}{\underset{2P}{g}}$ generates doubling P and compression of 2P to P simultaneously. $\mu_f = (2, 2) = 4$.

j) $\mathrm{SCprt}\ \overset{P}{\underset{2P}{g}}\ |||\ \mathrm{SCprt}\ \overset{2P}{\underset{P}{g}}$ generates doubling P and compression of 2P to P simultaneously. $\mu_f = (2, 2) = 4$.

k) $\overset{f(P)}{\underset{P}{g}}\ \mathrm{SCprt}\ \overset{P}{\underset{f(P)}{g}}$ generates expansion P to f(P) and compression of f(P) to P simultaneously. $\mu_f = (f(P)/P,\ f(P)/P)$.

l) $\mathrm{SCprt}\ \overset{P}{\underset{f(P)}{g}}\ |||\ \mathrm{SCprt}\ \overset{f(P)}{\underset{P}{g}}$ generates expansion P to f(P) and compression of f(P) to P simultaneously. $\mu_f = (f(P)/P,\ f(P)/P)$.

m) $\overset{f(P)}{\underset{r(P)}{g}}\ \mathrm{SCprt}\ \overset{r(P)}{\underset{f(P)}{g}}$ generates expansion r(P) to f(P) and compression of f(P) to r(P) simultaneously. $\mu_f = (f(P)/r(P), f(P)/\, r(P))$.

n) $\mathrm{SCprt}\ \overset{r(P)}{\underset{f(P)}{g}}\ |||\mathrm{SCprt}\ \overset{f(P)}{\underset{r(P)}{g}}$ generates expansion r(P) to f(P) and compression of f(P) to r(P) simultaneously. $\mu_f = (f(P)/r(P), f(P)/\, r(P))$.

o) etc.

1. etc.

Remark. $\overset{2P}{\underset{P}{g}}\ \mathrm{SCprt}\ \overset{P}{\underset{2P}{g}} \neq \mathrm{SCprt}\ \overset{P}{\underset{2P}{g}}\ |||\ \mathrm{SCprt}\ \overset{2P}{\underset{P}{g}}$.

Energy-Space

Energy-space contains bundles of energy fibers. May consider a local energy-space of each human and global energy-space, containing local energy-space of each human. Energy-space contains spaces of energies corresponding to format-numbers. Spaces of energies corresponding to format-numbers consist of global space with local spaces. Our physical space is part of (1, 1)-interpretation of bundle of energy fibers collected at the base in the one point of human energy-cocoon. We will this point by base-position. Each base-position corresponds to format-number. There is no mention of any multidimensionality or hierarchy in it. Let's associate space of format-numbers with local energy-space. Dimensionality doesn't apply here. Format-numbers are what's at work here. Here is the scalar product for elements a, b:

(a, b) = DS+QR,

a corresponds to format-number (D, Q), b corresponds to format-number (S, R), the norm of element a:

$\|a\| = \sqrt{D^2 + Q^2}$.

The global energy-space is local energy-space for an even more global space etc.

Some Interpretation Types

The theory of interpretations is the Unified geometric theory of energies.

(2, 1)-interpretation for A and B: A|||B

(3, 1)-interpretation for A and B and C: A|||B|||C is $\begin{matrix} A & & B \\ & ||| & \\ & C & \end{matrix}$, it not to be confused with A|||(B|||C) or (A|||B)|||C, what is achieved through (2, 1)-interpretation,

Quantum computers execute actions by format-number A = (2(1, 2), (1, 2)), further development by format-number B = (A, 2A), further development also (B, 2B), …, etc. Our networks will execute actions besides by these format-numbers also by format-number C = (2(2, 1), (2, 1)), further development by format-number D = (2C, C), further development by format-number (2D, D), …, etc. All of the previous, in particular, Definitions can be generalized to (3, 1)-interpretation, (N, 1)-interpretation etc. Can realized generalization these Definitions to 3-Definitions with 3-structures of connections in them (by 3- connections) etc.

May consider 3-information, 3-interpretation, 3-(mathematical graph), 3-algorithm, 3-format, 3-set, N-information, N-(mathematical graph), N-algorithm, N-interpretation, N-format, N-set etc. The example of 3-set:

$\begin{pmatrix} A_{11} & - & A_{12} \\ A_{21} & - & A_{22} \\ \backslash & \dots & / \\ & A_{23} & \\ & A_{13} & \\ & \dots & \end{pmatrix}$, the examples of 3-format: $\begin{pmatrix} M & - & N \\ & \backslash \; / & \\ & L & \end{pmatrix}$, $\begin{pmatrix} A & - & B \\ & \backslash \; / & \\ & C & \end{pmatrix}$, $\begin{pmatrix} ||| & - & \mathrm{self}() \\ & \backslash \; / & \\ & \mathrm{self}(|||) & \end{pmatrix}$, the examples of 3-interpretations: $\begin{pmatrix} M & - & N \\ & \backslash \; / & \\ & L & \end{pmatrix}$-interpretation, $\begin{pmatrix} A & - & B \\ & \backslash \; / & \\ & C & \end{pmatrix}$-interpretation, $\begin{pmatrix} ||| & - & \mathrm{self}() \\ & \backslash \; / & \\ & \mathrm{self}(|||) & \end{pmatrix}$-interpretation etc.

(1, (Q, R)) is $^{(Q, B)}$ self, (1, (Q, R))(D) is $^{(Q, B)}$ self(D). self(|||) = (((2, 1), (2, 1)), 1).

(2, 1)-interpretation ϵ |||, (N, 1)-interpretation ϵ |||, N > 2 etc.

(1, 2)-interpretation ϵ $|||^{-1}$, (1, M)-interpretation ϵ $|||^{-1}$, M > 2 etc.

(a, b) |||(c, d) = ((a, (c, d)), ((b, (c, d))) = (((a, c), (a, d)), ((b, c), (b, d))), i.e., the same two places simultaneously.

Paself(A) = (2((2, 1), 2(2, 1)), ((2, 1), 2(2, 1)))(A).

$\begin{pmatrix}(2,1)\\(1,2)\end{pmatrix}$-interpretation or (2, 1) ↑ |↓ (1, 2)-interpretation is equal (((2, 1), (1, 2)), 1)-interpretation.

$\begin{pmatrix}(1,2)\\(2,1)\end{pmatrix}$-interpretation or (1, 2) ↑ |↓ (2, 1)-interpretation is equal (((1, 2), (2, 1)), 1)-interpretation, (((1, 1), (2, 1)) ⇄ ((2, 1), (1, 1))) -interpretation, (((1, 1), (2, 1)) ||| ((2, 1), (1, 1))) -interpretation etc. May consider the vector-interpretation: $\begin{pmatrix} (A_1, B_1) \\ (A_2, B_2) \\ \cdots \\ (A_n, B_n) \\ (A_{n+1}, B_{n+1}) \end{pmatrix}$-interpretation etc.

Let us introduce the notations:

1. (w, u)-self(A) is (1, (w, u))-interpretation. For example, (2, 1)-self(A) = self(A), (1, 2)-self(A) = oself(A),
2. (w, u)- $|||$ is (w, u)-interpretation. For example, (2, 1)- $|||$ = $|||$, (1, 2)- $|||$ = $|||^{-1}$ etc.

For two:

A$|| > |$B is A>B and B>A simultaneously.

A||≠| B is A≠B and B=A simultaneously.

In A|||B, the A connections become B connections and vice versa simultaneously.

pa$|||$ = paself(containment), $|||$ = self(containment), pa$||d|$ = paself(d), $||d|$ = self(d).

A|||B manifests on the lower level of A and B. A|||B from our position is a process, and from the top-level position it is a result.

Definition 9.1. Dynamic operator $\mathrm{SCSprt}\begin{matrix} a \\ g \\ b \end{matrix}$ is containment a to b and b to a simultaneously. $\mathrm{SCSprt}\begin{matrix} a \\ g \\ b \end{matrix} \epsilon$ $a|||_g b$ or $\mathrm{SCSprt}\begin{matrix} a \\ g \\ b \end{matrix} \subset a|||_g b$.

A$||d|$ B is A d B and B d A simultaneously.

Для N: $\mathrm{SCSprt}\begin{matrix} a_1 \\ g \\ \cdots \\ g \\ a_N \end{matrix}$ is containment by g a_1 to a_2 and a_2 to a_1,…, a_i to a_j and a_j to a_i, … ∀i, j simultaneously.

Remark 9.1. May consider $\mathrm{SCSprt}\begin{matrix} d \\ d \\ d \end{matrix}$, $\mathrm{SCSprt}\begin{matrix} d \\ d \\ -d \end{matrix}$, $|||^{\frac{3}{2}}$ = |||(|||)|||, $|||^r$, $||d|^r$, $||$chaos$|$, chaos-self, self(chaos), self-randomnicity, oself-randomnicity etc.

2-self ≠ self^2 (i.e., (1, (4, 1)) ≠ ((1, (2, 1)), (2, 1))).

(2 objects, 1 place of space)-interpretation, ((1 place of space, (2 places of space, 1 object)) = (1 object, 2 places of space), ((1 place of space, (1 place of space, 2 objects)) = (2 objects, 1 place of space) etc.

||| is a more subtle connection than self, Rn-type of ||| is even more subtle, Zn-type of ||| is even more subtle, etc. $|||_D \subset |||$, ∀D, $||d|_Q \subset ||d|$, ∀Q,

A = oself(self(A)) = oself(A|||A),

A, B = $|||^{-1}_{(A,B)}$ A|||B,

B = $|||^{-1}_{(A,B)}$ A|||B – A,

A = A$|||^{0}$A,

$|||^{-1}_{(A,A)}$ A = oself(A),

$|||^{-1}_{(A,A,A)}$ A,

$|||^{-1}_{(A,A,\ldots,A)}$ A,

A($^{C}|||^{D}$) B,

A (||C||D|)B,

A$|||^{C|||D}$B,

A$|||_{C|||D}$B,

A$|||_{A|||B}$B,

A$|||_{()|||()}$B,

A$|||_{|||}$B,

$|||^{-|||}$,

$|||^{-|||^{\cdots^{-|||}}}$,

A||d$|_{||d|}$B,

A||d$|_{||Q|}$B,

A||d$|_{||S(A)|}$B, S(A) is A|||result of A,

A^{G}||d$|\,{}^{G}{}_{||d|}$B,

A^{G}||d$|\,{}^{G}{}_{||Q|}$B,

R^{n}-type of |||,

Z^{n}-type of |||,

$(a + ib)^{n}$-type of |||,

$\mathrm{self}(A,B)^{\mathrm{self}(A,B)^{\mathrm{self}(A,B)}}$,

$\mathrm{self}(A,B)_{\mathrm{self}(A,B)_{\mathrm{self}(A,B)}}$,

pself(A, B) = (A|||B)|||($|||^{-1}_{A}$B), ∀ A, B.

3-connection self (A, B, C) =self$\begin{pmatrix} A & - & B \\ & \backslash \;\; / & \\ & C & \end{pmatrix}$ = A|||B|||C, not to be confused with two 2-connections: (A|||B)|||C = A|||(B|||C). $self_q$ (A_q, B_q) generates field of energy $A_q|||_q B_q$ by spin q, may consider $self_v(|||_v, ||d|_r, {}^G||d|_y)$.

If d is object, we give for d = $SCSprt\overset{q}{\underset{q}{g_1}}$ in this case one of the options of A||d|B is $SCSprt\overset{\substack{a \\ q,\, SCSprtg_1 \\ a}}{\underset{\substack{b \\ q,\, SCSprtg_1 \\ b}}{g_1}}$,

where A = $SCSprt\overset{a}{\underset{a}{g_1}}$, B = $SCSprt\overset{b}{\underset{b}{g_1}}$, ||d| = $SCSprt\overset{q,\{\}}{\underset{q,\{\}}{g_1}}$. The generalization of it is

$SCS_{(M,N)}^{(K,L)}prt\overset{q_1,\dots,q_n,A_1,\dots,A_m}{\underset{q_1,\dots,q_n,B_1,\dots,B_k}{g_1}}$, where $q_1,\dots,q_n,A_1,\dots,A_m,B_1,\dots,B_k$ are objects.

^{di}self : Result of d (d-content) (for or into or…) Q (d-capacity) is Result to itself or

Result of itself.

May consider ||format|, ||connection| etc. For example, $||(2,1)| = |||_{(2,1)} = |||$. May turn on the desired actions by self-structure: A|||A = $Sprt\overset{A}{\underset{A}{d}}$ → A|||B = $Sprt\overset{A}{\underset{B}{d}}$. May turn of the desired actions by self-structure: $\overset{B}{\underset{A}{d}}\,Sprt$ → A|||A = $Sprt\overset{A}{\underset{A}{d}}$.

self does from any degenerate connection. Any G-type of |||, G is any structure, objects, action, process etc. In any G, any closure of Q onto itself can be used as the basis for constructing ||Q|. Any G-type of $|||^{-1}$, G is any structure, objects, action, process etc.

R^n-type of $|||^{-1}$,

Z^n-type of $|||^{-1}$,

$(a + ib)^n$-type of $|||^{-1}$,

By 2-

R^n-type of $|||(|||)|||^{-1}$,

Z^n-type of $|||(|||)|||^{-1}$,

$(a + ib)^n$-type of $|||(|||)|||^{-1}$,

R^n-type of $|/\backslash(|||)|/\backslash^{-1}$,

Z^n-type of $|/\backslash(|||)|/\backslash^{-1}$

$(a + ib)^n$-type of $|/\backslash(|||)|/\backslash^{-1}$,

R^n-type of $|/\backslash(\uparrow | \downarrow)|/\backslash^{-1}$,

Z^n-type of $|/\backslash(\uparrow | \downarrow)|/\backslash^{-1}$

$(a + ib)^n$-type of $|/\backslash(\uparrow | \downarrow)|/\backslash^{-1}$,

self($F_1(A), F_2(A), \ldots, F_n(A)$),

self $(|||^{-1}$, g $(|||)$b, $|||(f(|||^{-1})$.

G is any space, structure and it may be connected to new type of $|||$, self or $|||^{-1}$, oself or any etc.

In the nuclei of atoms, the bond between nucleons by n-$|||$. That's why it's difficult by $|||^{-1}$.

Living energy (energy in itself p(a)self) is the generator (source) of itself.

A special ANS operator that reacts to any contact by capturing arguments SCprt $\underset{b}{\overset{ANS}{g}} = \underset{b}{\overset{ANS}{g}}$ SCprt, ∀b.

May consider the following interpretation: $(1_o, 2_x)$ (D) is interpretation D in format – 1 object into two places simultaneously. The subject of $(1_o, 2_x)$ ((pself(oself(A))) (request B)) gives direct knowledge for request B, A = CNS of human. If A is elementary particle, then it is done by request B with needed "dynamic scan" to target weight etc. $(1_o, 2_x)$ (D) = $(2_x, 1_o)$ (D), $(1_x, 2_x)$ (D) = $((2_x, 1_x)\ (D))^{-1}$, $(1_o, 2_o)$ (D) = $((2_o, 1_o)\ (D))^{-1}$, $(1_x, 2_o)$ (D) = $(2_o, 1_x)$ (D).

May consider different kinds of interpretation: (B_C, R_U) (A), ∀ B_C, R_U, C, U etc.

SCprt $\underset{P}{\overset{Q,W}{g}}$ is $(2_x, 1_x)$ if Q, W, P are capacities. SCprt $\underset{P}{\overset{Q,W}{g}}$ is $(2_o, 1_o)$ if Q, W, P are objects. SCprt $\underset{P}{\overset{Q,W}{g}}$ is $(2_0, 1_x)$ if P are capacity, Q, W are objects. SCprt $\underset{P}{\overset{Q,W}{g}}$ is $(2_x, 1_0)$ if Q, W are capacities, P is object etc.

May consider the following interpretations: $(2_o, 1_o, 2_x)$, $((2_o, 1_o), 2_x)$ etc. $(2_{action}, 1_o)$ can turn on two actions with one object simultaneously. The increase in dimensionality in physical theories is a cost of the (1, 1)-interpretation. That's why Heisenberg's uncertainty relation and observer paradoxes arise, since (1, 2)-interpretation corresponds to a number of constraints (laws) half that of (1, 1)-interpretation.

May consider following examples of dynamic hierarchical sets:

1) $A_h = \begin{pmatrix} (2,1) - A_h \\ (1,1) - A_h \end{pmatrix}$,

2) $\begin{pmatrix} \text{result of d} - \text{connections by format } (2,1) \\ \text{result of d} - \text{connections by format } (1,1) \end{pmatrix}$,

3) Etc.

Remark 9.2. Of course, it is possible without hierarchy through the space of connections with any formats.

Let's consider the norm for 2- connections of the element x = (A, B) of this space:

||x|| = ||A||(||A||-||B||),

for 3- connections of the element x = $\begin{matrix} A & - & B \\ & | & \\ & C & \end{matrix}$ may consider the norm as the average of the norms for the manifestations of this 3-connection at the level of 2-connections.

The magician with double (2w, w) consists: $\begin{matrix} a & & a & & a & & a \\ g & SCprtg & & & g & SCprtg & \\ a & & a & & a & & a \\ & g & & SCprt & & g & \\ a & & a & & a & & a \\ g & SCprtg & & & g & SCprtg & \\ a & & a & & a & & a \end{matrix}$ magician in contrast with normal human $\begin{matrix} a & & a \\ g & SCprtg & \\ a & & a \end{matrix}$, w = (2(2, 1), (2, 1)), (2w, w) → (w, $\left(\left(2\{\ \}_{(2,1)}, \{\ \}_{(2,1)}\right)^{w_{x_1}}(w_{x_2})\right)$). After stretching their energy cocoon into a strip and twisting it into an energetic "shell," the magician may have the following energetic structure by new dynamic operator:

$\begin{matrix} a & & a \\ g & SCprtg & \\ a & & a \\ & r & \\ a & & a \\ g & SCprtg & \\ a & & a \end{matrix}$ $(S)_q(t)_r$ $\begin{matrix} a & & a \\ g & SCprtg & \\ a & & a \\ & q & \\ a & & a \\ g & SCprtg & \\ a & & a \end{matrix}$, q is twisting it into an energetic "shell, r is stretching their energy cocoon into a strip.

Fundamentally New Approach to Elementary Particles

Entanglement of two electrons may try be considered by format-number (2(2, 1), (2, 1)) conditionally. Quantum calculations by their through have format-number ((2(2, 1), (2, 1)), 2(2(2, 1), (2, 1))) conditionally.

Definition 10. 1. The format-number

$(2, 1)_{g(t)}((2, 1)_{g(t)}((1, 2)_{g(t)}))_{g(t)} (\bar{a}(t))$ or $(((1, 2)_{g(t)}, (2, 1)_{g(t)}), 1)(\bar{a}(t))$

is the process of containing $\bar{a}(t)$ within itself as an element by $g(t)$ and the process of expelling $\bar{a}(t)$from itself as an element by $g(t)$ simultaneously [1, 17].

Definition 10. 2. The format-number $(2, 1)_{g(t)}(\bar{a}(t))$is the process of containing $\bar{a}(t)$ within itself as an element by $g(t)$ [18 -20].

Definition 10. 3. The format-number $(1, 2)_{g(t)}(\bar{a}(t))$is the process of expelling $\bar{a}(t)$ from itself as an element by $g(t)$ [17].

Definition 10. 4. The format-number $(1, 2)_{g(t)}(\{\,\}_{\bar{a}(t)})$.is the process of expelling $\bar{a}(t)$ from the emptiness by $g(t)$ [17].

The Law of **Dark Matter**

$$\mathrm{oself}(\bar{a}(t)) = \overset{\{\,\}}{\underset{\bar{a}(t)}{g(t)\mathrm{SCprt}(t)}} = |||^{-1}_{g(t)}(\{\,\}_{\bar{a}(t)}) = (1, 2)_{g(t)}(\{\,\}_{\bar{a}(t)}).$$

A more general **Law** $|||^{-1}$

$$(1, 2)_{g(t)}(\bar{a}(t)_{(\bar{b}(t),\bar{c}(t))}) = |||^{-1}_{g(t)}(\bar{a}(t)_{(\bar{b}(t),\bar{c}(t))}) = \bar{b}(t), \bar{c}(t) \text{ for } \forall\ \bar{b}(t), \bar{c}(t), \bar{a}(t).$$

Energy $|||^{-1}$ **(**format-number (1, 2)**)** of emptiness gives birth to $\bar{a}(t)$. So, the production of new elementary particles seems to come from nowhere. Either we take from emptiness by $|||^{-1}$ or through substitution by $|||$ **(**format-number (2, 1)**)**.

Since our dynamic mathematics places the primary emphasis on the dynamics of energy, rather than on objectivity, the level of approach to studying processes expands.

Manifestations of the upper level, corresponding to elementary particle, are: 1) the object itself without self-interaction, 2) the spin of self-interaction, 3) other properties of both self-interaction and interactions etc.

The simplest interpretation of some elementary particle and their characteristics consider as

$^{Q(t)}(2, 1)\ ^{Q(t)}(\ ^{Q(t)}(2, 1)(\ ^{Q(t)}(1, 2))\ )\ (\bar{a}(t))$ or $((^{Q(t)}(1, 2),\ ^{Q(t)}(2, 1)), 1)(\bar{a}(t))$

(i.e., $\overset{\bar{a}(t)}{\underset{\bar{a}(t)}{(\text{action } Q(t))^{-1}\mathrm{Dprt}(t)}}\ \overset{\bar{a}(t)}{\underset{\bar{a}(t)}{\text{action } Q(t)}}$ [2], $\bar{a}(t) = \bar{a}_0(t) + E(t)$), with manifestations in our usual level: mass $||\bar{a}_0(t)||$ and spin $||\bar{a}_0(t)||_{\rightarrow}$ etc.

Mathematically, an electron at its level pa$|||$ will be represented as the following format-number $((^{Q(t)}(1, 2)(\ \bar{f}(t)),\ ^{Q(t)}(2, 1)\{\,\}\ ), 1)$ (i.e.,

$\overset{\bar{f}(t)}{\underset{\bar{f}(t)}{(\text{action } Q(t))^{-1}\mathrm{Dprt}(t)}}\ \overset{\{\,\}}{\underset{\{\,\}}{Q(t)}}$), $\{\,\}$ is the emptiness, if action $Q(t)$ is the containment by type $g(t)$, then as $(((1, 2)_{g(t)}(\ \bar{c}(t)), (2, 1)_{g(t)}(\{\,\})), 1)$ (i.e., $\overset{\bar{c}(t)}{\underset{\bar{c}(t)}{g(t)\mathrm{SCprt}(t)}}\ \overset{\{\,\}}{\underset{\{\,\}}{g(t)}}$), foton as

$(^{Q(t)}(1, 2)((^{Q(t)}(1, 2)(\ \bar{a}(t)),\ ^{Q(t)}(2, 1)(\{\,\})), 1),\ ^{Q(t)}(2, 1)\ ((^{Q(t)}(1, 2)(\ \bar{a}(t)),\ ^{Q(t)}(2, 1)(\{\,\})), 1), 1)$

(i.e.,

$$\left(\begin{array}{cc} \bar{a}(t) & \{\} \\ (\text{action } Q(t))^{-1}\text{Dprt}(t) & Q(t) \\ \bar{a}(t) & \{\} \\ \multicolumn{2}{c}{\text{action } Q(t))^{-1}} \\ \bar{a}(t) & \{\} \\ (\text{action } Q(t))^{-1}\text{Dprt}(t) & Q(t) \\ \bar{a}(t) & \{\} \end{array}\right) \text{Dprt}(t) \left(\begin{array}{cc} \bar{a}(t) & \{\} \\ (\text{action } Q(t))^{-1}\text{Dprt}(t) & Q(t) \\ \bar{a}(t) & \{\} \\ \multicolumn{2}{c}{\text{action } Q(t))^{-1}} \\ \bar{a}(t) & \{\} \\ (\text{action } Q(t))^{-1}\text{Dprt}(t) & Q(t) \\ \bar{a}(t) & \{\} \end{array}\right) \text{ or}$$

$((1, 2)_{g(t)}((1, 2)_{g(t)}(\bar{a}(t)), (2, 1)_{g(t)}(\{\})), 1)), 1), (2, 1)_{g(t)}((1, 2)_{g(t)}(\bar{a}(t)), (2, 1)_{g(t)}(\{\})), 1), 1)$

$$\left(\begin{array}{cc} \bar{a}(t) & \{\} \\ g(t)\text{SCprt}(t) & g(t) \\ \bar{a}(t) & \{\} \\ \multicolumn{2}{c}{g(t)} \\ \bar{a}(t) & \{\} \\ g(t)\text{SCprt}(t) & g(t) \\ \bar{a}(t) & \{\} \end{array} \text{Sprt}(t) \begin{array}{cc} \bar{a}(t) & \{\} \\ g(t)\text{SCprt}(t) & g(t) \\ \bar{a}(t) & \{\} \\ \multicolumn{2}{c}{g(t)} \\ \bar{a}(t) & \{\} \\ g(t)\text{SCprt}(t) & g(t) \\ \bar{a}(t) & \{\} \end{array}\right),$$

Higgs boson as

$((1, 2)_{g(t)}((1, 2)_{g(t)}(\bar{a}(t), \bar{b}(t)), (2, 1)_{g(t)}(\{\})), 1)), 1), (2, 1)_{g(t)} ((1, 2)_{g(t)}(\bar{a}(t), \bar{b}(t)), (2, 1)_{g(t)}(\{\})), 1), 1)$

$$\left(\begin{array}{cc} \bar{b}(t) & \{\} \\ g(t)\text{SCprt}(t) & g(t) \\ \bar{b}(t) & \{\} \\ \multicolumn{2}{c}{g(t)} \\ \bar{a}(t) & \{\} \\ g(t)\text{SCprt}(t) & g(t) \\ \bar{a}(t) & \{\} \end{array} \text{Sprt}(t) \begin{array}{cc} \bar{a}(t) & \{\} \\ g(t)\text{SCprt}(t) & g(t) \\ \bar{a}(t) & \{\} \\ \multicolumn{2}{c}{g(t)} \\ \bar{b}(t) & \{\} \\ g(t)\text{SCprt}(t) & g(t) \\ \bar{b}(t) & \{\} \end{array}\right),$$

proton is $(((1, 2)_{g(t)}(\{\}), (2, 1)_{g(t)}(\bar{p}(t))), 1)$ (i.e., $\begin{array}{ccc} \{\} & & \bar{p}(t) \\ g(t) & \text{SCprt}(t) & g(t) \\ \{\} & & \bar{p}(t) \end{array} = \begin{array}{ccc} & \{\} & \\ \{\} & & \{\} \\ \{\} & \{\} & \{\} \end{array}$

$$\text{PrSCprt} \begin{array}{ccc} u(t) & g_1(t) & u(t) \\ g_2(t) & & g_2(t) \\ & d(t) & \end{array} \text{ i.e.,}$$

$(((1, 2)_{\{\}_{\{\}}}(2\{\})_{\{\}}), (2, 1)_{d(t)_{g_2(t)}}(2u(t))_{g_1(t)}), 1),$

neutron as $(((1, 2)_{g(t)}(\{\}), (2, 1)_{g(t)}(\bar{n}(t))), 1)$ (i.e., $\begin{array}{ccc} \{\} & & \bar{n}(t) \\ \{\} & \text{SCprt}(t) & g(t) \\ \{\} & & \bar{n}(t) \end{array} = \begin{array}{ccc} \{\} & \{\} & \{\} \\ \{\} & & \{\} \\ & \{\} & \end{array}$

$$\text{PrSCprt} \begin{array}{ccc} & u(t) & \\ g_3(t) & & g_3(t) \\ d(t) & g_4(t) & d(t) \end{array} \text{) i.e.,}$$

$(((1,2)_{2\{\}_{\{\}}}(\{\})_{\{\}}), (2,1)_{2d(t)_{g_4(t)}}(u(t))_{g_3(t)}), 1)$,

, quarks $(((1,2)_{g(t)}(\{\}), (2,1)_{g(t)}(\bar{r}(t))), 1)$ (i.e., $d(t) = \begin{array}{c}\{\}\\ \{\}\\ \{\}\end{array} \mathrm{SCprt}(t) \begin{array}{c}\bar{r}(t))\\ g(t)\\ \bar{r}(t)\end{array}$), $(((1,2)_{g(t)}(\{\}), (2,1)_{g(t)}(\bar{d}(t))), 1)$ (i.e., $u(t) = \begin{array}{c}\{\}\\ \{\}\\ \{\}\end{array} \mathrm{SCprt}(t) \begin{array}{c}\bar{d}(t)\\ g(t)\\ \bar{d}(t)\end{array}$) interact with each other by gluon fields $(((1,2)_{g(t)}(\bar{h}_j(t)), (2,1)_{g(t)}(\bar{v}_j(t))), 1)$ (i.e., $g_j(t) = \begin{array}{c}\bar{h}_j(t)\\ w_j(t)\\ \bar{h}_j(t)\end{array} \mathrm{SCprt}(t) \begin{array}{c}\bar{v}_j(t)\\ w(t)\\ \bar{v}_j(t)\end{array}$, $j = 1, 2, 3, 4$), which are manifestations of general gluon field in the areas between certain quarks, graviton as $((1,2)_{w(t)}((1,2)_{w(t)}(\bar{h}(t)), (2,1)_{w(t)}(\bar{v}(t))), 1)), 1), (2,1)_{w(t)}((1,2)_{w(t)}(\bar{h}(t)), (2,1)_{w(t)}(\bar{v}(t))), 1), 1)$ (i.e.,

$$\begin{array}{ccc} \begin{array}{c}\bar{h}(t)\\ w(t)\\ \bar{h}(t)\end{array}\mathrm{SCprt}(t)\begin{array}{c}\bar{v}(t)\\ w(t)\\ \bar{v}(t)\end{array} & & \begin{array}{c}\bar{h}(t)\\ w(t)\\ \bar{h}(t)\end{array}\mathrm{SCprt}(t)\begin{array}{c}\bar{v}(t)\\ w(t)\\ \bar{v}(t)\end{array} \\ w(t) & \mathrm{SCprt}(t) & w(t) \\ \begin{array}{c}\bar{h}(t)\\ w(t)\\ \bar{h}(t)\end{array}\mathrm{SCprt}(t)\begin{array}{c}\bar{v}(t)\\ w(t)\\ \bar{v}(t)\end{array} & & \begin{array}{c}\bar{h}(t)\\ w(t)\\ \bar{h}(t)\end{array}\mathrm{SCprt}(t)\begin{array}{c}\bar{v}(t)\\ w(t)\\ \bar{v}(t)\end{array} \end{array}$$

) etc.

Remark 10.1. Also, may consider operator

$\begin{array}{c}\bar{a}(t)\\ (\text{action } Q(t))^{-1}\\ \bar{a}(t)\\ \text{Subject of } Q(t)\end{array} \mathrm{SDS}(t) \begin{array}{c}\text{Subject of } Q(t)\\ \bar{a}(t)\\ \text{action } Q(t)\\ \bar{a}(t)\end{array}$ [2] instead of operator $\begin{array}{c}\bar{a}(t)\\ g(t)\\ \bar{a}(t)\end{array} \mathrm{SCprt} \begin{array}{c}\bar{a}(t)\\ g(t)\\ \bar{a}(t)\end{array}$ for interpretation with elementary particles, in particular, Subject of $Q(t)$ may be an observer.

Spin self-interaction by $g(t)$ from $(((1,2)_{g(t)}(\bar{a}(t)), (2,1)_{g(t)}(\bar{a}(t))), 1)$ (i.e., $\begin{array}{c}\bar{a}(t)\\ g(t)\\ \bar{a}(t)\end{array} \mathrm{SCprt}(t) \begin{array}{c}\bar{a}(t)\\ g(t)\\ \bar{a}(t)\end{array}$): one-sided is half-integer, for example, $(((1,2)_{g(t)}(\bar{a}(t)), (2,1)_{g(t)}(\{\})), 1)$ (i.e., $\begin{array}{c}\bar{a}(t)\\ g(t)\\ \bar{a}(t)\end{array} \mathrm{SCprt}(t) \begin{array}{c}\{\}\\ \{\}\\ \{\}\end{array}$), two-sided is integer, for example, $(((1,2)_{g(t)}(\bar{a}(t)), (2,1)_{g(t)}(\bar{a}(t))), 1)$ (i.e., $\begin{array}{c}\bar{a}(t)\\ g(t)\\ \bar{a}(t)\end{array} \mathrm{SCprt}(t) \begin{array}{c}\bar{a}(t)\\ g(t)\\ \bar{a}(t)\end{array}$). Self-level corresponds to self-energies.

Entanglements in quantum mechanics is format-number $(2_{(2_{0.5},1)}(2_{0.5}, 1), (2_{0.5}, 1))$, where 0.5 in $(2_{0.5}$, 1) corresponds to split nature of elementary particles.

$((1, 2)_{g(t)}((1, 2)_{g(t)}(\bar{a}(t)), (2, 1)_{g(t)}(\{\})), 1)))(\bar{a}(t), \bar{b}(t))$, (i.e.,

$$\begin{matrix} \bar{a}(t) & \{\} \\ g(t)SCprt(t) & \{\} \\ \bar{a}(t) & \{\} \\ \bar{b}(t) & \{\} \\ g(t)SCprt(t) & \{\} \\ \bar{b}(t) & \{\} \end{matrix}$$

SCprt(t)), or pSTp₁Rself(A), A is structure with elementary particles, in particular, in microtubes.

Remark 10.2. The observer, through his observation, manifests an elementary particle to the ordinary level and thereby works with its manifestation, i.e., as an ordinary-level object — a particle. Corresponding changes occur at the object's upper level.

In fact, both the multidimensionality of space and the hierarchy of space are simply concepts that are convenient for standard classical (1, 1)-interpretation, but which naturally do not correspond to reality.

Some Format-Numbers for S- Morphology

The main equation

(x, 1) ((b)) = (1, 1) ((a)),

solution

$X = 2\log_{4\|b\|} \| a \|$

The main equation

(x, 1) ((b)) = (2, 1) ((a))

or

$self^{x/2}(b) = self\,(a)$,

solution

$X = 2\log_{4\|b\|_{format}} 4 \| a \|_{format}$,

where $\| a \|_{format}$, $\| b \|_{format}$ are norms a and b by its format, in particular for b is living organism, a is his DNA, when $a_{format} = (q, r)$

$\| a \|_{format} = \sqrt{\| q \|^2 + \| r \|^2}$,

but if q, r are numbers then

$\| a \|_{format} = \sqrt{q^2 + r^2}$, analogously for $\| b \|_{format}$. In the case singular format, for example, $a_{format} = q|||r$ we have

$\| a \|_{format} = \mu(q|||r) = (\mu(q)\mu(r))^{(\mu_{|||}(q|||r)+1)}$, where $\mu_{|||}(q|||r) = ½ - \frac{(\mu(q\cap r) - \mu((-q)\cap r)}{2(\mu(q\cup r) + \mu((-q)\cup r)}$, ∀A, B [6].

The format-number of normal living organism A is

((1,2), (2, 1), 1) ((1,2) ((1, 1) $_A$)), (1, 1) $_A$ is the format-number for the physical body of normal living organism A. $\overleftarrow{((1,2),(2,1),1)}$((1,2) ((1, 1) $_A$)) ∀A is a bridge for the transition from our dynamic science to traditional science and vice versa, the arrow at the top defines a sequential transition from (2, 1) to (1, 2) inversely (i.e., a constant oscillation between them).

The format-number of magician B is ((1,2), (2, 1), 1) (((1,2), (2, 1), 1) ((1, 1) $_B$)).

Layers of the cocoon for normal living organism A by format-numbers:

format-number (1, 1) corresponds to the surface layer,

format-number (2, 1) corresponds to the next layer etc.

DNA is ((1,2), (2, 1), 1) ((1,2) ((1, 1) $_{DNA}$)), (1, 1) $_{DNA}$ is the format-number for the physical body of DNA.

Quantum Entanglement of microtubule in neurons corresponds to (2(2, 1), (2, 1))-interpretation, Quantum Entanglement of neuron corresponds to (N(K(2, 1), (2, 1)), M(K(2, 1), (2, 1)))-interpretation, …, Quantum Entanglement of human CNS corresponds to (K_1(…,(K_n(K_{n+1}(2, 1), (2, 1)), K_{n+2}(2, 1), (2, 1))), (K_{n+1}(2, 1), (2, 1)), K_{n+2}(2, 1), (2, 1))),…), L_1(…,(K_n(K_{n+1}(2, 1), (2, 1)), K_{n+2}(1, 2), (2, 1))), (K_{n+1}(2, 1), 1), K_{n+2}(2, 1), (2, 1))),…)) interpretation etc. Quantum Entanglement of bacterium corresponds to (N_1(N_3(2, 1), N_4(2, 1)), N_5(N_3(2, 1), N_4(2, 1)), N_2(N_3(2, 1), N_4(2, 1)), N_5(N_3(2, 1), N_4(2, 1)))-interpretation.

Remark. May consider the cocoon as the space. He himself is his own space and his own content. A cocoon of living organism can manifest itself in any space depending on the position of the assemblage point.

Constructing New Singularities by Format-Numbers

It's fairly easy to construct new singularities by format-numbers using the principal compression-expansion (compression into expansion, expansion into compression, compression-expansion into any, compression-expansion into hierarchy, $\binom{\text{self}-\text{type}}{|||-\text{type}}$-compression-expansion into any, $\binom{\text{self}-\text{type}}{|||-\text{type}}$-F(compression-expansion) of any, (compression-expansion)-structure for compression-expansion $\binom{\text{self}-\text{type}}{|||-\text{type}}$-F(compression-expansion) of any, (compression-expansion)-structure for $\binom{\text{self}-\text{type}}{|||-\text{type}}$-G(compression-expansion) etc). The example of compression($(2,1)-\text{type}$) into expansion is (1, $(2,1)$) (compression($|||-\text{type}$) into expansion is self). The next example of compression($(2,1)-$type) into expansion is ((1, $(2,1)$), (2(1, $(2,1)$), (1, $(2,1)$)) (compression($|||-$type) into expansion is self^2) etc. The example of new singularity: (1, (2(1, $(2,1)$), 1)) etc. That is, numbers can be used not only for calculations but also for constructing new singularities, thereby creating and developing new branches of mathematics and new mathematical tools for science.

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