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Introduction to Section of Dynamic Mathematics: SCprt – Elements and Their Applications to Physics

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Abstract
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. Significance of the article: in a new qualitatively different approach to the study of complex processes through new mathematical hierarchical parallel fuzzy dynamic structures, in particular those processes that are dealt with by Synergetics An example of studying complex processes is quantum mechanics. It studies them through randomness (probability), i.e., it obtains some certainty through uncertainty. Our approach to studying complex processes concerning hyperfine energies is in classifying the principles of functioning of models of some complex processes, that we propose, in order to construct some of them at the biotechnical level and manipulate them (certainty through certainty). We define them and then certain approaches to them. Although their manipulation can be carried out with uncertainty and this quite naturally follows from their nature.

Our approach is not based on deterministic equations that generate self-organization, which is very difficult to study and gives very small results for a very limited class of problems and does not provide the most important thing - the structure of self-organization. We are just starting from the assumed structure of self-organization, since we are interested not so much in the numerical calculation of this as in the structure of self-organization itself, its formation (construction) for the necessary purposes and its management. Although we are also interested in numerical calculations. Nobel laureates in physics 2023 Ferenc Kraus and his colleagues Pierre Agostini and Anna Lhuillier used a short-pulse laser to generate attosecond pulses of light to study the dynamics of electrons in matter. According to our Theory of singularities of the type synthesizing, its action corresponds to singularity , which allows one to reach the upper level of subtle energies to manipulate lower levels. In April 2023 [14], we proposed using a short-pulse laser to achieve the desired goals by a directly parallel neural network. We then proposed the fundamental development of this directly parallel neural network. In the article [17] new mathematical structures and operators are constructed through action - "fuzzy containment". Here, the construction of new mathematical structures and operators is carried out with generalization to "type of accommodation". The significance of our articles 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., contributed to the development of mathematics.

Keywords: Hierarchical Structure (Dynamic Operator), SCprt-Elements, Tscpr- Elements, SCprt Self-Type Structures

Introduction

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. Significance of this 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.

We consider expression

$$\overset{C}{\underset{D}{g_2}}\text{SCprt}\overset{A}{\underset{B}{g_1}} \quad (*_{1.1})$$

where A fits into B with type of accommodation g_1, D is forced out from C with type of accommodation g_2. The result of this process will be described by the expression

$$\overset{C}{\underset{D}{g_2}}\text{SCpr}\overset{A}{\underset{B}{g_1}} \quad (*_{1.2})$$

If A, B, D, C are taken as sets, then we will call ($*_{1.1}$) a SC-dynamic set. The need ($*_{1.1}$) arose to describe processes in networks. Threshold element SCprt -- $\overset{b}{\underset{\{qy\}}{g_2}}\ \text{SCprt}\ \overset{\{ax\}}{\underset{b}{g_1}}$, b-artificial neurons of type SCprt (designation - mnSt), x= (x$_1$, x$_2$, ..., x$_n$) are the values of the initial signals, a= (a$_1$, a$_2$,…,a$_n$) are the weights of SCprt-synapses and the values of the output signals . It can be considered a simpler version of the dynamic set

$$\text{SCprt}\overset{A}{\underset{B}{g_1}} \quad (**_{1.1})$$

where set A fits into set B with type of accommodation g_1, the result of this process will be described by the expression

$$\text{SCpr}\overset{A}{\underset{B}{g_1}}(**_{1.2})$$

or

$$\overset{C}{\underset{D}{g_2}}\text{SCprt} \ (***_{1.1})$$

where set A is forced out from B with type of accommodation g_2, the result of this process will be described by the expression

$$\overset{C}{\underset{D}{g_2}}\text{SCpr}(***_{1.2})$$

We consider the measure: $\mu^{**}(\overset{b}{\underset{D}{g_2}}\text{SCprt}\overset{A}{\underset{b}{g_1}})=\frac{\mu(A)\mu(g_1)}{\mu(D)\mu(g_2)}$, where $\mu(A),\mu(D)$ –usual measures of sets A, D, $\mu(g_1)$, $\mu(g_2)$ - measures corresponding to the accommodations of the corresponding type.

Remark. One can consider some generalization for ($*_{1.1}$): $\overset{q_1(C)}{\underset{D}{g_2}}\ \text{SCprt}\ \overset{A}{\underset{q(B)}{g_1}}$, where A is contained into B through q with type of accommodation g_1, D is forced out from C through q$_1$ with type of accommodation g_2, A, B, D, C are taken as sets. The result of this process will be described by the expression

$$\overset{q_1(C)}{\underset{D}{g_2}}\ \text{SCpr}\ \overset{A}{\underset{q(B)}{g_1}} .$$

Similarly, for ($**_{1.1}$): SCprt $\overset{A}{\underset{q(B)}{g_1}}$, where A is contained into B through q with type of accommodation g_1(the result of this process will be described by the expression SCpr $\overset{A}{\underset{q(B)}{g_1}}$), for ($***_{1.1}$): $\overset{q_1(C)}{\underset{D}{g_2}}$ SCprt, where D is displaced from C through q$_1$ with type of accommodation g_2. The result of this process will be described by the expression $\overset{q_1(C)}{\underset{D}{g_2}}$ SCpr.

We construct new mathematical objects constructively without formalism. By its contradiction, formalism may destroy this thry by Gödel's theorem on the incompleteness of any formal theory. But in the next monograph, we will give the formalism of the theory it's due: the proof of axioms and theorems. Let us introduce the concepts Cha, the capacity measure, and Cca, the measure of its content. Cca is the same as the number of capacity content items. Consider the compression ratios of the dynamic set: $q_1 = SCprt \overset{A}{\underset{B}{g_1}}$ answers I compression power of dynamic set A, $q_2 = SCprt \overset{q_1}{\underset{B}{g_1}}$ –II compression power of dynamic set A, …, $q_{n+1} = SCprt \overset{q_n}{\underset{B}{g_1}}$ – n+1 compression power of dynamic set A. In contrast to the classical one-attribute set theory, where only its contents are taken as a set, we consider a two-attribute set theory with a set as a capacity and separately with its contents. We introduce the designations: CoQ—the contents of the capacity Q.

SCprt - elements

Definition 1.1.1. The set of elements $\{a\} = (a_1, a_2, \ldots, a_n)$ contained into point x of space X with accommodation type g_1 we shall call SCprt – element, and such a point in space is called capacity of the SCprt – element. We shall denote SCprt $\overset{\{a\}}{\underset{x}{g_1}}$. The result of this process will be described by the expression SCpr $\overset{\{a\}}{\underset{x}{g_1}}$.

Definition 1.1.2. SCprt $\overset{\{a\}}{\underset{x}{g_1}}$ — SC-dynamic set $\{a\}$ at x.

Definition 1.1.3. An ordered set of elements at one point in space is called an ordered SCprt–element. It's possible to SCprt $\overset{\{a\}}{\underset{x}{g_1}}$ correspond to the set of elements {a}, and the ordered SCprt - element - a vector, a matrix, a tensor, a directed segment in the case when the totality of elements is understood as a set of elements in a segment.

It's allowed to sum SCprt – elements: SCprt $\overset{\{a\}}{\underset{x}{g_1}}$ + SCprt $\overset{\{b\}}{\underset{x}{g_1}}$ = SCprt $\overset{\{a\} \cup \{b\}}{\underset{x}{g_1}}$. The operator SCprt $\overset{\{a\} \cup \{b\}}{\underset{x}{g_1}}$ is not equal $\{a\} \cup \{b\}$, rather, it is dynamic — contraction of $\{a\} \cup \{b\}$ to the point x. Similarly, for SCprt $\overset{\{a\} \cap \{b\}}{\underset{x}{g_1}}$. This is more

Capacity in Itself$_g$

Definition 1.1.4. The capacity A in itself$_g$ of the first type is the capacity containing itself$_g$ as an element with accommodation type g_1. Denote $SC_1 fA\{g_1\}$.

Definition 1.1.5. The capacity A in itself$_g$ of the second type is the capacity that contains elements from which it can be generated with accommodation type g_1. Denote $SC_2 fA\{g_l\}$.

An example of the capacity in itselfg of the first type is a set containing itself$_g$. An example of capacity in itself$_g$ of the second type is a living organism since it contains a program: DNA and RNA.

Definition 1.1.6. Partial capacity A in itself$_g$ of the third type is the capacity A in itself$_g$ as an element with accommodation type g_1 which partially contains itself$_g$ or contains elements from which it can be generated in part with accommodation type g_1 or both. Let us denote $SC_3 fA\{g_l\}$.

Let us introduce the following notations: $A*B = SCpr \overset{A}{\underset{B}{g_1}}$, A^2 = selfg_1 A = $SCpr \overset{A}{\underset{A}{g_1}}$, A^3 = self$g_1{}^2$A, …, A^{n+1} = self$g_1{}^n$A, … There is no commutativity here: $A*B \neq B*A$. We can consider operator functions: $e^A = 1 + \frac{A}{1!} + \frac{A^2}{2!} + \frac{A^3}{3!} + \cdots$, $(A+B)^n = \sum_{k=0}^{n} \binom{n}{k} A^k B^{n-k}$, $(1+A)^n = 1 + \frac{Ax}{1!} + \frac{n(n-1)A^2}{2!} + \cdots$, etc.

You can consider a more "hard"option: $A*B = PSCprt \overset{A}{\underset{B}{g_1}}$, where $PSCprt \overset{A}{\underset{B}{g_1}}$ – operator, containing A in every element of B, A^2 = P selfg_1 A = $PSCprt \overset{A}{\underset{A}{g_1}}$, A^3 = P self$g_1{}^2$A, …, A^{n+1} = P self$g_1{}^n$A, … . There is no commutativity here: $A*B \neq B*A$. We can consider operator functions: $e^A = 1 + \frac{A}{1!} + \frac{A^2}{2!} + \frac{A^3}{3!} + \cdots$, $(A+B)^n = \sum_{k=0}^{n} \binom{n}{k} A^k B^{n-k}$, $(1+A)^n = 1 + \frac{Ax}{1!} + \frac{n(n-1)A^2}{2!} + \cdots$, etc.

All capacities in self$_g$ -space are capacities in themselves by definition. Capacities in themselves can appear as SCprt -capacities and ordinary capacities. In these cases, the usual measures and methods of topology are used.

Connection of SCprt – elements with capacities in themselves.

For example, SCprt $\overset{\{R\}}{\underset{w\{R\}}{g_1}}$ is the capacity in itself$_g$ of the second type if $w\{R\}$ is a program capable of generating $\{R\}$. Consider a third type of capacity in itself$_g$. For example, based on SCpr $\underset{x}{\overset{\{a\}}{g_1}}$, where $\{a\} = (a_1, a_2, \ldots, a_n)$, i.e. n - elements at one point, we can consider the capacity SC_3f in itself$_g$ with m elements from {a}, m<n, which is formed according to the form:

$w_{mn} = (m, (n,1))$ (1.1)

that is, the structureS Cpr $\underset{x}{\overset{\{a\}}{g_1}}$ contains only m elements. Form (1.1) can be generalized into the following forms:

$w^1_{m,n,k} = (k, (\begin{matrix}(n_1,1)\\ (\ldots)\\ (n_m,1)\end{matrix}))$ (1.1.1)

or

$w^2_{m,n,k} = (k, (l, \begin{matrix}(n_1)\\ (\ldots)\\ (n_m)\end{matrix}))$ (1.1.2)

$w^3_{m,n,k,l} = Q((\begin{matrix}d_1\\ \ldots\\ d_l\end{matrix}), (\begin{matrix}(n_1,1)\\ (\ldots)\\ (n_m,1)\end{matrix}))$ (1.1.3),

where Q(x, y) – any operator, which makes a match between set $(\begin{matrix}d_1\\ \ldots\\ d_l\end{matrix})$ and set $(\begin{matrix}(n_1,1)\\ (\ldots)\\ (n_m,1)\end{matrix})$ or

$w^4_{m,m_1,n_1,m_2,n_2,m_3,n_3} = (m, ((m_1,n_1), ((m_2,n_2), (m_3,n_3))))$ (1.1.4),

or

(Q, R) (1.1.5),

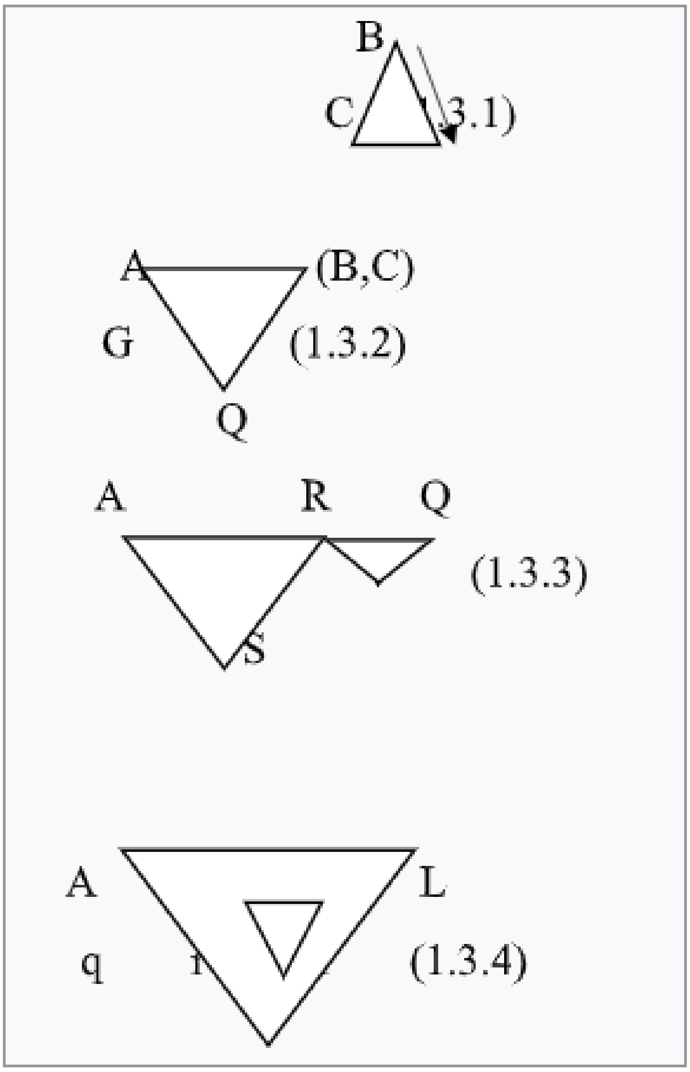
where Q – any, R – any structure, R could be anything can be anything, not just structure. In this case, (1.1.5) can be used as another type of transformation from Q to R. Capacities in themselves of the third type can be formed for any other structure, not necessarily SCpr, only by necessarily reducing the number of elements in the structure, in particular, using form

$w_{m_1\cdots m_n} = (m_1, (m_2, (\ldots(m_n, 1)\ldots)))$ (1.2)

Structures more complex than SC_3f can be introduced. For example, through a form that generalizes (1.1):

$w_{ABC} = (A, (B, C))$ (1.3)

where A is compressed (fits) in C in the compression structure B in C (i.e., in the structure SCpr$\underset{C}{\overset{B}{g_1}}$); or



or through the more general form that generalizes (1.2):

$w_{A_1 A_2 \ldots A_n C} = (A_1, (A_2, (\ldots(A_n, C)\ldots)))$ (1.4)

and corresponding generalizations of (1.4) on (1.3.1) - (1.3.4), etc.

(1.3), (1.4) are represented through the usual 2-bond. Science is the discipline of 2-connections, since everything in science is carried out through 2-connected logic, quantum logic is also a projection of 3-connected logic onto 2-connected logic. (1.3.1) - (1.3.4) schematically interpret the formation of the capacity in itselfg through a pseudo 3-connected form with a 2-connected form. The energy of the selfg -accommodation in itselfg closes on itselfg.

Math self$_g$

Let's consider SCprt arithmetic first:

1. Simultaneous addition of a set of elements $\{a\} = (a_1, a_2, \ldots, a_n)$ is carried out using SCprt $\underset{x}{\overset{\{a+\}}{g_1}}$.

2. Similarly, for simultaneous multiplication: SCprt $\underset{x}{\overset{\{a*\}}{g_1}}$ gives the set B with elements $b_{i_1 i_2 \ldots i_n} =$

$(SCprt\overset{\{a_{1i_1}*,a_{2i_2}*,\dots,a_{ni_n}\}}{\underset{x}{g_1}})_R$ for any $\{i_1,i_2,\dots,i_n\}$ without repetitions, x = $SCprt\overset{\{K\}}{\underset{w}{g_1}}$, K-set of any $\{k_1*,k_2*,\dots,k_n*\}$ without repeating them, k_i-any digit, i=1,2,…,n, R= $SCprt\overset{\{i_1+,i_2+,\dots,i_n\}}{\underset{w}{g_1}}$, R is the index of the lower discharge (we choose an index on the scale of discharges):

Table 1: Index on the scale of discharges

index	discharge
n	n
…	…
1	1
,	0
-1	1st digit to the right of the point
-2	2nd digit to the right of the point
...	...

Then $SCprt\overset{\{B+\}}{\underset{w}{g_1}}$ gives the final result of simultaneous multiplication. Any system of calculus can be chosen, in particular binary. The most straightforward functional scheme of the assumed arithmetic-logical device for SCprt-multiplication:

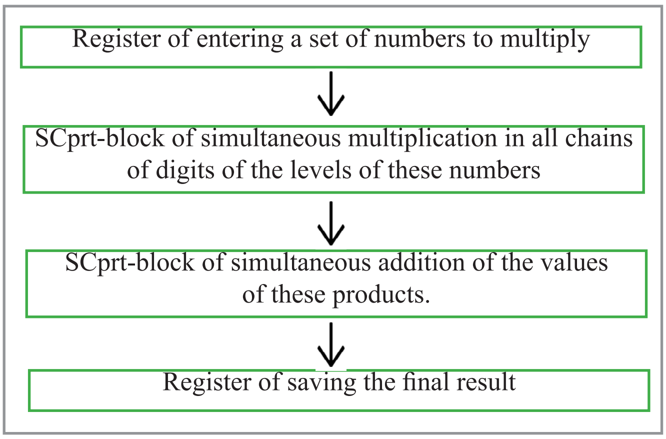


Figure 1: The straightforward functional scheme of the assumed arithmetic-logical device for SCprt-multiplication.

Remark. The algorithm for simultaneously multiplication of a set of numbers can also be implemented as the simultaneous addition of elements of a simultaneously formed composite matrix: a triangular matrix in which the elements of the first row are represented by multiplying the first number from the set by the rest: each multiplication is represented by a matrix of multiplying the digits of 2 numbers, taking into account the bit depth, the elements of the second rows are represented by multiplying the second number from the set by the ones following it, etc.

3. Similarly for simultaneous execution of various operations: $SCprt\overset{\{aq\}}{\underset{x}{g_1}}$, where $\{q\} = (q_1, q_2,\dots, q_n)$. q_i - an operation, i = 1, …, n.

4. Similarly, for the simultaneous execution of various operators: $SCprt\overset{\{Fa\}}{\underset{x}{g_1}}$, where $\{F\} = (F_1, F_2, \dots, F_n)$. F_i is an operator, i = 1, …, n.

5. The arithmetic itself$_g$ for capacities in themselves will be similar: addition - $SC_1f\{a+\}$, (or $SC_3f\{a+\}$) for the third type), multiplication $SC_1f\{a*\}$, ($SC_3f\{a*\}$).

6. Similarly with different operations: $SC_1f\{aq\}$, ($SC_3f\{aq\}$), and with different operators: $SC_1f\{Fa\}$, ($SC_3f\{Fa\}$).

7. $SCprg\overset{A}{\underset{B}{g_1}} -$ the result of the accommodation operator. For sets A, B we have

$SCprg\overset{A}{\underset{B}{g_1}} = \left\{\frac{D}{A\cup B - A\cap B}\right\}$, where D is self$g_1$-set for $A\cap B$. The measure:

$$\mu(SCprg\overset{A}{\underset{B}{g_1}}) = \left(\frac{\mu_{g_1}{}^s(A\cap B)}{\mu(A)+\mu(B)-\mu(A\cap B)}\right) * \mu(g_1).$$

There is the same for structures if it's considered as sets. Our approach to the theory of hierarchical sets differs from the construction of hierarchical sets by Y.L. Ershov we construct completely different types of hierarchical sets [3-6].

8. SCprt-derivative of f(x_1,x_2, …,x_n) is $SCprt\overset{\left\{\frac{\partial}{\partial x_{1_i}},\frac{\partial}{\partial x_{2_i}},\dots,\frac{\partial}{\partial x_{k_i}}\right\}}{\underset{f(x_1,,x_2,\dots,x_n)}{g_1}}$, where x=(x_{1_i}, x_{2_i},… x_{k_i})- any set from (x_1,x_2, …,x_n). Let's designate SCprt- $\frac{\partial^k f(x)}{\partial x_{1_i}\partial x_{2_i}\dots\partial x_{k_i}}$.

SCprt-integral off (x_1,x_2, …,x_n) is $SCprt\overset{\{\int()dx_{1_i},\int()dx_{2_i},\dots,\int()dx_{k_i}\}}{\underset{f(x_1,,x_2,\dots,x_n)}{g_1}}$, where ($x_{1_i}$, x_{2_i},… x_{k_i})- any set from (x_1,x_2, …,x_n). Let's designate SCprt-$\int\dots\int f(x)dx_{1_i}dx_{2_i}\dots dx_{k_i}$-k-multiple integral. SCprt-lim off (x_1,x_2, …,x_n) is

$\text{SCprt}\left\{\lim_{x_{1_i}\to a_{1_i}}, \lim_{x_{2_i}\to a_{2_i}}, \dots, \lim_{x_{k_i}\to a_{k_i}}\right\}_{g_1} f(x_1,, x_2, \dots, x_n)$. Let's designate SCprt-$\lim_{x_{1_i} \to a_{1_i}, \dots, x_{k_i} \to a_{k_i}} f(x_1,, x_2, \dots, x_n)$. self$g_1$-$\lim_{x\to a}$ = SCpr $\begin{matrix}\lim_{x\to a}\\ g_1\\ \lim_{x\to a}\end{matrix}$.

9. In the case of self$_g$ -derivatives, inclusions of multiple derivatives are obtained. The same is true for self$_g$ -integrals: we get inclusions of multiple integrals.

10. Let's denote selfg_1-(selfg_1-Q) through self$g_1{}^2$-Q , fSg_1(n,Q, g_1)=selfg_1-(selfg_1-(…(selfg_1-Q))) = self$g_1{}^n$-Q for n-multiple selfg_1.

Operator itself$_g$

Definition 7. An operator that transforms SCprt $\begin{matrix}\{a\}\\ g_1\\ x\end{matrix}$ into any $SC_i f\{b\}\{g_1\}., i = 2,3$; where $\{b\} \subset \{a\}$; is the operator itself$_g$.

Example. The operator contains the set in itself$_g$.

Lim-itself$_g$

1. SCprt-lim

For example, the double limit: $\lim_{\substack{x\to a1\\ y\to a2}} G(x,y)$ corresponds to SCprt $\begin{matrix}\{G(x,y)\}\\ g_1\\ (a_1, a_2)\end{matrix}$.

Similarly, for SCprt-lim with n variables.

In the case of lim-itself$_g$, for example, for m variables, it suffices to use the form (1.1) of lim SCprt for n variables (n>m). The same is true for integrals of variables m (for example, the double integral over a rectangular region is through the double limit).

The sequence of actions can be "collapsed" into an ordered SCprt element, and then translate it, for example, into $SC_3 f$ – the capacity in itself$_g$. Take the receipt $\frac{\partial^2 u}{\partial x^2}$ as an example. Here is the sequence of steps 1)$\frac{\partial u}{\partial x}$→ 2) $\frac{\partial}{\partial x}(\frac{\partial u}{\partial x})$. "collapses" into an ordered SCprt $\begin{matrix}\left\{\frac{\partial u}{\partial x}, \frac{\partial}{\partial x}(\frac{\partial u}{\partial x})\right\}\\ g_1\\ x\end{matrix}$, which can be translated into the corresponding $SC_1 f$. The differential operator SCprt $\begin{matrix}\left\{\frac{\partial u}{\partial x}, \frac{\partial}{\partial x}(\frac{\partial u}{\partial x})\right\}\\ g_1\\ x\end{matrix}$ - is interesting too.

We can consider the concept of SCprt - element as SCprt$\begin{matrix}A\\ g_1\\ B\end{matrix}$, where A fits in capacity B. Then SCprt$\begin{matrix}B\\ g_1\\ B\end{matrix}$ it will mean $SC_1 f B\{g_1\}$.

About SCprt and SC$_3$f programming.

The ideology of SCprt and SC$_3$f can be used for programming. Here are some of the SCprt programming operators:

1. Simultaneous assignment of the expressions $\{p\} = (p_1, p_2, \dots, p_n)$ to the variables $\{a\} = (a_1, a_2, \dots, a_n)$. This is implemented via SCprt $\begin{matrix}\{\{a\} := \{p\}\}\\ g_1\\ x\end{matrix}$.

2. Simultaneous checking the set of conditions $\{f\} = (f_1, f_2, \dots, f_n)$ for the set of expressions$\{B\} = (B_1, B_2, \dots, B_n)$. Implemented via $Sprt_x$ SCprt $\begin{matrix}IF\{\{B\}\{f\}\}\ then\ Q\\ g_1\\ x\end{matrix}$, where Q can be anything.

3. Similarly, for loop operators and others.

$SC_3 f$– software operators will differ only in that the aggregates $\{a\}, \{p\}, \{B\}, \{f\}$ will be formed from the corresponding SCprt program operators in form (1.1) and for more complex operators in the form from the forms (1.1.1) – (1.4).

The OS (operating system), the computer's principles, and the modes of operation for this programming are interesting. But this is already the material for the following publications.

Using elements of the mathematics of SCprt, we introduce the concept of SCprt – the change in physical quantity B: SCprt $\begin{matrix}\{\Delta_1 B, \dots, \Delta_n B\}\\ g_1\\ x\end{matrix}$. Then the mean SCpr - velocity will be

$v_{cpscpr}(t, \Delta t) = \text{SCprt}\begin{matrix}\left\{\frac{\Delta_1 B}{\Delta t}, \dots \frac{\Delta_n B}{\Delta t}\right\}\\ g_1 \\ x\end{matrix}$ and SCprt-velocity at time t: $v_{sct} = \lim_{\Delta t \to 0} v_{cpscpr}(t, \Delta t)$. SCprt – acceleration: $a_{sct} = \frac{dv_{sct}}{dt}$.

When using SCprt with "target weights", we get, depending on the "target weights", one or another modification, namely, for example, the velocity v^f_{sct} (with a "target weight"" f in the case when two velocities v_1, v_2 are involved in the set $\{v_1 f, v_2\}$ for $v^f_{st} = \text{SCprt}\begin{matrix}\{v_1 f, v_2\}\\ g_1 \\ x\end{matrix}$, f – instantaneous replacement we get an instantaneous substitution $v_1 by\ v_2$ at point x of space at time t_0 with accommodation type g_1.

Consider, in particular, some examples: 1) SCprt $\begin{matrix}e\\ g_1 \\ \{x_1, x_2\}\end{matrix}$ describes the presence of the same electron eat two different points x_1, x_2. 2) The nuclei of atoms can be considered as SCprt elements.

Similarly, the concepts of SCprt - force and SCprt - energy are introduced. For example, $E^f_{st} = \text{SCprt}\begin{matrix}\{E_1 f, E_2\}\\ g_1 \\ x\end{matrix}$ it would mean the instantaneous replacement of energy E1 by E2 at time t0 with accommodation type g_1. Two aspects of SCprt–energy should be distinguished: 1) carrying out the desired "target weight" and 2) fixing the result of it. Do not confuse energy - SCprt (the node of energies) with SCprt – energy that generates the node of energies, usually with the "target weights." In the case of ordinary energies, the energy node is carried out automatically.

Remark1.2. SCprt – elements are all ordinary, but with "target weights," they become peculiar. Here you need the necessary energy to carry them out. As a rule, this energy is at the level of self$_g$. This is natural since it's much easier to manage elements of the k level via the elements of a more structured k +1 level. Let us consider the concepts of capacities of physical objects in themselves. The question arises about the self$_g$-energy of the object. In particul $\text{SCprt}\begin{matrix}B\\ g_1 \\ B\end{matrix}$ will mean SC1f B. For example, allows you to reach the level of DNA self$_g$ -energy, allows you to reach the level of self$_g$ -energy Q. The law of self$_g$-energy conservation operates already at the level of self$_g$ -energy. Also, in addition to capacities in themselves, you can consider the types of accommodation of oneself$_g$ in oneself$_g$: the first type of the accommodation of oneself$_g$ in oneself$_g$ the second type of the accommodation of oneself$_g$ in oneself$_g$: potentially, for example, in the form of programming oneself$_g$, the third type is partial accommodation of oneself$_g$ in themselvesg—for example, self-operator, self-action, whirlwind. A container containing itself$_g$ can be formed by self$_g$ -accommodation, i.e., accommodation in oneself$_g$. Let us clarify the concept of the term capacity in itself$_g$: it is a capacity containing itself$_g$ f potentially. Consider self$_g$ -Q, where Q can be anything, including Q=self; in particular, it can be any action. Therefore, self$_g$ -Q is when Q is made by itself$_g$; it makes itself$_g$. There is a partial selfg -Q for any Q with partial self$_g$ -fulfillment. Let's consider several examples for capacities in themselves: ordinary lightning, electric arc discharge, and ball lightning.

A self$_g$ -search of the solution of the equations $f_i(x)=0$, where $i=1,2,\dots,n$, $x=(x_1, x_2, \dots, x_n)$, will be realized in $\text{SCprt}\begin{matrix}\{f_1(x) = 0?x, f_2(x) = 0?x, \dots, f_n(x) = 0?x\}\\ g_1 \\ a\end{matrix}$ or $\text{SCprt}\begin{matrix}\{f_1(x) = 0, f_2(x) = 0, \dots, f_n(x) = 0\}\\ g_1 \\ ?x\end{matrix}$. x acquires more degree of liberty and in this is direct decision. self$_g$ -equation for x has its decision for x in direct kind.

The same for $\text{SCprt}\begin{matrix}\{tasks(x)\}\\ g_1 \\ ?x\end{matrix}$. self$_g$ -task for x has its decision for x in direct kind. self$_g$ -question has its answer for x in direct kind. $\text{SCprt}\begin{matrix}\{t\}\\ g_1 \\ (o, x)\end{matrix}$, where $\{t\}$- time points set, (o, x)- object o in point x from space X, give to enter in necessary time moments. The same for $\text{SCprt}\begin{matrix}\{t\}\\ g_1 \\ o\end{matrix}$.

$\text{SCprt}\begin{matrix}\{God - father, God - son, Holy\ Spirit\}\\ g_1 \\ \alpha\end{matrix}$ is three-concept representation, where α is a point in the connectedness space. SCprt is also great for working with structures, for example: 1) SCprt $\begin{matrix}strA\\ g_1 \\ B\end{matrix}$ - the structure A that fits into B with accommodation type g_1, where B can be any capacity, another structure etc. 2) SCprt $\begin{matrix}str_Q\\ g_1 \\ R\end{matrix}$ - embedding structure from Q into R with accommodation type g_1.

Similarly, for displacement: 1) $\begin{matrix}B\\ g_2 \\ strA\end{matrix}$ SCprt - displacement of structure A from B with displacement type g_2, 2) $\begin{matrix}B\\ g_2 \\ str_Q\end{matrix}$ SCprt - displacement of the structure Q from B with displacement type g_2. To work with structures, you can introduce a special operator CCprt: $CCprt\overset{A}{\underset{B}{g_1}}$ structures B with the structure A with accommodation type g_1, $\overset{B}{\underset{A}{g_2}}$CCprt destructors B from the structure A with displacement type g_2.

Definition 1.1.8. A structure with a second degree of freedom will be called complete, i.e., "capable" of reversing itself$_g$ concerning any of its elements explicitly, but not necessarily in known operators; it can form (create) new special operators (in particular, special functions).

In particular, $CCprt\overset{A}{\underset{A}{g_1}}$, $CCpr\overset{A}{\underset{A}{g_1}}$ are such structures.

Similarly, for working with models, each is structured by its structure; for example, use SCprt-groups, SCprt-rings, SCprt-fields, SCprt-spaces, self$_g$ -groups, self$_g$ -rings, self$_g$ -fields, and self$_g$ -spaces. Like any task, this is also a structure of the appropriate capacity.

self$_g$ -H (self$_g$ -hydrogen), like other self$_g$ -particles, does not exist in the ordinary, but all self$_g$ -molecules, self$_g$ -atoms, and self-particles are elements of the energy space.

Remark 1.1.3. The concept of elements of physics SCprt is introduced for energy space. The corresponding concept of elements of chemistry SCprt is introduced accordingly.

Examples: 1) $SCprtE\overset{\{a_1 q, a_2\}}{\underset{D}{g_1}}$ – the energy of instantaneous substitution a_1 by a_2, where a_1, and a_2 are chemical elements, q is instant replacement. Similarly, one can consider for the node of chemical reactions $SCprt\overset{\{chemical\ elements\ with\ "target\ weights"\}}{\underset{reaction}{g_1}}$. The ideology of SCprt elements allows us to go to the border of the world familiar to us, which allows us to act more effectively.

Dynamic SCprt – elements

We considered stationary SCprt – elements earlier. Here we consider dynamic SCprt – elements.

Definition 1.2.1. The process of fitting a set of elements $\{a(t)\} = (a_1(t), a_2(t), \dots, a_n(t))$ into one point x of space X at time t with accommodation type g_1 will be called a dynamic SCprt – element. We will denote $SCprt(t)\overset{\{a(t)\}}{\underset{x}{g_1}}$.

Definition 1.2.2. Fitting an ordered set of elements into one point in space with accommodation type g_1 is called a dynamic ordered SCprt–element.

It is allowed to sum dynamic SCprt – elements:

$$SCprt(t)\overset{\{a(t)\}}{\underset{x}{g_1}} + SCprt(t)\overset{\{b(t)\}}{\underset{x}{g_1}} = SCprt(t)\overset{\{a(t)\}\cup\{b(t)\}}{\underset{x}{g_1}}.$$

Dynamic accommodation of oneself$_g$.

Definition 1.2.3. Dynamic SCprt-capacity $SCprt(t)\overset{R(t)}{\underset{Q(t)}{g_1}}$ is the process of embedding R(t) into Q(t) with accommodation type g_1.

Definition 1.2.4. The dynamic capacity A(t) containing itself$_g$ as an element of the first type is the process of containing A(t) in A(t) with accommodation type g_1. Denote $SC_1 f(t) A(t)$.

Definition 1.2.5. Dynamic capacity C(t) in itself$_g$ of the second type is the process of containing elements from which it can be generated with accommodation type g_1. Let's denote $SC_2 f(t) C(t)$.

Definition 1.2.6. Dynamic partial capacity B(t) in itself$_g$ of the third type is a process of partial accommodation of B(t) in itself$_g$ with accommodation type g_1 or elements from which it can be generated with accommodation type g_1 partially or both at the same time. Denote $SC_3 f(t) B(t)$.

All dynamic capacities in a dynamic self$_g$ -space are, by definition, dynamic capacities in themselves. Dynamic capacity itself$_g$ can manifest itself$_g$ as dynamic SCprt-capacity and ordinary dynamic capacity. In these cases, the usual measures and methods of topology are used.

Connection of dynamic SCprt – elements with dynamic accommodation of oneself$_g$ with accommodation type g.

Consider third type of dynamic partial accommodation of oneself$_g$ with accommodation type g. For example, based on

$SCprt(t)\overset{\{a(t)\}}{\underset{x}{g_1}}$, where $\{a(t)\} = (a_1(t), a_2(t), \dots, a_n(t))$, i.e. n – elements at one point x, we can consider the dynamic capacity in itself$_g$ $SC_3f(t)$ with m elements from $\{a(t)\}$, m<n, which is process formed according to the form (1.1), that is, only m elements from $\{a(t)\}$ are in the structure $\mathrm{SCprt}(t)\overset{\{a(t)\}}{\underset{x}{g_1}}$.

Dynamic accommodation of oneselfg of the third type can be formed for any other structure, not necessarily SCprt, only through the obligatory reduction in the number of elements in the structure. In particular, using the form from the forms (1.1.1) – (1.4).

It is possible to introduce structures more complex than SC3f(t).

Dynamic Math Itself$_g$

1. The process of simultaneous addition of a set of elements $\{a(t)\} = (a_1(t), a_2(t), \ldots, a_n(t))$ are realized by $\mathrm{SCprt}(t)\overset{\{a(t)+\}}{\underset{x}{g_1}}$.

2. By analogy, for simultaneous multiplication: $\mathrm{SCprt}(t)\overset{\{a(t)*\}}{\underset{x}{g_1}}$.

3. Similarly, for simultaneous execution of various operations: $\mathrm{SCprt}(t)\overset{\{a(t)q(t)\}}{\underset{x}{g_1}}$, where $\{q(t)\} = (q_1(t), q_2(t), \ldots, q_n(t))$. $q_i(t)$-an operation, i = 1, …, n.

4. Similarly, for the simultaneous execution of various operators: $\mathrm{SCprt}(t)\overset{\{F(t)a(t)\}}{\underset{x}{g_1}}$, where $\{F(t)\} = (F_1(t), F_2(t), \ldots, F_n(t))$. $F_i(t)$ is an operator, i = 1,…,n.

5. Dynamic arithmetic itself$_g$ for accommodations of oneself$_g$ will be similar: dynamic addition - $SC_1f(t)\{a(t)+\}$, (or $SC_3f(t)\{a(t)+\}$ for the third type), dynamic multiplication $SC_1f(t)\{a(t)*\}$, $(SC_3f(t)\{a(t)*\})$.

6. Similarly with different operations: $SC_1f(t)\{a(t)q(t)\}$, $(SC_3f(t)\{a(t)q(t)\})$ and with different operators: $SC_1f(t)\{F(t)a(t)\}$, $(SC_3f(t)\{F(t)a(t)\})$.

7. $\mathrm{SCprt}(t)\overset{A(t)}{\underset{B(t)}{g_1}}$ – gives the result $\mathrm{SCpr}(t)\overset{A(t)}{\underset{B(t)}{g_1}} = \left\{\frac{D(t)}{A(t)\cup B(t) - A(t)\cap B(t)}\right\}$ for sets A(t), B(t), where D(t) is self$_g$ -set for $A(t)\cap B(t)$.

The measure: $\mu\left(\mathrm{Cpr}(t)\overset{A(t)}{\underset{B(t)}{g_1}}\right) = \left(\frac{\mu^s(A(t)\cap B(t))}{\mu(A(t)) + \mu(B(t)) - \mu(A(t)\cap B(t))}\right) * \mu(g_1)$.

The same is true for structures if they are treated as sets.

Our approach to the theory of hierarchical sets differs from the construction of hierarchical sets by Y.L. Ershov we construct completely different types of hierarchical sets [3-6].

8. Similarly, for dynamic SCprt-derivatives, dynamic SCprt-integrals, dynamic SCprt-lim, dynamic self$_g$ -derivatives, dynamic self$_g$ -integrals

9. Denote dynamic self$_g$ -(dynamic self$_g$ -Q(t)) through dynamic self$_g$ ^{2}-Q(t) , $fS_g(t)(n,Q(t))$= dynamic self$_g$ -(dynamic self$_g$ -(…(dynamic self$_g$ -Q(t)))) = dynamic self$_g$ ^{n}-Q(t) for n-multiple dynamic self$_g$.

Remark 1.2.1. The dynamic SCprt-displacement of A(t) from B(t) with type of accommodation $g_2(t)$ will be denote by $\overset{B(t)}{\underset{A(t)}{g_2(t)}}\mathrm{SCprt}(t)$. Then the notation $\overset{C(t)}{\underset{D(t)}{g_2(t)}}\mathrm{SCprt}(t)\overset{A(t)}{\underset{B(t)}{g_1(t)}}$ is dynamic SCprt-accommodation of A(t) in B(t) with type of accommodation $g_1(t)$ and dynamic SCprt-displacement of D(t) from C(t) with type of accommodation $g_2(t)$simultaneously.

We can consider the concept of dynamic SCprt - element as $\mathrm{SCprt}(t)\overset{A(t)}{\underset{B(t)}{g_1(t)}}$, where A(t) fits in dynamic capacity B(t) with type of accommodation $g_1(t)$. Then $\mathrm{SCprt}(t)\overset{B(t)}{\underset{B(t)}{g_1(t)}}$ will mean $SC_1f(t)B(t)\{\ g_1(t)\}$. $\overset{A(t)}{\underset{A(t)}{g(t)}}\mathrm{SCprt}(t)$ denotes the dynamic expelling A(t) oneself$_{g(t)}$ out of oneself$_{g(t)}$, $\overset{A(t)}{\underset{A(t)}{g(t)}}\mathrm{SCprt}(t)\overset{A(t)}{\underset{A(t)}{g(t)}}$ is simultaneous dynamic accommodation A(t) of oneself$_{g(t)}$ in oneself$_{g(t)}$ and dynamic expelling A(t) oneself$_{g(t)}$ out of oneself$_{g(t)}$. $\overset{A(t)}{\underset{A(t)}{g(t)}}\mathrm{SCprt}(t)$ will be called dynamic anti-capacity from oneself$_{g(t)}$. For example, "white hole" in physics is such simple anti-capacity. The concepts of "white hole" and "black hole" were formulated by the physicists based on the subject of physics –the usual energies level. Mathematics allows you to deeply find and formulate the concept of singular points in the Universe based on the levels of more subtle energies. The experiments of the 2022 Nobel laureates Asle Ahlen, John Clauser, Anton Zeilinger correspond to the concept of the Universe as a capacity in itself$_g$. The energy of self$_g$ -accommodation in itselfg is closed on itself$_g$ [5].

Hypothesis: the accommodation of the galaxy in oneself$_g$ as a spiral curl and the expelling out of oneself$_g$ defines its existence. A self$_g$ -capacity in itself$_g$ as an element A is the god of A, the self$_g$ -capacity in itself$_g$ as an element the globe—the god of the globe, the self$_g$ -capacity in itself$_g$ as an element man-- the god of the man, the self$_g$ -capacity in itself$_g$ as an element of the universe-- the god of the universe, the accommodation of A into oneself$_g$ is spirit of A, the accommodation of the Earth into oneself$_g$ is is spirit of Earth, the accommodation of the man into oneself$_g$ is spirit of the man (soul), the accommodation of the universe into oneself$_g$ is spirit of the universe. We may consider the following axiom: any capacity is the capacity of oneself$_g$. This is for each energy capacity.

About dynamic SCprt and SC$_i$f(t) programming.

The ideology of dynamic SCprt and S_3f(t) can be used for programming:

1. The process of simultaneous assignment of the expressions $\{p(t)\} = (p_1(t), p_2(t), \dots, p_n(t))$ to the variables $\{g(t)\} = (g_1(t), g_2(t), \dots, g_n(t))$ is implemented through $\text{SCprt}(t)\begin{matrix}\{\{g(t)\} \coloneqq \{p(t)\}\}\\ w(t)\\ x(t)\end{matrix}$

2. The process of simultaneous check the set of conditions $\{f(t)\} = (f(t)_1, f_2(t) \dots, f(t)_n)$ for a set of expressions $\{B(t)\} = (B_1(t), B_2(t), \dots, B_n(t))$ is implemented through $\text{SCprt}(t)\begin{matrix}IF\{\{B(t)\}\{f(t)\}\}\ then\ Q(t)\\ g(t)\\ x(t)\end{matrix}$ .where Q(t) can be any.

3.Similarly for loop operators and others.

$S_3f(t)$– software operators will differ only in that the aggregates $\{g(t)\}, \{p(t)\}, \{B(t)\}, \{f(t)\}$ will be formed from corresponding processes SCprt(t) for the above-mentioned programming operators through form (1.1) or the form from the forms (1.1.1) – (1.4) for more complex operators.

Remark 1.2.2. With the help of dynamic SCprt-elements, the concepts of dynamic SCprt - force, dynamic SCprt – energy are introduced. For example, $E(t)^f_{sprt} = \text{SCprt}(t)\begin{matrix}\{E_1(t)f, E_2(t)\}\\ g(t)\\ x(t)\end{matrix}$ will mean the process of instantaneous replacement f of energy $E_1(t)$ by $E_2(t)$ at time t. Similarly, using $SC_if(t)$, the concepts of SC$_i$f(t)-force, SC$_i$f(t)-energy, i=1,2,3, and etc are introduced.

Remark 1.2.3. It is the accommodation of oneself$_g$ in oneself$_g$ that can "give birth" to the capacities in itself$_g$ – that is what self$_g$ -organization is.

Remark 1.2.4. $\text{SCprt}(t)\begin{matrix}\text{SCprt}(t)g(t)\begin{matrix}B(t)\\ \\ B(t)\end{matrix}\\ g(t)\\ \text{SCprt}(t)g(t)\begin{matrix}B(t)\\ \\ B(t)\end{matrix}\end{matrix}$ can increase self$_{g(t)}$ - level of B(t).

Remark 1.2.5. For example, the operator itself$_g$ is SC$_1$f(t).

Remark 1.2.6. May be considered the following derivatives:

$$\frac{d\text{SCprt}(t)g(t)\begin{matrix}A(t)\\ \\ B(t)\end{matrix}}{dt}, \frac{dg_2(t)\text{SCprt}(t)\begin{matrix}B(t)\\ \\ A(t)\end{matrix}}{dt}, \frac{dg_2(t)\begin{matrix}C(t)\\ \\ D(t)\end{matrix}\text{SCprt}(t)g_1(t)\begin{matrix}A(t)\\ \\ B(t)\end{matrix}}{dt}, \frac{dSC_if(t)}{dt},$$

i=1,2,3.

Remark 1.2.7. It is the accommodation of oneself$_g$ in itself$_g$ as an element that can be interpreted as dynamic capacities in itself$_g$.

Remark 1.2.8. Not every capacity containing itself$_g$ as an element will manifest itselfg as a sedentary capacity or capacity.

SCprt – elements for Continual Sets

Earlier, we considered finite-dimensional discrete SCprt-elements and self$_g$ -capacities in itself$_g$ as an element. Here we believe some continual SCprt-elements and continual self$_g$ -capacities in themselves as an element.

Definition 1.3.1. The set of continual elements $\{a\} = (a_1, a_2, \dots, a_n)$ fitting into point x of space X with accommodation type $g_1$will be called continual SCprt – element, and such a point in space will be called capacity of the continual SCprt – element. We will denote $\text{SCprt}\begin{matrix}\{a\}\\ g_1\\ x\end{matrix}$

Definition 1.3.2. An ordered set of continual elements at one point in space is called an ordered continual SCprt–element.

It's allowed to sum continual SCprt – elements: $\text{SCprt}\begin{matrix}\{a\}\\ g_1\\ x\end{matrix} + \text{SCprt}\begin{matrix}\{b\}\\ g_1\\ x\end{matrix} = \text{SCprt}\begin{matrix}\{a\} \cup \{b\}\\ g_1\\ x\end{matrix}$, where some or any elements may be ordered elements.

Definition 1.3.3. The continual $self_g$-capacity A in $itself_g$ as an element of the first type is the capacity fitting with accommodation type g_1 $itself_g$ as an element. Denote $SC_1 fA$.

Definition 1.3.4. The ordered continual $self_g$ -capacity A in $itself_g$ as an element of the first type is the ordered capacity fitting $itself_g$ as an element with accommodation type g_1.

Denote $\overrightarrow{SC_1 fA}$.

For example, SC_{∞}^{+}=sin∞|g is of this type. It denotes continual ordered $self_g$ -capacities in $itself_g$ as an element of following type—the range of simultaneous "activation" of numbers from [-1,1] in mutual directions: $\uparrow$ I $\downarrow_{-1}^{1}$. Also consider the following elements: SC_{∞}^{-}=sin (-∞)|g --$\downarrow$ I $\uparrow_{-1}^{1}$ |g, TC_{∞}^{+}=tg∞|g --$\uparrow$ I $\downarrow_{-\infty}^{\infty}$ |g, TC_{∞}^{-}=tg(-∞)|g --$\downarrow$ I $\uparrow_{-\infty}^{\infty}$ |g , don't confuse with values of these functions. Such elements can be summarized. For example: aSC_{∞}^{+}+bSC_{∞}^{-}=(a-b)SC_{∞}^{+} $= (b-a)\, SC_{\infty}^{-}$.

Definition 3.5. The continual $self_g$ -capacity A in $itself_g$, as an element of the second type, is the capacity containing elements from which it can be generated. Let's denote $SC_2{}^f A$.

An example of continual $self_g$ -capacity in $itself_g$ as an element of the second type is a living organism since it contains the programs: DNA and RNA.

Definition 1.3.6. Partial continual $self_g$ -capacity in $itself_g$ as an element of the third type is called continual $self_g$ -capacity in $itself_g$ as an element that partially contains $itself_g$ or contains elements from which it can be generated in part or both simultaneously. Denote $SC_3 f$.

All continual capacities in $self_g$ -space are continual $self_g$ -capacities in $itself_g$ as an element by definition. The continual $self_g$ -capacities in $itself_g$ as an element may appear as continual SCpr-capacities and usual continual capacities. In these cases, there are used typical measure and topology methods.

Consider a third type of continual $self_g$ -capacity in $itself_g$ as an element. For example, based on SCprt $\underset{x}{\overset{\{a\}}{g_1}}$, where $\{a\} = (a_1, a_2, \ldots, a_n)$, i.e. a_i - continual elements at one point, i=1, 2, …, n. The continual $self_g$ -capacity in $itself_g$ as an element with m continual elements from {a}, at m<n, can be considered as $SC_3 f$, which is formed by the form (1.1), i.e., only m continual elements are located in the structureS SCprt $\underset{x}{\overset{\{a\}}{g_1}}$. Continual $self_g$ -capacities in $itself_g$ as an element of the third type can be formed for any other structure, not necessarily SCprt, only by obligatory reducing the number of continual elements in the structure. In particular, using the form from the forms (1.1.1) – (1.4).

Structures more complex than $SC_3 f$ can be introduced. Mathematics $itself_g$ for continual elements.

1.Simultaneous addition of the continual elements of the set$\{a\} = (a_1, a_2, \ldots, a_n)$is implemented using SCprt $\underset{x}{\overset{\{a\,\cup\}}{g_1}}$.

2. By analogy, for simultaneous multiplication: SCprt $\underset{x}{\overset{\{a\,\cap\}}{g_1}}$.

3. Similarly, for simultaneous execution of various operations: SCprt $\underset{x}{\overset{\{aq\}}{g_1}}$, where $\{q\} = (q_1, q_2, \ldots, q_n)$. q_i - an operation, i = 1, …, n.

4. Similarly, for the simultaneous execution of various operators: SCprt $\underset{x}{\overset{\{Fa\}}{g_1}}$, where $\{F\} = (F_1, F_2, \ldots, F_n)$. F_i is an operator, i = 1, …, n.

5. For continual $self_g$ -capacities in $themselves_g$ as an element will be similar: addition - $SC_1 f\{a+\}$, (or $SC_3 f\{a+\}$) for the third type), multiplication $SC_1 f\{a*\}$, ($SC_3 f\{a*\}$).

6. Similarly with different operations: $SC_1 f\{aq\}$, ($SC_3 f\{aq\}$), and with different operators: $SC_1 f\{Fa\}$, ($SC_3 f\{Fa\}$).

7. SCpr$\underset{B}{\overset{A}{g}}$ is the result of the accommodation operator SCprt$\underset{B}{\overset{A}{g}}$.

For sets A, B we have

SCpr$\underset{B}{\overset{A}{g}}$ $= \left\{ \overset{D}{A \cup B - A \cap B} \right\}$, where D is $self_g$ -set for $A \cap B$. The measure:

$$\mu(\,\text{SCpr}\underset{B}{\overset{A}{g}}\,) = \left(\frac{\mu^s(A \cap B)}{\mu(A) + \mu(B) - \mu(A \cap B)} \right) * \mu(g).$$

There is the same for structures if it`s considered as continual sets. Our approach to the theory of hierarchical sets differs from the construction of hierarchical sets by Y.L. Ershov we construct completely different types of hierarchical sets [3-6].

Remark 1.3.1. Three in one is SCprt$\underset{\alpha}{\overset{\{\infty \text{ in itself}, \text{an element that is not anyone's element}, 0 \text{ out oneself}\}}{g}}$

α- point space connectedness.

We can consider the concept of a continual SCprt - element ıs SCprt$\underset{B}{\overset{A}{g}}$, where A fits in continual capacity B with type of accommodation g. Then SCprt$\underset{B}{\overset{B}{g}}$ will mean SC_1f B.

These elements are used for SCprt-coding, SCprt translation, coding self$_g$, and translation self$_g$ for networks], which is suitable for electric current of ultrahigh frequency. More complex elements can be considered as continual sets of numbers with their " activation " in mutual directions. For example, ranges of function values, particularly those representing the shape of lightning. Differential geometry can be applied here. Also, n-dimensional elements can be considered. The space of such elements is Banach space if we introduce the usual norm for functions or vectors. We call this space-- SCelb-space. Then we introduce the scalar product for functions or vectors and get the Hilbert space. We call this space SCelh-space. In particular, one can try to describe some processes with these elements by differential equations and use methods from [7]. You can also try to optimize and research some processes with these elements using the techniques from [8]. Let's introduce operators for transforming capacity to self$_g$ -capacity in itself$_g$ as an element: Q1SC(A) transforms A to SC1fA, Q0SC(A) transforms A to $\underset{A}{\overset{A}{g}}$SCprt, SCO(A) transforms A to↑ A ↓ ,↑ A ↓ -- ordered self$_g$ -capacity in itself$_g$ as an element of simultaneous "activation" of all elements of A in mutual directions. For example, SCO ([-1,1]) $= SC_\infty^+$, SCO([1,-1])= SC_∞^- , SCO([-∞,∞])= CT_∞^+, SCO([∞,-∞])= CT_∞^-. The operator $(Q_1SC(A))^2$ increases self$_g$ -level for A: it transforms self$_g$ -A= SC_1fA to self$_g$ ^{2}-A, $(Q_1SC(A))^n$ → self$_g$ ^{n}-A, $e^{Q_1SC(A)} \to e^{\text{selfg}} - A$. Let us introduce the following notations: $\underset{A}{\overset{\{\}}{g}}$ SCprt by os({ } →)elf$_g$,

$\underset{(A,A)}{\overset{A}{g}}$ SCprt by 2oself$_g$ -A, SCprt $\underset{A}{\overset{(A,A)}{g}}$ by 2self$_g$ -A,

SCprt $\underset{(A,A)}{\overset{A}{g}}$ by 1/2self$_g$ -A, SCprt $\underset{q(A)}{\overset{A}{g}}$ by qself$_g$ -A,

$\underset{q(A)}{\overset{A}{g}}$ SCprt by q()oself$_g$ -A, q-any operator,

$\underset{(q_1(A),\dots,q_N(A))}{\overset{A}{g}}$ SCprt by Noself$_g$ -A, q_i= A, i= 1, …, N;

$\underset{A}{\overset{A}{g}}$SCprt$\underset{A}{\overset{A}{g}}$ by (self$_g$ - oself$_g$)-A, $\underset{q_3(A)}{\overset{q_2(A)}{g}}$ SCprt $\underset{q_1(A)}{\overset{A}{g}}$ by ($q_1$self$_g$ - $\begin{pmatrix} q_3() \\ q_2() \end{pmatrix}$oself$_g$)-A, $\underset{(A,A)}{\overset{A}{g}}$ CCprt by by 2Coself$_g$ -A,

CCprt $\underset{A}{\overset{(A,A)}{g}}$ by 2Cself$_g$ -A, CCprt $\underset{(A,A)}{\overset{A}{g}}$ by 1/2Cself$_g$ -A,

CCprt $\underset{q(A)}{\overset{A}{g}}$ by qCself$_g$ -A, $\underset{q(A)}{\overset{A}{g}}$ CCprt by q()Coself$_g$ -A, q-any operator, $\underset{(q_1(A),\dots,q_N(A))}{\overset{A}{g}}$ CCprt by NCoself$_g$ -A, q_i= A, i= 1, …, N; $\underset{A}{\overset{A}{g}}$CCprt$\underset{A}{\overset{A}{g}}$ by Cself$_g$ -A- Coself$_g$ -A, $\underset{q_3(A)}{\overset{q_2(A)}{g}}$ CCprt $\underset{q_1(A)}{\overset{A}{g}}$ by q_1Cself$_g$ -A- $\begin{pmatrix} q_3() \\ q_2() \end{pmatrix}$Coself$_g$ -A,

SC2prt$\underset{A}{\overset{A}{g}}$= (self$_g$ -A, self$_g$ -A), SCNprt$\underset{A}{\overset{A}{g}}$= ($q_1$, …, q_N), q_i= self$_g$ -A, i= 1, …, N. self$_g$ (SCprt$\underset{B}{\overset{A}{g}}$)= SCprt $\underset{\text{SCprt}\underset{B}{\overset{A}{g}}}{\overset{\text{SCprt}\underset{B}{\overset{A}{g}}}{g}}$. Can be considered Q ($\underset{A}{\overset{A}{g}}$SCprt$\underset{A}{\overset{A}{g}}$), Q-any operator.

Definition 1.4.1. The process of containing a set with continual elements $\{a(t)\} = (a_1(t), a_2(t), \dots, a_n(t))$ at one point x of the space X at time with accommodation type g_1 will be called the dynamic continual SCprt – element. We will denote SCprt(t) $\underset{x}{\overset{\{a(t)\}}{g_1}}$..

Definition 1.4.2. The process of containing an ordered set of continual elements at one point in space with accommodation type g_1 is called dynamic continual ordered SCprt – element. It is allowed to sum dynamic continual SCprt – elements:

$$\text{SCprt}(t)\underset{x}{\overset{\{a(t)\}}{g_1}} + \text{SCprt}(t)\underset{x}{\overset{\{b(t)\}}{g_1}} = \text{SCprt}(t)\underset{x}{\overset{\{a(t)\}\cup\{b(t)\}}{g_1}}.$$

.

Dynamic continual containing of oneself$_g$ in oneself$_g$ as an element.

Definition 1.4.3. The dynamic continual SCprt-capacity $R(t)$

$SCprt(t)\ \genfrac{}{}{0pt}{}{g_1}{Q(t)}$ is called the process of embedding R(t) in Q(t) with accommodation type g_1.

Definition 1.4.4. The dynamic accommodation continual A(t) of oneself$_g$ of the first type is the process of putting A(t) into itself$_g$. Denote $SC_1 f(t)A(t)$.

Definition 1.4.5. The dynamic accommodation continual C(t) of oneself$_g$ of the second type embedding contains the continual elements with accommodation type g_1 from which it can be generated. Denote $SC_2 f(t)C(t)$.

Definition 1.4.6. The partial dynamic accommodation continual B(t) of oneselfg of the third type is the process of partial embedding continual B(t) into oneself$_g$ or continual elements from which it can be generated in part with accommodation type g_1 or both simultaneously. Denote $SC_3 f(t)B(t)$.

The connection of dynamic continual SCprt – elements with dynamic accommodation of oneself$_g$ in oneself$_g$ as an element.

Let us consider the partial dynamic continual accommodation of oneself$_g$ in oneself$_g$ as an element of the third type. For example, based on $SCprt(t)\ \genfrac{}{}{0pt}{}{\{a(t)\}}{\genfrac{}{}{0pt}{}{g_1}{x}}$, where $\{a(t)\} = (a_1(t), a_2(t), \ldots, a_n(t))$, i.e. n - continual elements at one point x, one can consider the dynamic accommodation $SC_3 f(t)$ of oneself$_g$ in oneself$_g$ as an element with m continual elements from $\{a(t)\}$, m<n, which is a process that is necessary form according to the form (1.1), i.e., only m continual elements from $\{a(t)\}$ are located in the structure $SCprt(t)\ \genfrac{}{}{0pt}{}{\{a(t)\}}{\genfrac{}{}{0pt}{}{g_1}{x}}$. Dynamic continual accommodations of oneself$_g$ in oneself$_g$ as an element of the third type can be formed for any other structure, not necessarily SCprt, only by necessarily reducing the number of continual elements in the structure. In particular, with the help of the form from the forms (1.1.1) – (1.4).

It is possible to introduce structures more complex than $SC_3f(t)$.

Dynamic Continual Mathematics Self$_g$

1. The process of simultaneous addition of the set of continual elements $\{a(t)\} = (a_1(t), a_2(t), \ldots, a_n(t))$ is realized by $SCprt(t)\ \genfrac{}{}{0pt}{}{\{a(t) \cup\}}{\genfrac{}{}{0pt}{}{g_1}{x}}$.
2. By analogy, for simultaneous multiplication: $SCprt(t)\ \genfrac{}{}{0pt}{}{\{a(t) \cap\}}{\genfrac{}{}{0pt}{}{g_1}{x}}$.
3. Similarly, for simultaneous execution of various operations: $SCprt(t)\ \genfrac{}{}{0pt}{}{\{a(t)q(t)\}}{\genfrac{}{}{0pt}{}{g_1}{x}}$, where $\{q(t)\} = (q_1(t), q_2(t), \ldots, q_n(t))$. $q_i(t)$-an operation, i = 1, …, n.
4. Similarly, for the simultaneous execution of various operators: $SCprt(t)\ \genfrac{}{}{0pt}{}{\{F(t)a(t)\}}{\genfrac{}{}{0pt}{}{g_1}{x}}$, where $\{F(t)\} = (F_1(t), F_2(t), \ldots, F_n(t))$. $F_i(t)$ is an operator, i = 1, …, n.
5. The dynamic arithmetic self$_g$ for the dynamic continual accommodations of oneself$_g$ will be similar: dynamic addition - $SC_1 f(t)\{a(t) \cup\}$, (or $SC_3 f(t)\{a(t) \cup\}$ for the third type), dynamic multiplication $SC_1 f(t)\{a(t) \cap\}$, ($SC_3 f(t)\{a(t) \cap\}$).
6. Similarly with different operations: $SC_1 f(t)\{a(t)q(t)\}$, ($SC_3 f(t)\{a(t)q(t)\}$), and with different operators: $SC_1 f(t)\{F(t)a(t)\}$, ($SC_3 f(t)\{F(t)a(t)\}$).
7.

the result $SCpr(t)\ \genfrac{}{}{0pt}{}{A(t)}{\genfrac{}{}{0pt}{}{g_1}{B(t)}} = \left\{ \genfrac{}{}{0pt}{}{D(t)}{A(t) \cup B(t) - A(t) \cap B(t)} \right\}$ for continual sets A(t), B(t), where D(t) is self$_g$ -set for $A(t) \cap B(t)$.

The measure:

$$\mu(Srt_{B(t)}^{A(t)}) = \left(\frac{\mu^s(A(t) \cap B(t))}{\mu(A(t)) + \mu(B(t)) - \mu(A(t) \cap B(t))}\right)^* \mu(g_1).$$

There is the same for structures if it`s considered as continual sets. Our approach to the theory of hierarchical sets differs from the construction of hierarchical sets by Y.L. Ershov we construct completely different types of hierarchical sets [3-6].

8. Similarly, for dynamic SCprt-derivatives, dynamic SCprt-integrals, dynamic SCprt-lim, dynamic self$_g$ -derivatives, dynamic self$_g$ -integrals

9. Denote dynamic continual self$_g$ -(dynamic continual self$_g$ -Q(t)) through dynamic continual self$_g$ ^{2}-Q(t), fSC(t)(n,Q(t))= dynamic continual self$_g$ -(dynamic continual self$_g$ -(…(dynamic continual self$_g$ -Q(t)))) = dynamic continual self$_g$ ^{n}-Q(t) for n-multiple dynamic continual self$_g$.

Remark 1.4. Dynamic continual SCprt-displacement of A(t) from B(t) with type of accommodation $g_2(t)$ will be denote through $\underset{A(t)}{\overset{B(t)}{g_2(t)}}\mathrm{SCprt}(t)$. Then the notation $\underset{D(t)}{\overset{C(t)}{g_2(t)}}\mathrm{SCprt}(t)\underset{B(t)}{\overset{A(t)}{g_1(t)}}$ is dynamic continual SCprt-embedding of A(t) in B(t) with type of accommodation $g_1(t)$ and dynamic continual SCprt-displacement of D(t) from C(t) with type of accommodation $g_2(t)$ simultaneously.

We can consider the concept of dynamic continual SCprt -element as $\mathrm{SCprt}(t)\underset{B(t)}{\overset{A(t)}{g_1(t)}}$, where A(t) fits in dynamic continual capacity B(t). Then $\mathrm{SCprt}(t)\underset{B(t)}{\overset{B(t)}{g_1(t)}}$ it will mean SC₁f(t) B(t). $\underset{A(t)}{\overset{A(t)}{g_2(t)}}\mathrm{SCprt}(t)$ denotes the dynamic continual displacement of A(t) from itself$_g$, $\underset{A(t)}{\overset{A(t)}{g_2(t)}}\mathrm{SCprt}(t)\underset{A(t)}{\overset{A(t)}{g_1(t)}}$ — simultaneous dynamic continual accommodation of oneself$_g$ A(t) in oneself$_g$ A(t) and dynamic continual expelling oneself$_g$ A(t) out of oneself$_g$ A(t). $\underset{A(t)}{\overset{A(t)}{g_2(t)}}\mathrm{SCprt}(t)$ will be called dynamic continual anti capacity from itself$_g$.

Connection of dynamic continual SCprt – elements with target weights with dynamic continual accommodation of oneself$_g$ with target weights.

Consider a third type of dynamic partial accommodation of oneself$_g$ with target weights g(t). For example, based on $\mathrm{SCprt}(t)\underset{x}{\overset{\{a(t)g(t)\}}{g_1}}$, where $\{a(t)\} =$ (a_1(t), a_2 (t),...,a_n(t)), i.e. n - continual elements with target weights{g(t)} at one point x, we can consider the dynamic accommodation $SC_3 f(t)g(t)$ of oneselfg with target weights with m continual elements with target weights{g(t)} from {a(t)}, m<n, which is the process of formation according to the form (1.1), i.e., only m continual elements with target weights{g(t)} from {a(t)} are located in the structure $SC_3 f(t)g(t)$. Dynamic accommodations of oneself$_g$ with target weights of the third type can be formed for any other structure, not necessarily SCprt, only by reducing the number of continual elements with target weights in the structure. In particular, using the form from forms (1.1.1) – (1.4). Structures more complex than $SC_3 f(t)g(t)$ can be introduced.

Definition 1.4.8. The dynamic embedding of continual A(t) into itselfg with target weights {g(t)} of the first type is the process of embedding A(t) into A(t) with target weights. Denote $SC_3 f(t)g(t)$

Definition 30. The dynamic accommodation of continual C(t) itself$_g$ into itself$_g$ with target weights{$g_{(t)}$} of the second type is the process of accommodation of the continual elements from which it can be generated. Let's denote $SC_3 f(t)g(t)$.

Definition 1.4.9. Partial dynamic accommodation of continual B(t) itself$_g$ into itself$_g$ with target weights {$g_{(t)}$} of the third type is the process of partial accommodation of continual B(t) into itself$_g$ or continual elements from which it can be generated partially, or both at the same time. Denote $SC_3 f(t)g(t)$.

The Usage of SCprt-elements for Networks

A. Galushkin's comprehensive monograph covers all aspects of networks, but traditional approaches go through classical mathematics, mainly through the usual correspondence operators [9]. Here we consider a different approach - through a new mathematical process with accommodation operators, which, although they can be interpreted as the result of some correspondence operators, are not themselves correspondence operators. Accommodation operators are more convenient for networks. Also, the main emphasis was placed on using processors operating using triodes, which are generally not used in SCprt-networks. SCprt-networks (SmnSCprt) are a SCprt-structure that can be built for the required weights. SCprt-OS (SCprt operating system) uses SCprt-coding and SCprt-translation. In the first one, coding is carried out through a 2-dimensional matrix-row (a, b), where the number b is the code of the action, and the number a is the code of the object of this action. SCprt-coding (or selfg -coding) is implemented through a matrix consisting of 2 columns (in the continuous case, two intervals of numbers). Here, the source encoding is used for all matrix rows simultaneously. SCprt-translation is carried out by inversion. In this case, self$_g$ -coding and self$_g$ -translation will be more stable. The target weights f_i in SCprt $\underset{a}{\overset{\{f_i x\}}{g_1}}$ are chosen for necessary tasks. We will not touch on the issues of applications, or network optimization. They are described in detail by Galushkin [9]. We will touch on the difference of this only for hierarchical complex networks. The same simple executing programs are in the cores of simple artificial neurons of type SCprt (designation - mnSCprt) for simple information processing. More complex executing programs are used for mnSCprt nodes. SCprt-threshold element –

$sgn(SCprt\overset{\{ax\}}{\underset{b}{g_1}})$, b- mnSCprt, $x=(x_1,x_2,\ldots,x_n)$ – source signals values, $a=(a_1,a_2,\ldots,a_n)$ – SCprt-synapses weights. The first level of mnSCprt consists of simple mnSCprt. The second level of mnSCprt consists of SCprt $\overset{\{mnSCprt\}}{\underset{D}{g_1}}$ – SCprt-node of mnSCprt in range D, D- capacity for mnSCprt node. The third level of mnSCprt consists of SCprt $\overset{SCprt\ \overset{\{mnSCprt\}}{\underset{D}{g_1}}}{\underset{D}{g_1}}$ - SCprt2- node of mnSCprt in range D, thus D becomes capacity of $itself_g$ in $itself_g$ as an element for mnSCprt. For our networks, it is sufficient to use $SCprt^2$- nodes of mnSCprt, but $self_g$-level is higher in living organisms, particularly $SCprt^n$-, $n\geq 3$. The target structure or the corresponding program enters the target unit using a short-pulse laser to generate attosecond pulses of light. After that, all networks or parts of them are activated according to the indicative goal. It may appear that we are leaving the network ideology, but these networks are a complex hierarchy of different levels, like living organisms.

Remark 1.5. Traditional scientific approaches through classical mathematics make it possible to describe only at the usual energy level. Here we consider an approach that makes describing processes with finer energies possible. mnSCprt contains SCprt $\overset{\{ceprogramsg\}}{\underset{mnSCprt}{g}}$, $ceprogramg$ –executing program in SCprt- OS. SCprt-OS (or $self_g$ -OS) is based on SCprt-assembly language (or $self_g$ -assembly language), which is based on assembly language through SCprt-approach in turn, if the base of elements of SCprt-networks is sufficient. The ceprogramsg are in SCprt-programming environments (or $self_g$ -programming environments), but this question and SCprt-networks base will be considered in the following publications. In particular, ceprogramsg may contain SCprt- programming operators. In mnSCprt cores, the constant memory SCprt with correspondent ceprogramsg depending on mnSCprt.

The OS (operating system) and the principles and modes of operation of the SCprt-networks for this programming are interesting. But this is already the material for the next publications. Here is developed a helicopter model without a main and tail rotor based on SCprt – physics and special neural networks with artificial neurons operating in normal and SCprt-modes. Let's denote this model through SmnSCprt. To do this, it's proposed to use mnSCprt of different levels; for example, for the usual mode, mnSCprt serves for the initial processing of signals and the transfer of information to the second level, etc., to the nodal center, then checked. In case of an anomaly - local SCprt–mode with the desired "target weight" is realized in this section, etc., to the center. In the case of a monster during the test, SmnSCprt is activated with the desired "target weight." Here are realized other tasks also. To reach the $self_g$ -energy level, the mode is used. In normal mode, it's planned to carry out the movement of SmnSCprt on jet propulsion by converting the energy of the emitted gases into a vortex to obtain additional thrust upwards. For this purpose, a spiral-shaped chute (with "pockets") is arranged at the bottom of the SmnSCprt for the gases emitted by the jet engine, which first exit through a straight chute connected to the spiral one. There is drainage of exhaust gases outside the SmnSCprt. SmnSCprt is represented by a neural network that extends from the center of one of the main clusters of SCprt - artificial neurons to the shell, turning into the body $itself_g$. Above the operator's cabin is the central core of the neural network and the target block, responsible for performing the "target weights" and auxiliary blocks, the functions and roles of which we will discuss further. Next is the space for the movement of the local vortex. The unit responsible for SmnSCprt's actions is below the operator's cab. In SCprt – mode, the entire network or its sections are SCprt – activated to perform specific tasks, in particular, with "target weights." In the target, block used Sit-coding, SCprt-translation for activation of all networks to "target weights" simultaneously, then –the reset of this SCprt-coding after activation. Unfortunately, triodes are not suitable for SCprt -neural networks. In the most primitive case, usual separators with corresponding resistances and cores for ceprogramsg may be used instead triodes since there is no necessity to unbend the alternating current to direct. The SCprt-operative memory belt is disposed around a central core of SmnSCprt. There are SCprt-coding, SCprt-translation, and SCprt-realize of eprogramsg and the programs from the archives without extraction, SCprt-coding and SCprt-translation may be used in high-intensity, ultra-short optical pulses laser of Nobel laureates 2018-year Gerard Mourou, Donna, Strickland. SCprt – structure or an ceprogramg if one is present of needed «target weight» are taken in target block at SCprt – activation of the networks.

SCprt $\overset{SmnSCprt,f}{\underset{activationt}{g}}$ derives SmnSCprt to the $self_g$ -level boundary with target weight f. It's used ultra-short optical pulses laser or an alternating current of above high frequency and ultra-violet light, which can work with SCprt – structures in SCprt–modes by its nature to activate the networks or some of its parts in SCprt–modes and locally using SCprt–mode. Above high frequently alternating current go through mercury bearers. That's why overheating does not occur. The power of the alternating current above high frequently increases considerably for the target block. The activation of all networks is realized to indicate "target weights."

Variable Hierarchical Dynamical Structures (Models) for Dynamic, Singular, Hierarchical Sets

In contrast to the classical one-attribute set theory, where only its contents are taken as a set, we consider a two-attribute set theory with a set as a capacity and separately with its contents. We simply use a convenient form to represent the singularity of a set. Articles use the following methodology for permanent structures [10-19]

1. Cancellation of the axiom of regularity
2. attributes for the set: capacity and its content
3. Compression of a set, for example, to a point
4. "turning out" from one another, particularly from a capacity, we pull out another capacity, for example, $itself_g$, as its element.

5. The simultaneity of one (compression) and the other ("eversion")
6. Own capacities
7. Qualitatively new programming and Networks.

Here we will consider variable structures (models), both discrete and continuous: a) with variable connections, b) with the variable backbone for links, c) generalized version; in particular, in variable structures (models), for example,

$$\overset{C}{\underset{D}{g_2}}SCprt(t)\overset{A}{\underset{B}{g_1}} = \begin{cases} \overset{C}{\underset{D}{g_2}}SCprt, \; q_2 \geq t \geq q_1 \\ \overset{C}{\underset{D}{g_2}}SC^1prt\overset{A}{\underset{B}{g_1}}, q_3 \geq t > q_2 \\ \overset{B}{\underset{D}{g_2}}SCprt\,\overset{A}{\underset{B}{g_1}}, q_4 \geq t > q_3 \quad (*_{6.1}), \\ SCprt\overset{A}{\underset{B}{g_1}}, q_5 \geq t > q_4 \\ \overset{\{\}}{\underset{D}{g_2}}SCprt, \; t > q_5 \\ \ldots \end{cases}$$

$\overset{C}{\underset{D}{g_2}}SC^1prt\overset{A}{\underset{B}{g_1}}$ is the analogue, considered ${}^{C}_{D}S^1prt^{A}_{B}$ in [10]. In particular, $\overset{B}{\underset{D}{g_2}}SCprt\,\overset{A}{\underset{B}{g_1}}$ can be interpreted as a game: player 1 fits A into B, and the other pushes D out of B at the same time.

Can be considered N-hierarchical structure: 1-level - elements; level 2 - connections between them, level 3 - relationships between elements of level 2, etc. up to level N+1. N-hierarchical structure: 1-level - A; 2-level -B, 3-level - C, etc. up to (N+!)- level, where A, B, C, … can be any in particular, by actions, sets, and others.

$$\overset{C}{\underset{D}{g_2}}SCprt\,\overset{A}{\underset{B}{g_1}} : \left\langle \underset{A,B}{A \to B} \middle| \underset{C,D}{D \leftarrow C} \right\rangle \to \left(\underset{A,B}{self(A \to B)} \right)$$

$$\overset{C}{\underset{D}{g_2}}SCprt\,\overset{A}{\underset{B}{g_1}} : \left\langle \underset{A,B}{A \to B} \middle| \underset{C,D}{D \leftarrow C} \right\rangle \to \left(\underset{C,D}{oself(D \leftarrow C)} \right)$$

Can be considered discrete hierarchical structure, continuous hierarchical structure, and discrete-continuous hierarchical structure, $SCprt\overset{N-\text{hierarchical structure}}{\underset{x}{g}}$.

The example

$$QHSprg=HSprt_x \overset{N-\text{level of hierarchical structure}}{SCprt\underset{x}{g}} \ldots \left[\left[\overset{i-\text{level of hierarchical structure}}{SCprt\underset{x}{g}} \right]\right] \ldots \overset{1-\text{level of hierarchical structure}}{SCprt\underset{x}{g}}$$

-- N-hierarchical structure compression with type of accommodation g into point x.

Let f(N, QHSprg)= $QHSprg^{QHSprg^{QHSprg^{\cdots^{QHSprg}}}}\}$-N levels

It can be considered self$_g$ - QHSprg, f(y, QHSprg) for any y, f(QHSprg, QHSprg).

Compression Hierarchy Examples:

$$1)\; SCprt\overset{\overset{()}{SCprt\,()}}{\underset{\underset{()+B}{SCprt\;()}}{()}} = \begin{pmatrix} SCprt\overset{\overset{()}{SCprt\,()}}{\underset{\underset{()}{SCprt\;()}}{()}} \\ SCprt\overset{\overset{()}{SCprt\,()}}{\underset{\underset{B}{SCprt\;()}}{()}} \end{pmatrix}$$

2)

$$\underset{\underset{()}{()SCprt\,()+D}}{()}\;\overset{\overset{()}{()SCprt\,()+C}}{()}\; SC_1prt \;\overset{\overset{()}{()SCprt\,()+A}}{()}\;\underset{\underset{()}{()SCprt\,()+B}}{()} = \begin{pmatrix} \overset{\overset{()\quad()}{()SCprt\,()}}{()} \; SC_1prt \; \overset{\overset{()\quad()}{()SCprt\,()}}{()} \\ \underset{\underset{()\quad()}{()SCprt\,()}}{()} \qquad \underset{\underset{()\quad()}{()SCprt\,()}}{()} \\ \overset{C}{\underset{D}{g_2}}SC_1prt\,\overset{A}{\underset{B}{g_1}} \end{pmatrix}$$

The example of variable hierarchy

$$\overset{C}{\underset{D}{g_2}}SCprt_1(t)\overset{A}{\underset{B}{g}} = \begin{cases} \left\{ Q + \underset{\underset{(C-D\cap C)-(D-D\cap C)}{D-D\cap C}}{\overset{\{\}}{g_2}}\; SCprt \right\}, \; q_2 \geq t \geq q_1 \\ \left(\underset{Q-{}^{B}_{B}S^1t_B^{A-B}}{S^{1e}_{0}fB\,*} \right), q_3 \geq t > q_2 \\ \left(\overset{S^{et}_{01}fB}{\underset{D-{}^{C-B}_{C-B}S_1t_B^{A-B}}{{}^{C-B}_{C-B}S_1t_B^{A-B}}} \right), \; , q_4 \geq t > q_3 \qquad (*_{6.2}), \\ \left(\overset{R}{A\cup B - A\cap B} \right), q_5 \geq t > q_4 \\ \overset{\{\}}{\underset{D}{g_2}}SCprt, \; t > q_5 \\ \ldots \end{cases}$$

which can be tried to be represented in the form of a hierarchical energy structure: the upper level of subtle self$_g$ -energy and the lower level, which is manifested in the form of objectivity.

Ordinary types of energy are manifestations of a lower level from these structures.

If we represent an amorphous body with a mathematical

structure of self$_g$ -object $\mathrm{SCprt}\overset{A_0+E_s}{\underset{A_0+E_s}{g_1}}$, where $\mathrm{SCprt}\overset{A_0}{\underset{A_0}{g_1}}$ - level of objectivity of an amorphous object, $\left(\mathrm{SCprt}\overset{A_0}{\underset{A_0+E_s}{g_1}} + \mathrm{SCprt}\overset{A_0+E_s}{\underset{A_0}{g_1}}\right)$ - the energy of connections between the level of subtle energy $\mathrm{SCprt}\overset{E_s}{\underset{E_s}{g_1}}$ and the level of objectivity . object as a hierarchical dynamic operator

$$\begin{matrix} \mathrm{SCprt}\overset{E_s}{\underset{E_s}{g_1}} \\ \left(\mathrm{SCprt}\overset{A_0}{\underset{A_0+E_s}{g_1}} + \mathrm{SCprt}\overset{A_0+E_s}{\underset{A_0}{g_1}}\right) \\ \mathrm{SCprt}\overset{A_0}{\underset{A_0}{g_1}} \end{matrix} \quad (1.7.1).$$

In particular, the magnetic field and spin belong to the second level in (1.7.1).

The next level of objectivity responds to a crystal. We represent a crystal with a mathematical structure

$$\mathrm{SCprt}\overset{\mathrm{SCprt}\overset{A_0+E_s}{\underset{A_0+E_s}{g_1}}}{\underset{\mathrm{SCprt}\overset{A_0+E_s}{\underset{A_0+E_s}{g_1}}}{g_1}} \quad (1.7.2).$$

Thus, one can try to conventionally represent the mathematical model of the energy structure of a crystal as a hierarchical dynamic operator (1.7.2). The next level of objectivity responds to a living crystal, for example, the bone of a living organism, a nail, viruses, DNA, RNA and etc. When there is no nutrient medium and energy, it behaves like

a crystal: $\mathrm{SCprt}\overset{\mathrm{SCprt}\overset{\{\}}{\underset{\{\}}{\{\}}}}{\underset{\mathrm{SCprt}\overset{\{\}}{\underset{\{\}}{\{\}}}}{\{\}}}$ $\mathrm{SCprt}\overset{\mathrm{SCprt}\overset{A_0+E_s}{\underset{A_0+E_s}{g_1}}}{\underset{\mathrm{SCprt}\overset{A_0+E_s}{\underset{A_0+E_s}{g_1}}}{g_1}}$, a nutrient medium appears and the necessary energy:

$$\begin{array}{llllll} & B_0+E_q & & & B_0+E_q & \\ \mathrm{SCprt} & g_1 & & \mathrm{SCprt} & g_1 & \\ & B_0+E_q & & & B_0+E_q & \\ & g_1 & \mathrm{SCprt} & & g_1 & \\ & B_0+E_q & & & B_0+E_q & \\ \mathrm{SCprt} & g_1 & & \mathrm{SCprt} & g_1 & \\ & B_0+E_q & & & B_0+E_q & \end{array}$$

, its structure is transformed into a mathematical structure

$$\begin{array}{llllll} & B_0+E_q & & & A_0+E_s+B_0+E_q & \\ \mathrm{SCprt} & g_1 & & \mathrm{SCprt} & g_1 & \\ & B_0+E_q & & & A_0+E_s+B_0+E_q & \\ & g_1 & \mathrm{SCprt} & & g_1 & \\ & B_0+E_q & & & A_0+E_s+B_0+E_q & \\ \mathrm{SCprt} & g_1 & & \mathrm{SCprt} & g_1 & \\ & B_0+E_q & & & A_0+E_s+B_0+E_q & \end{array}$$

. The division of DNA into two DNAs after sufficient accumulation of bases and energy - this minimal division into only two only two duplicates corresponds to the law of conservation of living energy and minimization of the entropy of the system.

Next comes the level of living organisms:

$$\begin{array}{lllllllllll} & A_0+E_s & & & A_0+E_s & & & A_0+E_s & & & A_0+E_s \\ \mathrm{SCprt} & g_1 & & \mathrm{SCprt} & g_1 & & \mathrm{SCprt} & g_1 & & \mathrm{SCprt} & g_1 \\ & A_0+E_s & & & A_0+E_s & & & A_0+E_s & & & A_0+E_s \\ & g_1 & \mathrm{SCprt} & & g_1 & & & g_1 & \mathrm{SCprt} & & g_1 \\ & A_0+E_s & & & A_0+E_s & & & A_0+E_s & & & A_0+E_s \\ \mathrm{SCprt} & g_1 & & \mathrm{SCprt} & g_1 & & \mathrm{SCprt} & g_1 & & \mathrm{SCprt} & g_1 \\ & A_0+E_s & & & A_0+E_s & & & A_0+E_s & & & A_0+E_s \\ & & g_1 & & & \mathrm{SC_1prt} & & & g_1 & & \\ & A_0+E_s & & & A_0+E_s & & & A_0+E_s & & & A_0+E_s \\ \mathrm{SCprt} & g_1 & & \mathrm{SCprt} & g_1 & & \mathrm{SCprt} & g_1 & & \mathrm{SCprt} & g_1 \\ & A_0+E_s & & & A_0+E_s & & & A_0+E_s & & & A_0+E_s \\ & g_1 & \mathrm{SCprt} & & g_1 & & & g_1 & \mathrm{SCprt} & & g_1 \\ & A_0+E_s & & & A_0+E_s & & & A_0+E_s & & & A_0+E_s \\ \mathrm{SCprt} & g_1 & & \mathrm{SCprt} & g_1 & & \mathrm{SCprt} & g_1 & & \mathrm{SCprt} & g_1 \\ & A_0+E_s & & & A_0+E_s & & & A_0+E_s & & & A_0+E_s \end{array}$$

Next comes the level of Globe, where the role of living cells (molecules in the case of a crystal) is played by living organisms. Next comes the level of Universe, where the role of living cells (molecules in the case of a crystal) is played by planets inhabited by living beings. You can try to represent these levels through more complex mathematical models, there are options for going beyond the level of objectivity for objects with energy structures of a sufficiently high level, but this is already material for subsequent publications. Our object world is an interpretation of the manifestation of only one set of subtle energy fibers out of their countless number.

$\overset{C}{\underset{C}{g_2\mathrm{SCprt}}}$ will be called dynamic anti-capacity from oneself$_g$. For example, "white hole" in physics is such simple anti-capacity. The concepts of "white hole" and "black hole" were formulated by the physicists based on the subject of physics –the usual energies level. Mathematics allows you to deeply find and formulate the concept of singular points in the Universe based on the levels of more subtle energies. The experiments of the 2022 Nobel laureates Asle Ahlen, John Clauser, Anton Zeilinger and the experiments in chemistry Nazhipa Valitov correspond to the concept of the Universe as a capacity in itself$_g$ g as the element. They experimented with connections for elements of the microworld, and since here the connections are self$_g$ -connections, then when the object component of self$_g$ -connections is removed, its higher level remains, which was manifested in their experiments. The electron spin belongs to the second level - above the level of objectivity. The energy of self$_g$ -accommodation in itself$_g$ is closed on itself$_g$.

Remark 1.7.1. From the point of view of our theory of dynamic operators and sets, we can interpret the energy effect of a thermonuclear reaction as the result of the "collapse" of two self$_g$ -objects: for example,1) ${}^3_2He$, ${}^3_2He$ and the formation of one self$_g$ -object ${}^4_2He$, 2) ${}^3_2He$, ${}^2_1H$ and the formation of one self$_g$ -object ${}^4_2He$. As a result, the energy of the collapse of the lost part of the self$_g$ is released.

Remark 1.7.2. To gain access to object transformation, just go to the level lS=$\frac{2}{\pi}arctg(1+\mathcal{E})$, $\mathcal{E}$ may be quite small.

Examples of transformation:

1) $SCprt\overset{q}{\underset{q}{g_1}} \to SCprt\ \overset{\overset{q}{SCprt g_1}\ q}{\underset{q\ \underset{q}{SCprt g_1}}{g_1}} \to SCprt\ \overset{\overset{b}{SCprt g_1}\ c}{\underset{b\ \underset{c}{SCprt g_1}}{g_1}}$

2) $SCprt\overset{q}{\underset{q}{g}} \to SC_3f(self_g(q)) \to SCprt\overset{r}{\underset{r}{g}}$

This is a rather conditional interpretation, because in fact, the lS of the "vessel" (energy cocoon) of the object may turn out to be greater than $\frac{2}{\pi}arctg(1)$. This is taken for initiation: we build a theory of this, starting from this stage of interpretation. After experiments, the next stage may begin.

self$_g$ A =$SCprt\overset{A}{\underset{A}{g}}$ can be transformed into any D if $\mu l_g(D)$ = μl_g ($SCprt\overset{A}{\underset{A}{g}}$), μl_g (x) - level measure of self$_g$ for x, in particular, into $SCprt\overset{any\ C}{\underset{A}{g}}$ or $SCprt\overset{A}{\underset{any\ C}{g}}$, and also an object R into any object Q or any energy U. The transformations of this type will be called stransformations. self$_g$ ^{N} A can transform itself$_g$ into any D if N ≥2; to realize this we need an even larger quantity N.

Example of a parallel-serial program statement

$$SCprt\ \underset{g}{\overset{s := SCprt\overset{C}{\underset{\overset{Q}{SCprt\,\underset{A}{g}}}{g}}}{\ \ }}\ \ if\ \{p\}SCprt\ \overset{\overset{g}{A}}{g}\ \ af := SCprt\overset{}{\underset{E}{g}}\ \ for\ w\ SCprt\ \underset{if\ C\ \ SCprt\,\underset{J}{g}}{g}$$

Each self$_g$ -field can automatically rebuild the self$_g$ -program to the desired.

self$_g$ N- OS and is designed for such transformations, and it itself$_g$ can be transformed at N≥1, or it itself$_g$ can be transformed at N ≥2.

Remark 1.7.3. Hypothesis 1.7: equations for real processes in a non-trivial form can be used to fully or partially interpret the self$_g$ -level of the process, replacing the equal signs with identification signs, and solutions to these equations as a manifestation of this level on the level of objectivity and ordinary energies. That is, equations for real processes serve as a definition of the self$_g$-level of the process, the definition of self$_g$ -values (self$_g$ -characteristics) of the process through the identification sign, i.e., they are defined (expressed) through themselves. In particular, forms (1.1) - (1.4) can be used as forms of identification. Each such singularity creates its own field, the process, the object etc. Much more effective than science for working with these singularities will be special Dynamic programming, which we are currently working on to create. Identification at the lower levels of a hierarchical dynamic structure of type (1.7.1) will lead to the upper level. You can also try to use it for full or partial interpretation of the self$_g$ -level of chemical reactions, but here there will be a trivial identification and determination of the self$_g$ -level will be much simpler. For example, a type w ≡ 2w singularity at the top level of the structure of a mathematical simplified model of DNA generates a field for DNA division. A rather complex type of singularity at the upper level of the structure of a simplified mathematical model generates an electromagnetic field through identification in Maxwell's equations.

Remark 1.7.4. Parallel operator $SCprt\overset{symbols}{\underset{places\ for\ symbols}{g}}$ corresponds to theoretical science, parallel operator $SCprt\overset{objects}{\underset{x}{g}}$ corresponds to technology, x – the space "point" (space place).

Remark 1.7.5. Let self$_g$ -energy of A looks like $SCprt\overset{C_A+\Delta C}{\underset{C_A+\Delta C}{g}}$

$$= \mathrm{SCprt}\ g^{C_A}_{C_A} + \mathrm{SCprt}\ g^{\Delta C}_{C_A} + \mathrm{SCprt}\ g^{C_A}_{\Delta C} + \mathrm{SCprt}\ g^{\Delta C}_{\Delta C},\ \mathrm{SCprt}\ g^{C_A}_{C_A}$$

corresponds to objectivity of A,

$$\mathrm{SCprt}\ g^{\Delta C}_{C_A} = E_A\ (1.7.3),$$

E_A - usual energy of A. ΔC determined from (1.7.3) through C_A and then we can determine the complete self$_g$ -energy of A.

Remark 1.7.6. Let us consider an analogue of the Schrödinger equation for networks operating on electromagnetic energy

$$\frac{\partial w}{\partial x} = [w, \mu_g S(H)]$$

w- measure of self$_g$ for networks operating, $\mu_g S(H)$ - measure of self$_g$ for H, H = H($\mu_g S$(p), $\mu_g S$(q),t) - an analogue of the Hamiltonian in the space of actions of artificial neurons in a neural network, q is the operator of an artificial neurons action result, p is the operator of an artificial neurons action impulse.

Remark 1.7.7. The self$_g$ -space of a higher level contains many self$_g$ -energetic fibers, collecting into appropriate sets that can be accessed by the corresponding self$_g$-spaces of lower levels. That's right, for example. This assembly point on the human cocoon can carry out this, in particular, access to our self$_g$-space with objects.

Remark 1.7.8. It is quite possible to try to build up the levels of objects and processes; change something at these levels.

Remark 1.7.9. One can try to conventionally represent the mathematical model (1.7.1) of the atom (molecule) as a hierarchical dynamic operator.

Remark 1.7.10. Here, self$_g$ -action is understood as action on oneself$_g$ (i.e., to the same action), while physicists understand self$_g$ -action, for example, as the absorption of one elementary particle by another of the same type.

Remark 1.7.10.1. Subtle energy can manifest itself$_g$ in the form of: 1) objectivity, 2) ordinary energies, 3) information. Using neural networks of the SmnCSprt-type, it is possible to organize a SC-Internet, where instead of exchanging information, an exchange of subtle energies will take place.

Epigraph

Mathematics is on the border of science (knowledge), so it is she who is able to make major breakthroughs beyond this border.

Competing Interest

There are no competing interests. All sections of the monograph are executed jointly.

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Appendix

If we introduce for the energy of a chemical element the concept $self_g$ -energy (the concept of a chemical element was introduced earlier): SCprt g^{R}_{R}, R=Q+D, Q- internal energy, D is the energy of its interaction with the external environment.

SCprt g^{R}_{R} = SCprt g^{Q+D}_{Q+D} =SCprt g^{Q}_{Q+D} +SCprt g^{D}_{Q+D} =SCprt g^{Q}_{Q} +SCprt g^{Q}_{D} +SCprt g^{D}_{Q} +SCprt g^{D}_{D}, SCprt g^{Q}_{Q} - internal $self_g$ -energy, SCprt g^{D}_{D} -the external $self_g$ -energy, SCprt g^{Q}_{D} - object component of a chemical element, SCprt g^{D}_{Q} - usual energy component of a chemical element. We describe the usual chemical reactions for the SCprt g^{Q}_{D} -component using the SCprt g^{D}_{Q}-component. A $self_g$ -molecule ($self_g$ -atom, $self_g$ -(elementary particle))) as a capacity can have the following types of $self_g$: $self_g$ -set, $self_g$ -structure, $self_g$ -hierarchy or its elements that generates this $self_g$ -molecule ($self_g$ -atom, $self_g$ -(elementary particle))).

$self_g$ -power is force that is applied to $oneself_g$ or its elements that generates this $self_g$ -power.

You can try to consider the equations: SCpr g^{x}_{x} =a, x(a) - ?,

SCpr g^{x}_{b} $= a, x(a,b)$–?,

SCpr g^{q}_{x} =a, x(a, q)- ?.

Supplement for Quantum Mechanics and Classical statistical Mechanics through SCprt-elements:

Hamilton operator $\hat{H} = \hat{H}_0 + \widehat{W}_0$, $\hat{H}_0$ -considered quantum system energy, consisting of two or more parts, without their interaction with each other, $\widehat{W}_0$ is the energy of their interaction, $\hat{\rho}$-statistical operator [20]. $self_g$ -energy SCpr $g^{\hat{H}}_{\hat{H}}$ =

SCpr $g^{\hat{H}_0+\widehat{W}_0}_{\hat{H}_0+\widehat{W}_0}$ = SCpr $g^{\hat{H}_0}_{\hat{H}_0+\widehat{W}_0}$ + SCpr $g^{\widehat{W}_0}_{\hat{H}_0+\widehat{W}_0}$ = SCpr $g^{\hat{H}_0}_{\hat{H}_0}$ + SCpr $g^{\hat{H}_0}_{\widehat{W}_0}$ + SCpr $g^{\widehat{W}_0}_{\hat{H}_0}$ +SCpr $g^{\widehat{W}_0}_{\widehat{W}_0}$, SCpr $g^{\hat{H}_0}_{\hat{H}_0}$ - considered quantum system $self_g$ -energy, SCpr $g^{\widehat{W}_0}_{\widehat{W}_0}$ is $self_g$ -energy of their interaction, SCpr $g^{\hat{H}_0}_{\widehat{W}_0}$ --object manifestation of the energy of the system in an external field., SCpr $g^{\widehat{W}_0}_{\hat{H}_0}$ - the manifestation of the energy of the system in the energy interaction with the external field. Variants of the Schrödinger equation $\frac{\partial\hat{\rho}}{\partial t} + [\hat{W},\hat{\rho}]=0$ of the form SC₂f, SC₃f are possible, using the form (1.1) or form from the forms (1.1.1) – (1.4).

The carrier of the measure of objectivity-mass should be objectivity - elementary particle graviton, look like SCpr $g^{objectivity}_{objectivity}$, therefore it is a $self_g$ -particle and is not an element of the level of objectivity, but is an element of the level $self_g$. Therefore, it cannot be found at our level. In fact, the theory of SCprt-elements helps to form a unified field theory on a qualitative level, because it is not possible to create a quantitative unified field theory. Supplement for string theory: May be to try represent elementary particles in the form of continual $self_g$ -elements of the type CS^{-}_{∞}=sin(-∞)|g --↓ I ↑$^{1}_{-1}$|g, CT^{+}_{∞}=_tg∞|g --↑ I ↓$^{\infty}_{-\infty}$ |g, CT^{-}_{∞}=tg(-∞)|g --↓ I ↑$^{\infty}_{-\infty}$ |g, f↑I↓w|g for any f, w etc.

We consider SCprt-logic: consider the functional fC(Q), which gives a numerical value for the $truth_g$ of the statement

Q from the interval, where 0 corresponds to "no," and one corresponds to the logical value "yes [1]." Then for joint statements A, B: fC(A+B)=fC(A)+fC(B)-fC(A*B)+fSC(D), D- $self_g$ -statement from A*B, fSC(x)- the value of $self_g$ -truth for $self_g$ -statement x; for dependent statements: fC(A*B)=fC(A)*fC(B/A)=fC(B)*fC(A/B), where fC(B/A)-conditional $truth_g$ of the statement B at statement A, fC(A/B)-dependent $truth_g$ of statement A at the statement B. Adding the $truth_g$ values of inconsistent propositions: fC(A+B)=fC(A)+fC(B). The formula of complete $truth_g$: fC(A)=$\sum_{k=1}^{n} fC(B_k) * fC(A/B_k)$, B_1, B_2, .., B_n-full group of hypotheses-statements: $\sum_{k=1}^{n} fC(B_k)$=1("yes").

Remark. A statement can be interpreted as an event, and its truth value as a probability.

SCprt- statement for set of statements A={A_1, A_2, …, A_n}: SCprt $\overset{\{A_1, A_2, \dots, A_n\}}{\underset{x}{g_1}}$, SCprt $\overset{\{f(A_1), f(A_2), \dots, f(A_n)\}}{\underset{x}{g_1}}$, - SCprt- truth for these statements. It is possible to consider the $self_g$ -statement SC_3A with m statements from A, at m<n, which is formed by the form (1.1), that is, only m statements from A are located in the structure SCprt$\overset{A}{\underset{x}{g_1}}$. The same for $self_g$ - truth $SC_3\{ f(A_1), f(A_2), \dots, f(A_n)\}$.

One can introduce the concepts of SCprt-group: SCprt$\overset{A}{\underset{x}{g_1}}$, A is usual group, SCprt$\overset{A}{\underset{B}{g_1}}$, where A, B- usual groups, self-group: SCf_iA, i=1,2,3 , A is usual group.

Definition A. A structure with a second degree of freedom will be called complete, i.e., "capable" of reversing $itself_g$ concerning any of its elements clearly, but not necessarily in known operators; it can form (create) new special operators (in particular, special functions). In particular, CCprt$\overset{A}{\underset{A}{g_1}}$, CCpr$\overset{A}{\underset{A}{g_1}}$ are such structures. Similarly, for working with models, each is structured by its structure; for example, use SCprt-groups, SCprt-rings, SCprt-fields, SCprt-spaces, $self_g$ -groups, $self_g$ -rings, $self_g$ -fields, and $self_g$ -spaces. Like any task, this is also a structure of the appropriate capacity. Since the degree of freedom is double, it is clear that the form of the $self_g$ -equation contains a solution or structures the inversion of the $self_g$ -equation concerning unknowns, i.e., the structure of the $self_g$ -equation is complete. The transition process in the form of $\overset{C}{\underset{D}{g_2}}$SCprt$\overset{A}{\underset{B}{g_1}}$ is included in the transition from one world A (spatial variables, which we will denote by X1, and time variables, by T1) to another world B (spatial variables, which we will denote by X2, and time variables, by T2). It is accompanied by spatial variables in the form (T1, X1), i.e. such a transition process transforms time variables T1 into part of spatial ones, and time variables - T3.

We consider functional g(x): X→g, x∈ X, g—numerical value of functional g(x). It is specific capacity for X. SCprt $\overset{\{g(x)\}}{\underset{\{g(x)\}}{g_1}}$ made from her the $self_g$ -capacity in $itself_g$ as an element $SC_1f\{g(x)\}$, {g(x)}—the set of any functionals for X. In particular, probability p(X) –is such functional, X—an event. Here SCprt $\overset{\{p(x)\}}{\underset{\{p(x)\}}{g_1}}$ is SC_1f p(X), denote it through pSC(X).

Usual event is dynamical capacity.

Definition B. SCprt-probability of events A, B is p(SCprt$\overset{A}{\underset{B}{g_1}}$), denote SCpp$\overset{A}{\underset{B}{g_1}}$. In particular,

SCpp$\overset{A}{\underset{B}{g_1}}$ for joint A, B: SCpp$\overset{A}{\underset{B}{g_1}}$= p(SCprt$\overset{A}{\underset{B}{g_1}}$)=p($\left\{\overset{D}{A \cup B - A \cap B}\right\}$)*$\mu(g_1)$= p(A)+p(B) – p(AB)+pSC(D), D - the $self_g$ -capacity in $itself_g$ as an element from A∩B, pSC(D)—probability $self_g$ of D of next level—$self_g$ level. The probability for stochastic value X is capacity. We represent its distribution in the kind of SCprt-element:

SCpp $\overset{\{(x_1, p_1), (x_2, p_2), \dots, (x_n, p_n)\}}{\underset{x}{g_1}}$ (*)

Here interest represent partial distribution $self_g$ from (*) by form (1.1) or form from the forms (1.1.1) – (1.4) with value $self_g$ of stochastic value X for some subset $\{x_{1_1}, x_{2_1}, \dots, x_{j_1}\} \in \{x_1, x_2, \dots, x_n\}$ with probabilities $self_g$ $\{pCS_1, pCS_2, \dots, pCS_j\}$.

For operator $X_1 \overset{F}{\to} X_2$: $\overset{F}{\to} X_2$ is capacity for X_1. SCprt $\begin{matrix} \overset{F}{\to} X_2 \\ g_1 \\ \overset{F}{\to} X_2 \end{matrix}$ -- $self_g$ - capacity in $itself_g$ as an element for X_1. More complex for implicit operator: $F(X_1, X_2)=0$. Then SCprt $\begin{matrix} F(X1, X2) = 0 \\ g_1 \\ F(X1, X2) = 0 \end{matrix}$ forms $self_g$ -capacity in $itself_g$ as an element for X_1 relatively of X_2 or for X_2 relatively of X_1. x obtains more power of the liberty and in this is direct decision (i. e. $self_g$ -capacity in $itself_g$ as an element for x). $self_g$ -equation for x has its decision for x in direct kind. $self_g$ -task for x has its decision for x in direct kind. $self_g$ -question has its answer for x in direct kind. x acquires more degree of liberty and in this is direct decision. We consider SCprt$\begin{matrix} D \\ g_1 \\ D \end{matrix}$, D-block over execution subject in $S_{mnSCprt}$ for networks. Then we have $self_g$ -capacity in $itself_g$ as an element D, where full realization requires SmnSCprt level of $S_{mnSCprt}$ and may made no visual its. The entire neural network as instantaneous simultaneous RAM in SCprt-elements and $self_g$ - elements.$self_g^{self_g^{\dots self_g}}$, $f_1 \downarrow I \uparrow_{-1}^{1} f_2^{\, f_1 \downarrow I \uparrow_{-1}^{1} f_2^{\dots f_1 \downarrow I \uparrow_{-1}^{1} f_2}}$, $sin\infty|g^{sin\infty|g^{\dots sin\infty|g}}$.When activated in a neural network, the entire neural network becomes a working memory. Use of $self_g$ -energy as activation or from outside. QC_0= $\begin{matrix} \text{SCprt} & \begin{matrix} S_{mnSprt} \\ g_1 \\ activation \end{matrix} \\ \text{SCprt} & g_1 \\ \text{SCprt} & \begin{matrix} S_{mnSprt} \\ g_1 \\ activation \end{matrix} \end{matrix} \to$

$self_g$ -RAM, QC_{00}= $\begin{matrix} \begin{matrix} S_{mnSprt} \\ g_2 \\ activation \end{matrix} & \text{SCprt} \\ g_2 & QC_0 \\ \begin{matrix} S_{mnSprt} \\ g_2 \\ activation \end{matrix} & \text{SCprt} \end{matrix}$, QC_{01}= $\begin{matrix} \text{SCprt} & \begin{matrix} S_{mnSprt} \\ g_1 \\ activation \end{matrix} \\ g_2 & QC_0 \\ \text{SCprt} & \begin{matrix} S_{mnSprt} \\ g_1 \\ activation \end{matrix} \end{matrix}$.

QC_0, QC_{00}, QC_{01}-coding, translation, realization eprograms, QC_0, QC_{00}, QC_{01}-$S_{mnSCprt}$, QC_0,QC_{00},QC_{01}-Assembler.