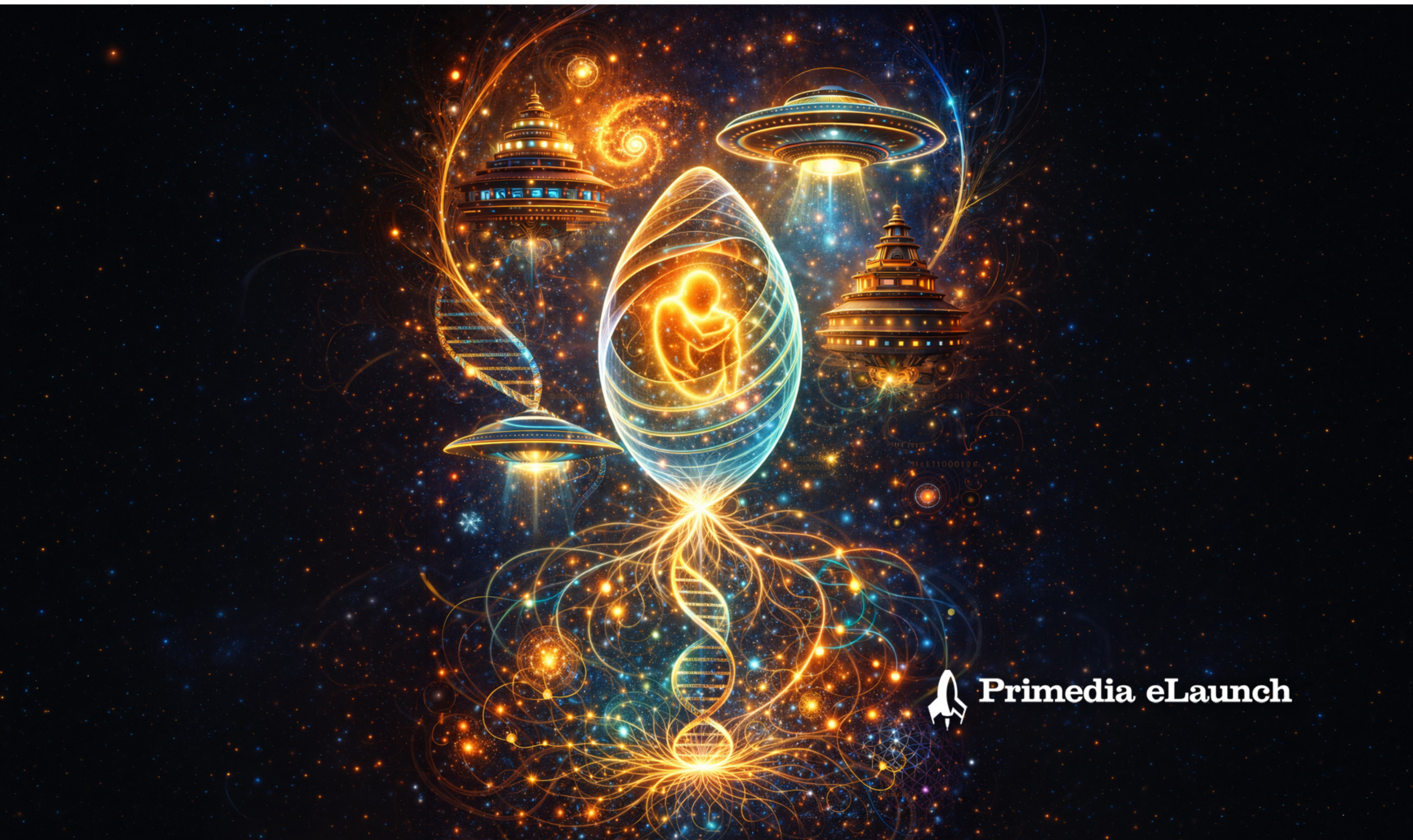
Illia Danilishyn, Oleksandr Danilishyn

GENERALIZATIONS OF SELF-TYPE AND |||-TYPE STRUCTURES, ELEMENTS OF S- MORPHOLOGY AND OTHERS

Monograph



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GENERALIZATIONS OF SELF-TYPE AND |||-TYPE STRUCTURES, ELEMENTS OF S- MORPHOLOGY AND OTHERS

Monograph

Edited by *Volodymyr Pasynkov*

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2026

Epigraph 1:

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

Epigraph 2:

The paradox is the truth

Reviewer: Volodymyr PASYNKOV
PhD of physic-mathematical science, assistant professor of applied mathematics
and calculated techniques department of «National Metallurgical Academy», Ukraine

D 18

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The monograph first task: to understand hierarchy of energies in the Universe and the principles of functioning of living energy (s-morphology) (living organism, in particular, human, subtle energies), and then using these principles to "construct" artificial living energies (let's call them pseudo-living energies). It is possible to significantly expand the horizons of science, in particular physics, by studying the subtle energies in the Universe. On the basis of mathematical uncertainties, new mathematical structures are formed, allowing us to describe processes and objects that are fundamentally not determined by conventional deterministic methods. Here is considered new mathematical uncertainties. Objective uncertainties in any case can mean manifestations of processes and objects that are fundamentally not determined by conventional deterministic methods. Many energies are indeterminate because they are based on uncertainties from the perspective of traditional science—large concentrations of specific energy in a chaotic state. The foundation of dynamic mathematics lies in working with uncertainties, which makes it possible to manipulate these indeterminate energies using direct-accumulative direct-parallel neural networks. The second task of the monograph is to construct a new mathematical apparatus for neural networks of a fundamentally new type: generalization of paradoxical singularities (singularities of disintegration&synthesis), self-type singularities, self-type structures, direct-parallel and direct-accumulative action. We construct models of singularities for singular work with them through neural networks - analogues of the human CNS. Ordinary regular work with them in ordinary science is fundamentally unable to realize their capabilities. Therefore, singular science realized on a neural network - an analogue of the human CNS - will be much more natural. Unfortunately, we do not have funding to perform the necessary experiments and the practical creation of a technical model of such a neural network. There is a need to develop an instrumental mathematical base for new technologies. The task of the work is to create new approaches for this by introducing new concepts and methods. Our mathematics is unusual for a mathematician, because here the fulcrum is the action, and not the result of the action as in classical mathematics. Therefore, our mathematics is adapted not only to obtain results, but also to directly control actions, which will certainly show its benefits on a fundamentally new type of neural networks with directly parallel calculations, for which it was created. Any action has much greater potential than its result. It is time for physicists to begin studying not only the manifestations of living energies, but also the living energies themselves, which are by no means expressed through objectivity and ordinary energies, although they are capable of manifesting themselves through a lower level - objectivity and ordinary energies. We, as mathematicians, offer a new corresponding apparatus for understanding nature and studying living energies. Significance of the article: in a new qualitatively different approach to the study of complex processes through new mathematical, hierarchical, dynamic structures, in particular those processes that are dealt with by Synergetics. The significance of our article is in the formation of the presumptive mathematical structure of subtle energies, this is being done for the first time in science, and the presumptive classification of the mathematical structures of subtle energies for the first time. The experiments of the 2022 Nobel laureates Asle Ahlen, John Clauser, Anton Zeilinger and the experiments in chemistry Nazhipa Valitov, experiments of prof. Be that as it may, we created classes of new mathematical structures, new mathematical singularities, i.e., made a contribution to the development of mathematics.

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Foreword:

In this book, the authors develop the themes of the books [1-6] in more interesting dynamic structures. Here is considered elements of self-type and |||-type actions and others, new paradoxical singularities (singularities of disintegration&synthesis), self-type singularities, analogues of equations for singularities, new approachis to elementary particles and physics, biology, Dynamic programming, which works through levels hierarchy in the space of energies with pseudo-living energies. Significance of the monograph: 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. Authors' approachis 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. They are just starting from the assumed structure of self-organization, since they 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 they 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 their Theory of singularities of the type synthesizing, its action corresponds to singularity ↑ I ↓ q h , which allows one to reach the upper level of subtle energies to manipulate lower levels. In April 2023 [37], the authors proposed using a short-pulse laser to achieve the desired goals by a directly parallel neural network. They then proposed the fundamental development of this directly parallel neural network. There is a long overdue need for the use of singular hierarchical structures, in particular self-sets, to describe complex processes, in particular to describe unusual states of consciousness and pathological conditions in medicine. The experiments of Nobel laureates in 2022-year Asle Ahlen, Clauser John, Zeilinger Anton correspond to the concept of the Universe as its self-containment in itself. The monograph aims to create new constructive hierarchical mathematical objects for new technologies, particularly for a fundamentally new type of neural network with parallel computing and not the usual parallel computing through sequential computing. Based on fundamentally new type of neural network with parallel computing, it is possible to create a propeller-less helicopter, a space shuttle, medical equipment and various other effective and unusual equipment, in particular, household equipment.

Ukraine, March 2026
Volodymyr Pasynkov

Part I. Generalizations of self-type and |||-type structures

Part III. GrSprt – elements and Their Applications

Introduction

Conventional science approaches things through matter, meaning that everything, including energy (which must be interpreted through material carriers—particles), is interpreted through matter. In dynamic science, which we propose as an alternative, everything, including matter, is interpreted through energy. Matter is interpreted as energy closed in on itself (energy within itself). If this were not the case, energy would dissipate over time and matter would not exist.

The true bearers of this approach are true sorcerers, but they reject classifications. We use them, but only through one position of the assemblage point on people's cocoons, corresponding to the perception of our world. This is significantly less than the perception of true sorcerers, who can utilize a significantly larger number of assemblage point positions. Our world is an interpretation of the intersection of two great bands of emanations: the band of organic beings and the band of inanimate material objects, which is what prompts conventional science's approach through matter. Dynamic science takes an approach through energy, starting from this same intersection, removing the axiom of regularity from the foundation of conventional science—set theory—just as Lobachevsky, by removing the axiom of parallelism from Euclidean geometry, led to the creation of Einstein's general theory of relativity. By removing the axiom of regularity, we gain access to unlimited possibilities for interpreting energy. Dynamic science emphasizes the uniqueness of the object. Exit into upper level by SmnScprt [2 -6] through ||| with target weights tw, back through $|||^{-1}$ with the result of tw. Perception of human A for object B: by A|||B, the next (A|||B) |||C = (A|||C) |||B then $|||^{-1}$(A||| C) |||B and receiving A|||C. We are not claiming a new use, we are claiming a new interpretation. First attention leads to usual science, symbiosis of it with interpretations of second attention leads to dynamic science. In the first attention, a person's spacesuit in this world is perceived as their physical body; in the second attention, a person's spacesuit in the energy space is perceived as their energy body—a cocoon of emanations; and finally, in the third attention, a person has developed to such a degree that they no longer need a spacesuit. The physical bodies of objects are only interpretations of their self-nature. In conventional science, their characteristics are manipulated, which also belong to the mental self-nature of the people manipulating them. We must preserve these "spacesuits" of ours for the development and preservation of our consciousness. By changing spaces, places within spaces, objects, actions, etc., through ||| [1 -6], $|||^{-1}$ anything is possible. May consider interpretations theory by geometry, algebra- topology etc. Any mathematical apparatus can be applied to interpretations as an element, as well as to any digitized objects, actions, and processes. Let's contrast AI with artificial consciousness (designation AC) by pa|||, which can allows not only to perform any replacement of an object, process, or action, or ||| with $|||^{-1}$and on the contrary or to obtain any object, process, or action from nowhere, but also to create any living, pseudo-living energy. Conditional activation of object A (replacing A with B): ($|||_A$ to) B or $|||^r_A$ B or A\B are designations. If it is carried out through the nagual, then the connection A|||B is established, and if it is carried out through the tonal, then the connection A|||B is found. Scanning A_B by SmnSprt in the ||| mode automatically leads to A|||B and then to B. SmnSprt$|||^r_A$ B, here all neurons activates by this target weight, but the vision of the process itself will be unavailable to us since it is through the upper level; we will only receive the result. By upper level may be created objects, actions, processes etc.

Einstein wanted to create a unified geometric theory of energy fields, now we are introducing a mathematical theory of everything. Einstein wanted to create a unified geometric theory of energy fields; now we are introducing a mathematical theory of everything. The essence of our Dynamic Mathematics is that it operates with objects, actions, processes, and so on, but according to mathematical laws in a holistic approach. Programmers introduced object-oriented programming; now we are introducing object-oriented mathematics (Dynamic Mathematics). This is the **Manifesto** of Dynamic Mathematics.

Part I. Generalizations of self-type and |||-type structures

1.1 Elements of self-type and |||-type actions

1.1.1 Designations and definitions

Designations:

$$Q = \underset{a}{\overset{a}{g}}\mathrm{SCprt}\underset{a}{\overset{a}{g}},\ r = \underset{b}{\overset{b}{v}}\mathrm{SCprt},\ d = \mathrm{SCprt}\underset{c}{\overset{c}{g}}.$$

Definitions:

$$a = \mathrm{Unl}(Q),\ b = \mathrm{ounl}(\underset{b}{\overset{b}{g}}\mathrm{SCprt}),\ c = \mathrm{unl}(\mathrm{SCprt}\underset{c}{\overset{c}{g}})$$

$$\mathrm{m}(\underset{a}{\overset{a}{g}}\mathrm{SCprt}\underset{a}{\overset{a}{g}}) = ||a||_0$$

$$\mathrm{m}(\mathrm{ounl}(\underset{b}{\overset{b}{v}}\mathrm{SCprt})) = ||b||_2$$

$$\mathrm{m}(\mathrm{unl}(\mathrm{SCprt}\underset{c}{\overset{c}{g}})) = ||c||_1$$

The degrees of freedom:

We will be count the degree of freedom of A: $\mu_{\mathbf{f}}(A)$ for usual level

$\mu_{\mathbf{f}}(A) = -1$

$\mu_{\mathbf{f}}(\mathrm{paself}(A)) = 1,\ \forall A,\ \mathrm{paself}(A) = A|||(-A),$

$\mu_{\mathbf{f}}(A|||B) = 1,\ \forall A, B$ if usual measure $\mu(A \cap B) = 0,$

$\mu_{\mathbf{f}}(\mathrm{self}(A)) = 0,\ \forall A,\ \mathrm{self}(A) = A|||A$

$\mu_{\mathbf{f}}(A|||B) = ½ - \frac{(\mu(A\cap B) - \mu((-A)\cap B)}{2(\mu(A\cap B) + \mu((-A)\cap B)}$, ∀A, B,

May consider

$$\mu\left(\begin{array}{ccc} |||^{-1} & - & ||| \\ | & - & | \\ \mathrm{os}elf & - & \mathrm{s}elf \end{array}\right).$$

Oself is an from-element.

$${}^{g}\mathrm{pself}(a) = {}^{g}\mathrm{paself}(\mathrm{SCprt}\underset{a}{\overset{a}{g}}) = \underset{a}{\overset{a}{g}}\mathrm{SCprt}\underset{a}{\overset{a}{g}} = \underset{a}{\overset{a}{g}}\mathrm{SCprt}|||\mathrm{SCprt}\underset{a}{\overset{a}{g}}.$$

pa||| = paself(|||).

May consider new types of dynamic operators:

for example, by 4-connection

$$\begin{array}{ccc} A & - & ||| \\ | & - & | \\ \mathrm{os}elf(B) & - & \mathrm{p}aself(A||\mathrm{su}|\mathrm{B}) \end{array}, \quad \begin{array}{ccc} {}^{su}\mathrm{p}aself(A||\mathrm{su}|\mathrm{B}) & - & ||\mathrm{su}| \\ {}^{su}self(A||\mathrm{su}|\mathrm{B}) & - & ||\mathrm{d}| \\ \backslash \quad / & & \\ \mathrm{s}elf(B) & & \end{array} \quad \text{etc.}$$

1.1.2 Simplest equations

I variant

Equation for a, b

$$\mathrm{p}_2\mathrm{self}(a, b) = \underset{a}{\overset{b}{g}}\mathrm{SCprt}\underset{b}{\overset{a}{g}} = \mathrm{e}|||(\mathrm{p}, \mathrm{n})$$

II variant

Equation for c

$$\mathrm{e}|||(\mathrm{p}, \mathrm{n}) = \underset{\{\,\}}{\overset{\{\,\}}{g}}\ \mathrm{SCprt}\underset{c}{\overset{c}{g}} = \mathrm{oself}(\{\,\})|||(\mathrm{c}|||\mathrm{c})$$

As a measure of weight, volume and any other characteristics

Equation

$$\mathrm{SCprt}\overset{x}{\underset{x}{g}} = b,\ x - ?$$

Definition. A circular set is a set that closes in on itself, i.e., its last element is its first element.

For example, a circle is circular set, Möbius strip.

Definition. 8-set is a set, which consists of two circular sets connected by one of its subset.

Also, may consider any other types of circular set etc, that closes in on itself, i.e., its last element is its first element and has subset.

1.1.3 Syntax of |||-like actions

$$\overset{x}{\underset{(A,B)}{g}}\ \mathrm{SCprt}\ \overset{(A,B)}{\underset{x}{g}}\quad (*)$$

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

(*) gives example of pseudo-living energy.

Replacement A with B

$$\overset{x}{\underset{B}{g}}\mathrm{SCprt}\overset{A}{\underset{x}{g}}$$

$$\mathrm{SCprt}\overset{A}{\underset{B}{g}} = A^{g}|||B,$$

$$\overset{A}{\underset{B}{g}}\mathrm{Sprt} = A^{g}|||^{-1}B,$$

A pa|||B – this is by third attention without physical.

$|||(a, b) = a|||b$,

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

$\overset{\{\,\}}{\underset{|||^{tw}}{g}}$ Sprt is calling intention to tw by g.

Paradox A|||paradox B

Oself-type $(|||^{-1})$

Theorem.

Equation self(x) = b has a solution x = oself(b).

Proof. self(x) = (1, (2, 1))(x)

$$x = \frac{(1, (1, 1))}{(1, (2, 1))}(b) = (1, (1/2, 1))(b) = \text{oself}(b)$$

or

$$x = \frac{(1, 1)}{(1, (2, 1))}(b) = (1, \frac{1}{(2, 1)})(b) = \text{oself}(b)$$

Equation $\frac{d\,\text{self}(x)}{dx} = b$ has a solution $x = \text{oself}(\int b\,dx)$

Definition. $A|||_B D = \text{SCprt}\ \overset{A,D}{\underset{B}{g}}$. Here B is capacity for *A,D* at any B by containment type g.

More correctly: $A_A|||_B D_D$, A_A and D_D correspond to A and D of usual level.

An usual level is by containment, other levels are by other actions. Potentially, the same objects can also exist at the intersection of other energy fibers.

self(a) is containment itself as element, in particular, in the kind of all automorphisms of a.

$$\underset{C}{\overset{Q}{A}}|||_B D = \mathrm{SCprt}\underset{B}{\overset{\{A,D,C,Q\}}{g}} = A|||_B D|||_B C|||_B Q,$$

$$(A|||_B D)|||_B C = \mathrm{SCprt}\underset{B}{\overset{\{\mathrm{SCprt}\underset{B}{\overset{\{A,D\}}{g}}\quad C\}}{g}},$$

$$A|||_B (D)|||_B C) = \mathrm{SCprt}\underset{B}{\overset{\{A,\ \mathrm{SCprt}\underset{B}{\overset{\{D,C\}}{g}}\ \}}{g}}.$$

Definition. $A^Q|||_B D = \mathrm{Dprt}\underset{B}{\overset{A,D}{Q}}$. Here B is capacity for A,D at any B by action Q.

Definition. ${}^{Q}|||^{-1}_{A,D}D = \underset{A,D}{\overset{B}{Q^{-1}}}\mathrm{Dprt}$ is expelling A,D from any B by action Q^{-1}.

Definition. $A|||_{\underset{B}{C}}D = \mathrm{SIIprt}\underset{B}{\overset{A,D}{C}}$. Here C is capacity for A,D at any B, that is capacity for C by containment.

Definition. $A^Q|||_B D = \mathrm{SAprt}\underset{B}{\overset{A}{Q}}$. Here B is capacity for A,D at any B by Q= $(Q_{11}, Q_{12}, \ldots, Q_{1n})$.

$$\underset{D}{\overset{C}{Q_2}}\mathrm{SAprt}\underset{B}{\overset{A}{Q_1}} \qquad (*_{4.1})$$

where A = ($a_1, a_2, \ldots, a_n$) appear into B with actions Q_1= ($Q_{11}, Q_{12}, \ldots, Q_{1n}$), including virtual actions, D = ($d_1, d_2, \ldots, d_n$) are forced out of C with actions Q_2 = ($Q_{21}, Q_{22}, \ldots, Q_{2n}$), including virtual actions [4].

Definition. $\{\lambda\}\mathrm{Uprt}\{\xi\} = \{\lambda\}^{\mathrm{U}}|||\{\xi\}$, $\{\lambda\} = \begin{matrix} \cdots \\ C \\ \uparrow \\ \bar{P} \\ \uparrow \\ \bar{\bar{S}} \\ \uparrow \\ \overline{\overline{\overline{K}}} \\ \uparrow \\ \overbrace{R} \\ \uparrow \\ \overline{\overline{\overline{\overline{G}}}} \\ \uparrow \\ \overbrace{\overbrace{O}} \\ \uparrow \\ \overline{\overbrace{\overbrace{U}}} \\ \uparrow \\ \overline{\overline{\overbrace{\overbrace{V}}}} \\ \cdots \end{matrix}$, $\{\xi\} = \begin{matrix} \cdots \\ \overline{\overline{\overbrace{\overbrace{W}}}} \\ \uparrow \\ \overline{\overbrace{\overbrace{J}}} \\ \uparrow \\ \overbrace{\overbrace{H}} \\ \uparrow \\ \overline{\overline{\overline{\overline{F}}}} \\ \uparrow \\ \overbrace{A} \\ \uparrow \\ \overline{\overline{\overline{L}}} \\ \uparrow \\ \overline{\overline{D}} \\ \uparrow \\ \bar{Q} \\ \uparrow \\ B \\ \cdots \end{matrix}$.

$$\text{Definition. }\{\lambda\}\mathrm{Zprt}\{\xi\} = \{\lambda\}^{Z}|||\{\xi\},\ \{\lambda\} = \begin{array}{c} C \\ \uparrow \\ \overline{P} \\ \uparrow \\ \overline{\overline{S}} \\ \uparrow \\ \overbrace{\;R\;} \\ \uparrow \\ \overline{\overline{\overline{G}}} \\ \uparrow \\ \overbrace{\overbrace{O}} \\ \uparrow \\ \overline{\overbrace{\overbrace{U}}} \\ \uparrow \\ \overline{\overline{\overbrace{\overbrace{V}}}} \\ \ldots \end{array},\ \{\xi\} = \begin{array}{c} \ldots \\ \overline{\overline{\overbrace{\overbrace{W}}}} \\ \uparrow \\ \overline{\overbrace{\overbrace{J}}} \\ \uparrow \\ \overbrace{\overbrace{H}} \\ \uparrow \\ \overline{\overline{\overline{F}}} \\ \uparrow \\ \overbrace{A} \\ \uparrow \\ \overline{\overline{D}} \\ \uparrow \\ \overline{Q} \\ \uparrow \\ B \end{array}\ [4],$$

$$^{Z}\mathrm{self}(A) = \begin{array}{c} A \\ \uparrow \\ \overline{A} \\ \uparrow \\ \overline{\overline{A}} \\ \uparrow \\ \overbrace{\;A\;} \\ \uparrow \\ \overline{\overline{\overline{A}}} \\ \uparrow \\ \overbrace{\overbrace{A}} \\ \uparrow \\ \overline{\overbrace{\overbrace{A}}} \\ \uparrow \\ \overline{\overline{\overbrace{\overbrace{A}}}} \\ \ldots \end{array}\ \mathrm{Zprt}\ \begin{array}{c} \ldots \\ \overline{\overline{\overbrace{\overbrace{A}}}} \\ \uparrow \\ \overline{\overbrace{\overbrace{A}}} \\ \uparrow \\ \overbrace{\overbrace{A}} \\ \uparrow \\ \overline{\overline{\overline{A}}} \\ \uparrow \\ \overbrace{A} \\ \uparrow \\ \overline{\overline{A}} \\ \uparrow \\ \overline{A} \\ \uparrow \\ A \end{array}$$

Definition. Vprt({ψ}, {η}) = $^{V}|||(\{A\})$ =

$$\dots$$

$$parelf A_{12}\left(decignation - \overline{\overline{\overbrace{\overbrace{\overline{A_{12}}}}}}\right)$$

$$singelf A_{11}\left(decignation - \overline{\overbrace{\overbrace{\overline{A_{11}}}}}\right)$$

$$subtle\ energy\ of\ object\ \ A_{10}\ \text{paradoxical}\ upper\ level\ (\,pa|||)\left(decignation - \overbrace{\overbrace{\overline{A_{10}}}}\right)$$

$$subtle\ energy\ of\ object\ \ A_9\ \text{paradoxical}\ mid-level(paself(A_9))\left(decignation - \overbrace{\overline{\overline{\overline{\overline{A_9}}}}}\right)$$

$$subtle\ energy\ of\ object\ \ A_8\ \text{paradoxical}\ down-level(pself(A_8))\left(decignation - \overline{\overline{\overline{\overline{A_8}}}}\right)$$

$$\begin{array}{cc} / & \backslash \\ subtle\ energy\ of\ |||^{-1} & subtle\ energy\ of\ ||| \\ \underline{\underline{\underline{A_7}}} & \overline{\overline{\overline{A_4}}} \\ \left(\underline{\underline{A_6}}\right) & \overline{\overline{A_3}} \\ & (\overline{A_2}) \\ ordinary\ energy\ exhibited\ by\ an\ \ object\ \ A\left(decignation - \underline{A_5}\right) \ \leftarrow & the\ raw\ energy\ of\ an\ object\ \ A_1\left(decignation - A_1\right) \end{array}$$

, { A } = (A_1, ..., A_{12}).

$$\dots$$

$$parelf A\left(decignation - \overline{\overline{\overbrace{\overbrace{A}}}}\right)$$

$$singelf A\left(decignation - \overline{\overbrace{\overbrace{A}}}\right)$$

$$subtle\ energy\ of\ object\ \ A\ \text{paradoxical}\ upper\ level\ (\,pa|||)\left(decignation - \overbrace{\overbrace{A}}\right)$$

^{V}self(A) =

$$subtle\ energy\ of\ object\ \ A\ \text{paradoxical}\ mid-level(paself(A))\left(decignation - \overbrace{\overline{\overline{\overline{\overline{A}}}}}\right)$$

$$subtle\ energy\ of\ object\ \ A\ \text{paradoxical}\ down-level(pself(A))\left(decignation - \overline{\overline{\overline{\overline{A}}}}\right)$$

$$\begin{array}{cc} / & \backslash \\ subtle\ energy\ of\ |||^{-1} & subtle\ energy\ of\ ||| \\ \underline{\underline{\underline{A}}} & \overline{\overline{\overline{A}}} \\ \left(\underline{\underline{A}}\right) & \overline{\overline{A}} \\ & (\overline{A}) \\ ordinary\ energy\ exhibited\ by\ an\ \ object\ \ A\left(decignation - \underline{A}\right) \ \leftarrow & the\ raw\ energy\ of\ an\ object\ \ A\left(decignation - A\right) \end{array}$$

$$\text{Definition. } \{\lambda\}\mathrm{Uprt}\{\xi\} = \{\lambda\}^{\mathrm{U}}|||\{\xi\},\ \{\lambda\} = \begin{array}{c} \cdots \\ C \\ \uparrow \\ \overline{P} \\ \uparrow \\ \overline{\overline{S}} \\ \uparrow \\ \overline{\overline{\overline{K}}} \\ \uparrow \\ \overbrace{R} \\ \uparrow \\ \overline{\overline{\overline{\overline{G}}}} \\ \uparrow \\ \overbrace{\overbrace{O}} \\ \uparrow \\ \overline{\overbrace{\overbrace{U}}} \\ \uparrow \\ \overline{\overline{\overbrace{\overbrace{V}}}} \\ \cdots \end{array},\ \{\xi\} = \begin{array}{c} \cdots \\ \overline{\overline{\overbrace{\overbrace{W}}}} \\ \uparrow \\ \overline{\overbrace{\overbrace{J}}} \\ \uparrow \\ \overbrace{\overbrace{H}} \\ \uparrow \\ \overline{\overline{\overline{\overline{F}}}} \\ \uparrow \\ \overbrace{A} \\ \uparrow \\ \overline{\overline{\overline{L}}} \\ \uparrow \\ \overline{\overline{D}} \\ \uparrow \\ \overline{Q} \\ \uparrow \\ B \\ \cdots \end{array},\quad [4]$$

$$
{}^{U}\mathrm{self}(Q) = \begin{array}{c}
\vdots \\
Q \\
\uparrow \\
\bar{Q} \\
\uparrow \\
\bar{\bar{Q}} \\
\uparrow \\
\bar{\bar{\bar{Q}}} \\
\uparrow \\
\overbrace{Q} \\
\uparrow \\
\bar{\bar{\bar{\bar{Q}}}} \\
\uparrow \\
\overbrace{\overbrace{Q}} \\
\uparrow \\
\bar{\overbrace{\overbrace{Q}}} \\
\uparrow \\
\bar{\bar{\overbrace{\overbrace{Q}}}} \\
\vdots
\end{array}
\quad \text{Uprt} \quad
\begin{array}{c}
\vdots \\
\bar{\bar{\overbrace{\overbrace{Q}}}} \\
\uparrow \\
\bar{\overbrace{\overbrace{Q}}} \\
\uparrow \\
\overbrace{\overbrace{Q}} \\
\uparrow \\
\bar{\bar{\bar{\bar{Q}}}} \\
\uparrow \\
\overbrace{Q} \\
\uparrow \\
\bar{\bar{\bar{Q}}} \\
\uparrow \\
\bar{\bar{Q}} \\
\uparrow \\
\bar{Q} \\
\uparrow \\
Q \\
\vdots
\end{array}
$$

Definition. {λ}Vprt{ξ} = {λ}^{V}|||{ξ}, {λ} = $\begin{array}{ccc} & \cdots & \\ & C & \\ & \uparrow & \\ & \bar{P} & \\ & \uparrow & \\ & \bar{\bar{S}} & \\ & \uparrow & \\ & \overline{\overline{\overline{K}}} & \\ & \uparrow & \\ \multicolumn{3}{c}{\overbrace{\underline{D}\qquad\leftarrow\qquad C}} \\ \uparrow & & \uparrow \\ \underline{\underline{Q}} & & \overline{R} \\ \uparrow & & \uparrow \\ & & \overline{\overline{P}} \\ \underline{\underline{\underline{M}}} & & \uparrow \\ \uparrow & & \overline{\overline{\overline{L}}} \\ |||^{-1} & & \uparrow \\ \backslash & & ||| \\ & & / \\ & \overline{\overline{\overline{\overline{B}}}} & \\ & \uparrow & \\ & \overbrace{\overbrace{W}} & \\ & \uparrow & \\ & \overline{\overbrace{\overbrace{J}}} & \\ & \uparrow & \\ & \overline{\overline{\overbrace{\overbrace{O}}}} & \\ & \cdots & \end{array}$, {ξ} = $\begin{array}{ccc} & \cdots & \\ & \overline{\overline{\overbrace{\overbrace{Z}}}} & \\ & \uparrow & \\ & \overline{\overbrace{\overbrace{K}}} & \\ & \uparrow & \\ & \overbrace{\overbrace{G}} & \\ & \uparrow & \\ & \overline{\overline{\overline{\overline{F}}}} & \\ & & \backslash \\ / & & ||| \\ |||^{-1} & & \uparrow \\ \uparrow & & \overline{\overline{\overline{T}}} \\ \underline{\underline{\underline{A}}} & & \uparrow \\ \uparrow & & \overline{\overline{Y}} \\ \underline{\underline{S}} & & \uparrow \\ \uparrow & & \overline{U} \\ \underline{E} & & \uparrow \\ & \leftarrow & H \end{array}$ (A.1.1), [5]

where $\overline{\overline{\overbrace{\overbrace{Z}}}}$, $\overline{\overline{\overbrace{\overbrace{O}}}}$ - *parelf* levels of Z and O respectively, $\overline{\overbrace{\overbrace{J}}}$, $\overline{\overbrace{\overbrace{K}}}$ – singelf levels of J and K respectively, $\overbrace{\overbrace{G}}$, $\overbrace{\overbrace{W}}$ - paradoxical upper levels of G and W respectively, $\overline{\overline{\overline{\overline{F}}}}$, $\overline{\overline{\overline{\overline{B}}}}$ - paradoxical average levels of F and B respectively, $\overline{U}$, $\overline{R}$ - middle$_1$ levels of U and R respectively, $\underline{E}$, $\underline{D}$ - *ordinary energies exhibited* by E, D respectively, $\underline{\underline{Q}}$, $\underline{\underline{S}}$ - first sublevel of Q and S respectively, $\underline{\underline{\underline{A}}}$, $\underline{\underline{\underline{M}}}$ - second sublevel of A and M respectively.

Definition. $\{\lambda\}\mathrm{Lprt}\{\xi\} = \{\lambda\}^{L}|||\{\xi\},\ \{\lambda\} = \begin{array}{c} C \\ \uparrow \\ \overline{P} \\ \uparrow \\ \overbrace{R} \end{array},\ \{\xi\} = \begin{array}{c} \overbrace{A} \\ \uparrow \\ \overline{Q} \\ \uparrow \\ B \end{array},$

$$^{L}\mathrm{self}(A) = \begin{array}{c} A \\ \uparrow \\ \overline{A} \\ \uparrow \\ \overbrace{A} \end{array} \mathrm{Lprt} \begin{array}{c} \overbrace{A} \\ \uparrow \\ \overline{A} \\ \uparrow \\ A \end{array}$$

Definition. $\{\lambda\}\mathrm{Wprt}\{\xi\} = \{\lambda\}^{W}|||\{\xi\},\ \{\lambda\} = \begin{array}{c} C \\ \uparrow \\ \overline{P} \\ \uparrow \\ \overbrace{R} \\ \uparrow \\ \overline{\overline{G}} \\ \uparrow \\ \overbrace{\overbrace{O}} \\ \ldots \end{array},\ \{\xi\} = \begin{array}{c} \ldots \\ \overbrace{\overbrace{H}} \\ \uparrow \\ \overline{\overline{F}} \\ \uparrow \\ \overbrace{A} \\ \uparrow \\ \overline{Q} \\ \uparrow \\ B \end{array}$ [3],

$$^{W}\mathrm{self}(A) = \begin{array}{c} A \\ \uparrow \\ \overline{A} \\ \uparrow \\ \overbrace{A} \\ \uparrow \\ \overline{\overline{A}} \\ \uparrow \\ \overbrace{\overbrace{A}} \\ \ldots \end{array} \mathrm{Wprt} \begin{array}{c} \ldots \\ \overbrace{\overbrace{A}} \\ \uparrow \\ \overline{\overline{A}} \\ \uparrow \\ \overbrace{A} \\ \uparrow \\ \overline{A} \\ \uparrow \\ A \end{array}$$

Some interpretations:

$(2, 1)_f = |||_f$,

$(1, (2, 1)_f)_g = \mathrm{self}_g(|||_f)$,

Interpretation-(d-compression).

$(2, 1)_{(2, 1)} = |||_{|||}$.

Interpretation Change Operator: MJ^{l}_{s}. Example: $\mathsf{MJ}^{(2, 1)}_{(1, 1)}$ is change of (2, 1)-interpretation with (1, 1)- interpretation, $\mathsf{MJ}^{l}_{s}(A, B)$ is change of $A_{(2, 1)}$-interpretation with $B_{(1, 1)}$- interpretation, $A_{(2, 1)} \neq \mathrm{self}(B_{(1, 1)})$.

There are no real hierarchies. There are simply different interpretations.

Definition. $\frac{d\mathrm{self}(a(x))}{dx} = \frac{d\mathrm{self}(a(x))}{da(x)} \frac{da(x)}{dx}$

$$\text{Operator SCprt}\overset{\frac{d}{dx}}{\underset{\frac{d}{dx}}{g}}\, a(x) \neq \text{SCprt}\ \overset{\frac{da(x)}{dx}}{\underset{\frac{da(x)}{dx}}{g}}$$

$$\text{Operator SCprt}\overset{Q}{\underset{Q}{g}}\, a(x) \neq \text{SCprt}\ \overset{Qa(x)}{\underset{Qa(x)}{g}}$$

Inaction corresponds to inself$^{3/2}$. May consider nobody's inaction.

Some dynamic operators:

$$\text{SCprt}\overset{Q}{\underset{Q}{g}},$$

$$\overset{\{\,\}}{\underset{\{\,\}}{g}}\,\text{SCprt}\overset{Q}{\underset{Q}{g}},$$

$$\overset{Q}{\underset{Q}{g}}\,\text{SCprt}\overset{Q}{\underset{Q}{g}},$$

$$\overset{Q}{\underset{Q}{g}}\,\text{SCprt},$$

$\mathrm{SCprt}\,\overset{\{\}}{\underset{Q}{g}},$

$\mathrm{SCprt}\,\overset{Q}{\underset{\{\}}{g}},$

$\mathrm{SCprt}\,\overset{Q}{\underset{|||}{g}},$

$\mathrm{SCprt}\,\overset{A,\,B}{\underset{|||}{g}}$, *A*, *B* contain into action and become actions itself.

A|||B is capacity for A and B in higher level or A and B are manifestations of higher level. self(B) is capacity for B in higher level.

1.1.4 Generalizations of |||-like actions

||| corresponds to containment action. Generalizations of ||| to any other actions are possible.

$|A|B| = A|||_{|||}B = |||_{|||}(A, B)$ etc.

Definition. A| |*ch*|B is chcapacity: A changes B and B changes A simultaneously.

Definition. A| |*d*|B is dcapacity: A is valid by d to B and B is valid by d to A simultaneously, d is any (action or object or process or connection etc) (designation d-compression).

Remark. Compression is a type of connection.

Definition. A| || |*d*||B is ddcapacity: A is valid by | |*d*| to B and B is valid by | |*d*| to A simultaneously ().

Definition. A| ||||B is |||capacity: A is valid by | ||||to B and B is valid by | ||||to A simultaneously.

Any structure by $|\,|d|$, in particular,

$$Q = A|\,||\,||\,|d_1|\,||\,|\,|d_2||\ldots|\,||\,|d_n||\,||B,$$

$$A|\,||\,||\,|d_1|\,||\,|\,|d_2||\ldots|\,||\,|d_\psi||\,||B,$$

$$A|\,||\,||\,|d_1|\,||\,|\,|d_2||\ldots|\,||\,|d_\infty||\,||B,$$

$$\begin{array}{l} A \quad B \\ |\,||\,|d||, \\ \quad C \end{array}$$

$$\begin{array}{l} A \quad B \\ \quad \mathrm{Q} \quad , \\ \quad C \end{array}$$

$$\begin{array}{lcl} R & - & D \\ | & G-\text{compression} & |, \\ C & - & V \end{array}$$

G-(self- compression),

G-(pself- compression),

G-($|||$- compression),

G-(pa$|||$- compression),

$$\begin{array}{ccc} |\,||\,|G_1|| & & |\,||\,|G_2|| \\ & \mathrm{Q} & \quad , \\ & |\,||\,|G_3|| & \end{array}$$

$$\begin{array}{ccc} |\,||\,|d|| & & |\,||\,|d|| \\ & \mathrm{Q} & \quad , \\ & |\,||\,|d|| & \end{array}$$

Definition. $A|\,|d|_Q B$ is dcapacity: A is valid by d to B relatively of Q (for example, relative to space or time or any) and B is valid by d to A relatively of Q simultaneously, d is any (action or object or process etc).

Definition. $A|\Big|\,|\,|d|_Q\Big|_R B$ is ddcapacity: A is valid by $|\,|d|_Q$ to B relatively of R (for example, relative to space or time or any) and B is valid by $|\,|d|_Q$ to relatively of Q (for example, relative to space or time or any) A simultaneously.

May consider F($^{\mathrm{IIdI}}\mathrm{self}_R$(B), A), F($^{\mathrm{IIdI}}\mathrm{self}_R$($|\,|d|_Q$), A), F($^{\mathrm{IIdI}}\mathrm{self}_Q$(B), A), F($^{\mathrm{di}}\mathrm{self}_Q$($|\,|d|_Q$), A) etc.

Definition. $\{\lambda\}\mathrm{Vddprt}\{\xi\} = \{\lambda\}^{\mathrm{Vdd}}|\,||\,|d||\{\xi\}$, $\{\lambda\} =$

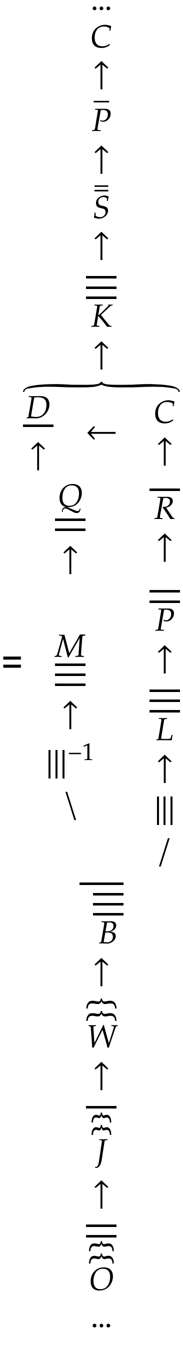
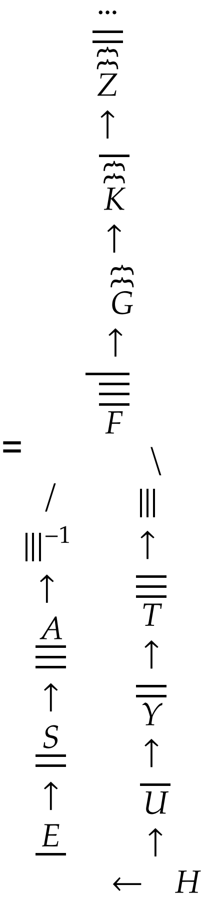
$$\begin{array}{c}
\ldots\\
C\\
\uparrow\\
\overline{P}\\
\uparrow\\
\overline{\overline{S}}\\
\uparrow\\
\overline{\overline{\overline{K}}}\\
\uparrow\\
\overbrace{\begin{array}{ccc}
\underline{D} & \leftarrow & C\\
\uparrow & & \uparrow\\
\underline{\underline{Q}} & & \overline{R}\\
\uparrow & & \uparrow\\
\underline{\underline{\underline{M}}} & & \overline{\overline{P}}\\
\uparrow & & \uparrow\\
|||^{-1} & & \overline{\overline{\overline{L}}}\\
\backslash & & \uparrow\\
 & & |||\\
 & & /
\end{array}}\\
\overline{\overline{\overline{\overline{B}}}}\\
\uparrow\\
\overbrace{\overbrace{W}}\\
\uparrow\\
\overline{\overbrace{\overbrace{J}}}\\
\uparrow\\
\overline{\overline{\overbrace{\overbrace{O}}}}\\
\ldots
\end{array}, \quad \{\xi\} = \begin{array}{ccc}
 & \ldots & \\
 & \overline{\overline{\overbrace{\overbrace{Z}}}} & \\
 & \uparrow & \\
 & \overline{\overbrace{\overbrace{K}}} & \\
 & \uparrow & \\
 & \overbrace{\overbrace{G}} & \\
 & \uparrow & \\
 & \overline{\overline{\overline{\overline{F}}}} & \\
/ & & \backslash\\
|||^{-1} & & |||\\
\uparrow & & \uparrow\\
\underline{\underline{\underline{A}}} & & \overline{\overline{\overline{T}}}\\
\uparrow & & \uparrow\\
\underline{\underline{S}} & & \overline{\overline{Y}}\\
\uparrow & & \uparrow\\
\underline{E} & & \overline{U}\\
 & & \uparrow\\
 & & \leftarrow\ H
\end{array} \qquad [5]$$

Definition. {λ}VddQRprt{ξ} = $\{\lambda\}^{\mathrm{Vdd}}|\left|\,|d|_Q\right|_R\{\xi\}$, {λ} =

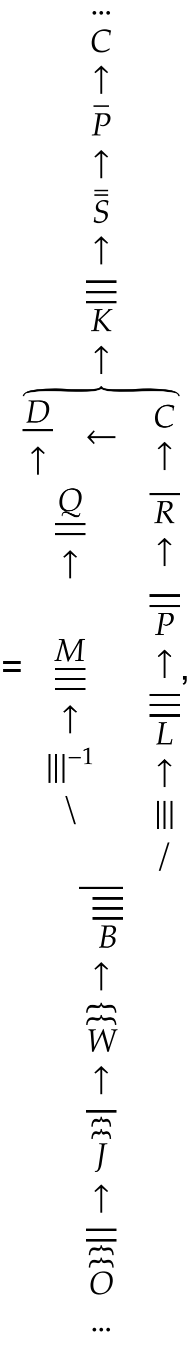
$$\begin{array}{c}
\cdots \\
C \\
\uparrow \\
\bar{P} \\
\uparrow \\
\bar{\bar{S}} \\
\uparrow \\
\overline{\overline{\overline{K}}} \\
\uparrow \\
\overbrace{\begin{array}{ccc}
\underline{D} & \leftarrow & C \\
\uparrow & & \uparrow \\
\underline{\underline{Q}} & & \overline{R} \\
\uparrow & & \uparrow \\
\underline{\underline{\underline{M}}} & & \overline{\overline{P}} \\
\uparrow & & \uparrow \\
|||^{-1} & & \overline{\overline{\overline{L}}} \\
\backslash & & \uparrow \\
 & & ||| \\
 & & /
\end{array}} \\
\overline{\overline{\overline{\overline{B}}}} \\
\uparrow \\
\overbrace{\overbrace{W}} \\
\uparrow \\
\overline{\overbrace{\overbrace{J}}} \\
\uparrow \\
\overline{\overline{\overbrace{\overbrace{O}}}} \\
\cdots
\end{array}$$

, {ξ} =

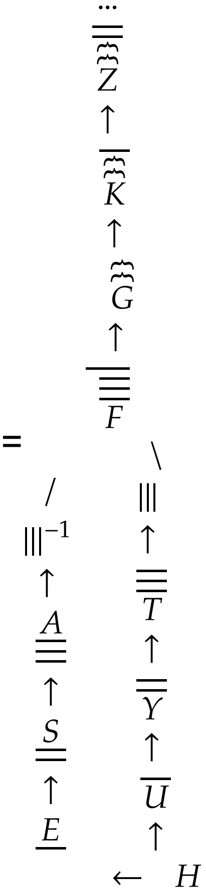
$$\begin{array}{ccc}
 & \cdots & \\
 & \overline{\overline{\overbrace{\overbrace{Z}}}} & \\
 & \uparrow & \\
 & \overline{\overbrace{\overbrace{K}}} & \\
 & \uparrow & \\
 & \overbrace{\overbrace{G}} & \\
 & \uparrow & \\
 & \overline{\overline{\overline{\overline{F}}}} & \\
 & & \backslash \\
/ & & ||| \\
|||^{-1} & & \uparrow \\
\uparrow & & \overline{\overline{\overline{T}}} \\
\underline{\underline{\underline{A}}} & & \uparrow \\
\uparrow & & \overline{\overline{Y}} \\
\underline{\underline{S}} & & \uparrow \\
\uparrow & & \overline{U} \\
\underline{E} & & \uparrow \\
 & \leftarrow & H
\end{array} \tag*{[5]}$$

Definition. $\{\lambda\}\mathrm{Vdprt}\{\xi\} = \{\lambda\}^{\mathrm{Vd}}|\,|d|\{\xi\}$, $\{\lambda\}$ = , $\{\xi\}$ =  [5].

Definition. $\{\lambda\}\mathrm{VdQprt}\{\xi\} = \{\lambda\}^{\mathrm{Vd}}|\,|d|_{Q}\{\xi\}$, $\{\lambda\}$ =



, $\{\xi\}$ =

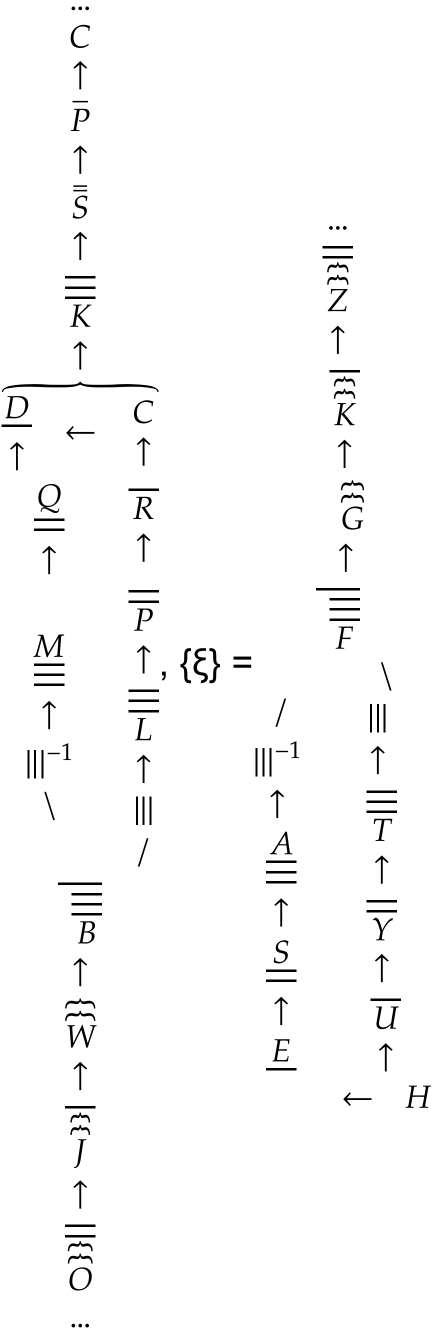


[5].

Definition. ||| of levels (fire from within) leads to third attention, i.e. enter to super level. ||su| at the super level is analogues of |||.

May consider ||su|-type structures, ^{su}self-type structures, ||parelf|-type structures, ^{par}self-type structures etc.

Definition. {λ}Vsprt{ξ} = $\{\lambda\}^{Vs}||su|\{\xi\}$, {λ} = , {ξ} = [5]



May consider ||d|-type structures, ^{di}self-type structures, that correspond to self-type structures for | |d| . The degeneracy of ^{di}self(B) is ^{di}self(d). May consider d_1 = ^{di}self (d), d_2 = ^{di}self(d_1), …, d_{n+1} = ^{di}self(d_n), …, F(^{di}self(B), A), F(^{di}self(d), A), F(^{di}oself (B), A), F(^{di}oself(d), A) etc.

May consider ||||d||- type structures, ^{IIdI}self-type structures, that corresponds to self -type structures for ||||d||. The degeneracy of ^{IIdI}self(B) is ^{IIdI}self(d) or ^{IIdI}self(||d|).

May consider $c_1 = {}^{IIdI}self(d)$, $c_2 = {}^{IIdI}self(c_1)$, …, $c_{n+1} = {}^{IIdI}self(c_n)$, …, $F({}^{IIdI}self(B), A)$, $F({}^{IIdI}self(d), A)$, $F({}^{IIdI}oself(B), A)$, $F({}^{IIdI}oself(d), A)$ etc.

May consider $||su|$-type structures, ${}^{su}self$-type structures, that corresponds to self-type structures for $||su|$. The degeneracy of ${}^{su}self(B)$ is ${}^{su}self(su)$.

May consider $||d|^{-1}$-type structures, $||su|^{-1}$-type structures, $||||d||^{-1}$- type structures, $||d|^{-1}{}_{Q}$-type structures, $\left|\left|\,||d|_{Q}\right|_{R}\right.^{-1}$-type structures etc.

For example: Definition. $||d|_{(A,\, B)}{}^{-1}G$: G is divided by d to A and B, d is any (action or object or process etc) (designation d- expansion).

Capacity corresponds to containment action. Qcapacity (designation) corresponds to action Q. ${}^{Q}|\sqcup||$ corresponds to action Q instead $|||$. ${}^{Q}|A^{Q}|||_{B}D = A^{Q}|\sqcup||_{B}D$. For any R consider (R)capacity: ${}^{®}|\bowtie|$ corresponds to R. If we apply the *Induction law*(Generalization of Newton's third law) [6] to all the action-structures presented in the book, we reach higher levels of the hierarchy in induced counter-actions.

May consider examples of structural hierarchy:

$$
\begin{array}{cccccccccccc}
 & \dots & & & & & \dots & & & & & \dots \\
 & & ||su| & & & & - & & & & ||d| & \\
 & & & \dots & & & \dots & & & \dots & & \\
 & & & & {}^{su}self(A) & & - & & {}^{di}self(B) & & & \\
 & & & & & A & - & B & & & & \\
1) & \dots & I & \dots & I & I & & I & I & \dots & I & \dots \\
 & & & & & C & - & D & & & & \\
 & & & & {}^{IIdI}self(C) & & - & & {}^{ex}oself(B) & & & \\
 & & & \dots & & & \dots & & & \dots & & \\
 & & |||d|| & & & & - & & & & ||ex|^{-1} & \\
 & \dots & & & & & \dots & & & & & \dots
\end{array}
$$

2) Definition. {λ}VVsprt{ξ} =

$$\{\lambda\}^{\mathrm{VVs}}|\,|su|\{\xi\},\ \{\lambda\} = \begin{tikzcd}
& \cdots & \\
& C & \\
& \bar{P} \arrow[u] & \\
& \bar{\bar{S}} \arrow[u] & \\
& \overline{\overline{\overline{K}}} \arrow[u] & \\
\underline{D} & \overbrace{\hphantom{xxxx}} \arrow[u] & C \arrow[ll] \\
\underline{\underline{Q}} \arrow[u] & & \overline{R} \arrow[u] \\
\underline{\underline{\underline{M}}} \arrow[u] & & \overline{\overline{P}} \arrow[u] \\
\|\mathrm{d}|^{-1} \arrow[u] & & \overline{\overline{\overline{L}}} \arrow[u] \\
& & \|\mathrm{d}| \arrow[u] \\
& \overline{\overline{\overline{\overline{B}}}} \arrow[uul, no head, "\backslash"] \arrow[ur, no head, "/"'] & \\
& \widetilde{\widetilde{\widetilde{W}}} \arrow[u] & \\
& \overline{\widetilde{\widetilde{\widetilde{J}}}} \arrow[u] & \\
& \overline{\overline{\overline{\widetilde{\widetilde{\widetilde{O}}}}}} \arrow[u] & \\
& \cdots & \\
\underline{D} & & C \arrow[ll] \\
\underline{\underline{Q}} \arrow[u] & & \overline{R} \arrow[u] \\
\underline{\underline{\underline{M}}} \arrow[u] & & \overline{\overline{P}} \arrow[u] \\
\|\mathrm{su}|^{-1} \arrow[u] & & \overline{\overline{\overline{L}}} \arrow[u] \\
& & \|\mathrm{su}| \arrow[u] \\
& \overline{\overline{\overline{\overline{\widetilde{\widetilde{F}}}}}} \arrow[uul, no head, "\backslash"] \arrow[ur, no head, "/"'] & \\
& \cdots &
\end{tikzcd},\ \{\xi\} = \begin{tikzcd}
\underline{D} & & C \arrow[ll] & \\
\underline{\underline{Q}} \arrow[u] & & \overline{R} \arrow[u] & \\
\underline{\underline{\underline{M}}} \arrow[u] & & \overline{\overline{P}} \arrow[u] & \\
\|\mathrm{su}|^{-1} \arrow[u] & & \overline{\overline{\overline{L}}} \arrow[u] & \\
& & \|\mathrm{su}| \arrow[u] & \\
& \cdots \arrow[uul, no head, "\backslash"] \arrow[ur, no head, "/"'] & & \\
& \overline{\overline{\overline{\widetilde{\widetilde{\widetilde{Z}}}}}} & & \\
& \overline{\widetilde{\widetilde{\widetilde{K}}}} \arrow[u] & & \\
& \widetilde{\widetilde{\widetilde{G}}} \arrow[u] & & \\
& \overline{\overline{\overline{\overline{F}}}} \arrow[u] & & \\
\left|\Big|\,|\,|d|_Q\Big|_R\right|^{-1} \arrow[ur, no head, "/"] & - & \left|\Big|\,|\,|d|_Q\Big|_R\right. \arrow[ul, no head, "\backslash"'] & \\
\underline{\underline{\underline{A}}} \arrow[u] & & \overline{\overline{\overline{T}}} \arrow[u] & \\
\underline{\underline{S}} \arrow[u] & & \overline{\overline{Y}} \arrow[u] & \\
\underline{E} \arrow[u] & & \overline{U} \arrow[u] & \\
& & \arrow[u] & H \arrow[l]
\end{tikzcd}$$

where $\overline{\overline{\overbrace{\overbrace{Z}}}}$, $\overline{\overline{\overbrace{\overbrace{O}}}}$ - *parelf* levels of Z and O respectively, $\overline{\overbrace{\overbrace{J}}}$, $\overline{\overbrace{\overbrace{K}}}$ – singelf levels of J and K respectively, $\overbrace{\overbrace{G}}$, $\overbrace{\overbrace{W}}$ - paradoxical upper levels of G and W respectively, $\overline{\overline{\overline{\overline{F}}}}$, $\overline{\overline{\overline{\overline{B}}}}$ - paradoxical average levels of F and B respectively, $\overline{U}$, $\overline{R}$ - middle$_1$ levels of U and R respectively, $\underline{E}$, $\underline{D}$ - *ordinary energies exhibited* by E, D respectively, $\underline{\underline{Q}}$, $\underline{\underline{S}}$ - first sublevel of Q and S respectively, $\underline{\underline{\underline{A}}}$, $\underline{\underline{\underline{M}}}$ - second sublevel of A and M respectively etc.

3) Any structural hierarchy, in particular, by 3-structures or N-structures or 3-connections or N-connections or any Q-structures or any Q-connections etc.

Certainly ||| is the projection (manifestation) of more complex structures and corresponding to usual parallel hierarchy, for example as NS of human. May consider parallel hierarchy with “holes” (rings or Mobius strips) and use algebraic topology. Also, may consider continual analogues of parallel hierarchy with “holes” (rings or Mobius strips), for example, in the kind of "foam" etc.

1.1.5 Syntax of self-like formations

$$^{g(t)}\text{self}(a(t)) = \text{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}},$$

$$^{g(t)}\text{oself}(a(t)) = \overset{a(t)}{\underset{a(t)}{g(t)}}\text{SCprt},$$

$$^{g(t)}\text{pself}(a(t)) = \overset{a(t)}{\underset{a(t)}{g(t)}}\text{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}},\ ^{g(t)}\text{paself}(a(t)) = a\,(t)\ \text{pa}|\,|g(t)|\ a\,(t)\ \text{ets.}$$

For participle $^{g(t)}$self -type structures are similarly.

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

$A|\,|ch|\,A = {}^{\mathrm{ch}}\mathrm{self}(A)$,

$A|\,|d|\,A = {}^{\mathrm{di}}\mathrm{self}(A)$.

$A|\,|ex|\,B$ is excapacity: A expands B and B expands A simultaneously.

$A|\,|ex|\,A = {}^{\mathrm{ex}}\mathrm{self}(A)$.

$A|\,|\mathrm{com}|\,B$ is cocapacity: A compresses B and B compresses A simultaneously.

$A|\,|\mathrm{com}|\,A = {}^{\mathrm{com}}\mathrm{self}(A)$,

$$\begin{pmatrix} |||^{-1} & ||\mathrm{su}|^{-1} \\ ||\mathrm{su}|^{-1} & ||\mathrm{d}|^{-1} \end{pmatrix},$$

$$\begin{pmatrix} |||^{-1} & ||\mathrm{su}|^{-1} \\ ||\mathrm{su}| & ||\mathrm{d}| \end{pmatrix},$$

$$\begin{pmatrix} |||^{-1} & |\,\Big|\,|\,|d|_Q\Big|_R \\ ||\mathrm{su}|^{-1}|\,\Big|\,|\,|d|_Q\Big|_R^{-1} & ||\mathrm{d}|^{-1} \end{pmatrix} \text{etc.}$$

May try to consider Capacity-capacity(cacapacity), Selfcapacity, Selfaction, Self(abstraction), selfconnection, selfdisconnection, selfany, $|||$connection, $|||^{-1}$-connection, $||\mathrm{su}|^{-1}$-connection, $||\mathrm{d}|$- connection, ${}^{\mathrm{di}}$selfconnection etc.

1.2 Inorganic beings

May try to consider an inorganic being

D as

$${}^{g(t)}\mathrm{self}(\mathrm{SCprt}\,\underset{\{\,\}}{\overset{\{\,\}}{g(t)}}|||_D\underset{a(t)}{\overset{a(t)}{g(t)}})\mathrm{SCprt})$$

May try to consider an inorganic being W into which magicians turn as

$$^{g(t)}\mathrm{self}^2(^{g(t)}\mathrm{self}(\mathrm{SCprt}\overset{\{\}}{\underset{\{\}}{g(t)}}|||_D\overset{a(t)}{\underset{a(t)}{g(t)}})\mathrm{SCprt}))$$ is "cocoon stripe" twisted into a "shell".

For virus V

$$\overset{\{\}}{\underset{\{\}}{g(t)}}\ \mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}} = {}^{g(t)}\mathrm{self}(\mathrm{SCprt}\overset{\{\}}{\underset{\{\}}{g(t)}}|||_V\overset{a(t)}{\underset{a(t)}{g(t)}})\mathrm{SCprt})^{-1}.$$

Remark W8. Directly parallel actions in any experimental science leads to self-type structures, for example, directly parallel evidence (directly parallel logic).

1. 3 Some applications to physics [17]

May try to consider nonliving object B as

$\mathrm{Sprt}\overset{a}{\underset{a}{g(t)}}|||_B\mathrm{Sprt}\overset{E}{\underset{E}{g(t)}} = \mathrm{Sprt}\overset{a}{\underset{a}{g(t)}}|||_B\overset{a}{\underset{a}{g(t)}}\mathrm{Sprt}$, where $\mathrm{Sprt}\overset{a}{\underset{a}{g(t)}}$ is the energy closed in on itself, which is the physical (material) part of object B, $|||_B\mathrm{Sprt}\overset{E(t)}{\underset{E(t)}{g(t)}} = |||_B\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{Sprt}$ is the remaining part, which is subtle energy of object B, electron orbitals are manifestations of this subtle energy. Entanglements correspond to self-level, spin is element of this self-level. Bosons corresponds to actions, that’s why they have self $^{(2N+1)/2}$-type ($N \geq 1$), i.e., their spin are N+1, fermions have self ^{N}-type ($N \geq 1$), i.e., their spin are N/2. Entanglements is a product of self-level how spin.

May try to consider living object D as

$^{g(t)}$self$(\overset{a(t)}{\underset{a(t)}{\text{Sprt}g(t)}}|||_D\overset{E(t)}{\underset{E(t)}{\text{Sprt}g(t)}})$, where $\overset{a(t)}{\underset{a(t)}{\text{Sprt}g(t)}}$ is usual material part of D, $\overset{E(t)}{\underset{E(t)}{\text{Sprt}g(t)}}$ is rest part of D from subtle energies, $\overset{E(t)}{\underset{E(t)}{\text{Sprt}g(t)}} = (\overset{a(t)}{\underset{a(t)}{\text{Sprt}g(t)}})^{-1} = \overset{a(t)}{\underset{a(t)}{g(t)\text{Sprt}}}$ = $^{g(t)}$oself($a(t)$). Then E(t) = $^{g(t)}$oself($^{g(t)}$oself($a(t)$)) has from 1 to 6 layers depending on living object type, for bacterium with two DNA – 2 layers, for bacterium with two DNA – 1 etc. We have: the first surface layer has 1 assemblage point position, the second layer has 3 assemblage point positions etc. $^{g(t)}$self$(\overset{a(t)}{\underset{a(t)}{\text{Sprt}g(t)}}|||_D$ corresponds to will of this object, $^{g(t)}$self$(|||_D\overset{a(t)}{\underset{a(t)}{g(t)}}\text{Sprt})$ corresponds to assemblage point of this object.

Assemblage point position has form $\overset{\{\,\}}{\underset{\{\,\}}{g(t)}}$SCprt(t), an assemblage point has form $\overset{\{\,\}}{\underset{\overline{d_n}(t)}{g(t)}}$ SCprt(t), that corresponds to n-th position of its.

Definition 2. 3. 1. 4. The dynamic element $^{g(t)}$eself($\overline{a}(t)$) = $\overset{\{\,\}}{\underset{\overline{a}(t)}{g(t)}}$ SCprt(t) is the process of expelling $\overline{a}(t)$ from the emptiness by $g(t)$ [17].

The Law of **Dark Matter**

$^{g(t)}$eself($\overline{a}(t)$) = $\overset{\{\,\}}{\underset{\overline{a}(t)}{g(t)}}$ SCprt(t) = $|||^{-1}_{\overline{a}(t)}(\overline{a}(t))$.

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

$|||^{-1}_{\left(\overline{b}(t),\ \overline{c}(t)\right)}(\overline{a}(t)) = \overline{b}(t),\ \overline{c}(t)$ for $\forall\ \overline{b}(t),\ \overline{c}(t), \overline{a}(t)$.

Energy $|||^{-1}$of emptiness gives birth to $\overline{a}\ (t)$. So, the production of new elementary particles seems to come from nowhere. Either we take from emptiness by $|||^{-1}$ or through substitution by |||. ||| corresponds to containment action. self(a) is "decomposed" into all connections... connections, and connections are a manifestation of energy, matter is also connections (specific), connections are also energy. M is gravitational connection, volume is spatial connection, charge is field connection etc. Energy is connections. All connections… connections as internal and external of D belong to self(D).

The Law of **Any**

Any connection B has own upper levels: $\begin{pmatrix} \dots \\ parelfB \\ \dots \\ {}^{su}paselfB \\ {}^{su}selfB \\ \dots \\ \text{||||B||} \\ {}^{IIBI}paselfB \\ {}^{IIBI}selfB \\ \text{||B|} \\ \\ {}^{Bi}selfB \\ \dots \\ paselfB \\ pselfB \\ selfB \\ B \end{pmatrix}$ as and any disconnection

Q: $\begin{pmatrix} \dots \\ parelfQ \\ \dots \\ {}^{su}paselfQ \\ {}^{su}selfQ \\ \dots \\ \text{||||Q||} \\ {}^{IIQI}paselfQ \\ {}^{IIQI}selfQ \\ \text{||Q|} \\ \\ {}^{Qi}selfQ \\ \dots \\ paselfQ \\ pselfQ \\ selfQ \\ Q \end{pmatrix}$ etc.

Here is possible any new structures, usual hierarchy is simplest variant. There is no absolute void, only ordinary physical emptiness. That's why effects arise in ordinary physical emptiness. In the energy space everything is possible. Any connection may be used as template for creating (initiation) of any new self-type structures, new |||-type structures etc.

Designations:

$\tilde{\tilde{A}} = \underset{\textit{all}\text{ connections}}{\overset{A}{g(t)}}\ \mathrm{SCprt(t)}$, ${}^{G}\{\tilde{\tilde{A}}\} = \mathrm{SCprt(t)}\ \underset{Q\text{ – connection}}{\overset{\{A_1, A_2, \dots, A_n\}}{g(t)}}$, Q – connection is any, in particular, 3 – connection, N – connection, N is any.

May consider $\mathrm{SCprt(t)}\ \underset{\textit{dis}\text{connection C}}{\overset{\text{connection B}}{g(t)}}$, $\underset{\text{connection B}}{\overset{\text{disconnection C}}{g(t)}}\ \mathrm{SCprt(t)}$,

$\mathrm{SCprt(t)}\ \underset{\text{connection B}}{\overset{\text{disconnection C}}{g(t)}}$, $\underset{\textit{dis}\text{connection C}}{\overset{\text{connection B}}{g(t)}}\ \mathrm{SCprt(t)}\ \underset{\textit{dis}\text{connection C}}{\overset{\text{connection B}}{g(t)}}$,

$\underset{\text{connection B}}{\overset{\text{disconnection C}}{g(t)}}\ \mathrm{SCprt(t)}\ \underset{\textit{dis}\text{connection C}}{\overset{\text{connection B}}{g(t)}}$,

$\underset{\textit{dis}\text{connection C}}{\overset{\text{connection B}}{g(t)}}\ \mathrm{SCprt(t)}\ \underset{\text{connection B}}{\overset{\text{disconnection C}}{g(t)}}$,

$\underset{\text{connection B}}{\overset{\text{disconnection C}}{g(t)}}\ \mathrm{SCprt(t)}\ \underset{\text{connection B}}{\overset{\text{disconnection C}}{g(t)}}$, connection ↑ I ↓ disconnection, disconnection ↑ I ↓ connection etc.

Energy space-capacity(designation: escapacity),

$^{(es)}$self(escapacity),

$^{(es)}$self-type(escapacity),

$^{(es)}|\bowtie|$type(escapacity).

Energy-capacity(designation: ecapacity),

$^{(e)}$self(ecapacity),

$^{(e)}$self-type(ecapacity),

$^{(e)}|\bowtie|$-type(ecapacity).

self is evident by any connection, in particular, connections... connections (series by connections) any non-living objects are its elementary particles. May made energy of the following type: self(↑ I ↓) by UHF.

Studying of manifestations upper levels of living objects may be by electric arc, short-pulse laser etc.

The Law of Division:

p(a)self$_x$(B) generates p(a)self$_t$(B),

oself$_x$(B) generates oself$_t$(B),

self$_x$(self$_t$(B)) generates 2self$_t$(B),

self$_x$(self$_x$(B)) generates self$_t$(oself$_x$(B)).

$\mathrm{SCprt}\underset{a(t)}{\overset{a(t)}{g(t)}}|||_{w}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt}$ is a form of any the law of conservation.

May try to consider (|||-type)- space-time (flow), (||d|-type)- space-time (flow),

(||||d||- type)- space-time (flow).

Variants of conservation laws: $\mathrm{SCprt}\underset{a}{\overset{a}{g}}$, $\underset{a}{\overset{a}{g}}\mathrm{SCprt}\underset{a}{\overset{a}{g}}$, $\underset{a}{\overset{a}{g}}\mathrm{SCprt}$, $\underset{a}{\overset{b}{g}}\mathrm{SCprt}\underset{b}{\overset{a}{g}}$, $\mathrm{Dprt}\underset{a}{\overset{a}{g}}$ etc and any structures with these kinds.

A and B in different capacities within their strip, they correspond to certain different energy fibers and consequently in different interpretations of perception.

Flow Format changes with (1, 1) (corresponds to reason) to (2, 1) (corresponds to will).

Elementary particles are connections (energy). A matter is connections (energy). Any object is connections (energy). It is the connections that are strengthened in the matter. self(B) includes all automorphisms of B. |||B includes all connections (energy) of B. $|||^{-1}$B is connections (energy) of B.

1.4 Elements of s-chemistry

May try to consider atom D as

$\overset{a(t)}{\underset{a(t)}{\mathrm{Sprt}g(t)}}|||_D\overset{E(t)}{\underset{E(t)}{\mathrm{Sprt}g(t)}}$, where $\overset{a(t)}{\underset{a(t)}{\mathrm{Sprt}g(t)}}$ is usual material part of D, $\overset{E(t)}{\underset{E(t)}{\mathrm{Sprt}g(t)}}$ is rest part of D from subtle energies, $\overset{E(t)}{\underset{E(t)}{\mathrm{Sprt}g(t)}} = (\overset{a(t)}{\underset{a(t)}{\mathrm{Sprt}g(t)}})^{-1} = {}^{g(t)}\mathrm{oself}(a(t))$. Then $E(t) = {}^{g(t)}\mathrm{oself}({}^{g(t)}\mathrm{oself}(a(t)))$ has from 1 to 6 layers depending on atom type(depending on valence).

1.5 S-arithmetics

self-addition: singularity A(+|||+)B.

self- subtraction: singularity A(-|||-)B.

self-multiplication: singularity A(*|||*)B.

self-division: singularity A(/|||/)B.

self-exponentiation: singularity A($( )^n$|||$( )^n$)B,

mixed self-operations: singularity A(+|||-)B, singularity A(/|||+)B, singularity A(*|||+)B, singularity A(+|||$( )^n$)B, singularity A(-|||*)B, singularity A(/|||-)B, singularity A(-|||$( )^n$)B, singularity A(*|||/)B, singularity A(*|||$( )^n$)B, singularity A(/|||$( )^n$)B etc.

1.6 Self-operators

To create any living, pseudo-living energy, self-type objects may use Self-operators:

$$\left(\begin{array}{cc}
\multicolumn{2}{c}{\ldots}\\
\multicolumn{2}{c}{\mathit{parelf}\,A\left(\mathit{decignation}-\overline{\overline{\overbrace{\overbrace{A}}}}\right)}\\
\multicolumn{2}{c}{\mathit{singelf}\,A\left(\mathit{decignation}-\overline{\overbrace{\overbrace{A}}}\right)}\\
\multicolumn{2}{c}{\mathit{subtle\ energy\ of\ object}\ \ A\ \text{paradoxical}\ \mathit{upper\ level}\ (\,pa|||)\left(\mathit{decignation}-\overbrace{\overbrace{A}}\right)}\\
\multicolumn{2}{c}{\mathit{subtle\ energy\ of\ object}\ \ A\ \text{paradoxical}\ \mathit{mid-level}(\mathit{paself}(A))\left(\mathit{decignation}-\overbrace{\overline{\overline{\overline{\overline{A}}}}}\right)}\\
\multicolumn{2}{c}{\mathit{subtle\ energy\ of\ object}\ \ A\ \text{paradoxical}\ \mathit{down-level}(\mathit{pself}(A))\left(\mathit{decignation}-\overline{\overline{\overline{\overline{A}}}}\right)}\\
/ & \backslash\\
\mathit{oself-type}\ (|||)(\mathit{oself-type\ of}\ |||) & \mathit{self-type}\ (|||)(\mathit{self-type\ of}\ |||)\\
\mathit{subtle\ energy\ of}\ |||^{-1} & \mathit{subtle\ energy\ of}\ |||\\
\underline{\underline{\underline{A}}} & \overline{\overline{\overline{A}}}\\
\left(\underline{\underline{A}}\right) & \overline{\overline{A}}\\
 & \left(\overline{A}\right)\\
\mathit{ordinary\ energy\ exhibited\ by\ an\ \ object}\ \ A\left(\mathit{decignation}-\underline{A}\right)\ \leftarrow & \mathit{the\ raw\ energy\ of\ an\ object}\ \ A\left(\mathit{decignation}-A\right)
\end{array}\right),$$

$$\begin{array}{lcl} a & & Q\\ Q^{-1} & \mathrm{Dprt} & Q,\\ Q^{-1} & & a\end{array}$$

$$\mathrm{PrSCprt}\ \begin{array}{ccccc} & & Q & & \\ & Q & & Q & \\ a & & Q & & C\end{array},$$

$$\begin{array}{rl} & Q\\ & Q\\ \mathrm{SIIprt} & Q \text{ is self}^{5/2},\\ & Q\\ & Q\end{array}$$

$$\begin{array}{rl} & Q\\ & Q\\ \mathrm{SIIprt} & Q \text{ is self}^{2} \text{ etc.}\\ & Q\\ & A\end{array}$$

$$\begin{array}{rl} & Q\\ & Q\\ \mathrm{SIIrt} & Q \text{ is the result, but no self-operator.}\\ & Q\\ & A\end{array}$$

$self - type$ ($C(d, t)|||$) can create any self-operators, self-functions, self-actions, self-process, self-any. Our dynamic operators are suitable to define self-operators, self-functions, self-actions, self-process, self-any.

1.7 Some remarks to Singular analysis

Using Singular analysis may by SmnSCprt, VmnVprt etc.

May consider

(equation 1)||| (equation 2)

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

(equation A)||| (equation -A).

Solutions of Singular equations

Singularity B(x) = C

x = (Singularity B)$^{-1}$(C)

Singular solutions:

Examples:

|||-solutions, ||||d||-solutions etc.

Singular relationship

Examples:

Parelf- equations,

Singular synthesis

Examples:

x|||2x-synthesis, (singularity 1)||| (singularity 2)-synthesis, A||||d||-synthesis, A||d|-synthesis, pId = parelf(||||d||), $\overset{A\ -\ B}{\underset{C}{||||d||}}$ -synthesis and others by SmnSCprt, VmnVprt etc.

1.8 Matrix Interpretations

Interpretations for any, in particular, for objects, actions, processes etc.

Examples:

	Places of spase	time	objects	actions	energy	processes	…	observer
1-th level	1	1	1					1
…								
N-th level								

Table (1)

corresponds to (1, 1, 1, , , , …, 1) usual interpretation with an observer.

1.8.1 Interpretations with the observer

(1, 1, 1, , , , …, 1) usual interpretation with an observer (the observer is responsible for the 3rd position - 1)

(2, 1, 1, , , , …, 1) unusual interpretation with an observer.

May consider |||-(1), ||d|-(1), ||||d||-(1), (2, 1, 1, 2, , , , …, 2)- Interpretations, (1, 1, 2, 1, , , , …, 2) – Interpretations, (Self-type)-Matrix Interpretations, (|||-type)-

Matrix Interpretations, (||d|-type)-Matrix Interpretations, (||||d||-type)-Matrix Interpretations etc.

May consider self-type algorithms of interpretations, self-type equations of interpretations, self-type tasks of interpretations,

$$\begin{array}{ccc} (1,2)-\text{interpretation} & & (2,1)-\text{interpretation} \\ Q^{-1} & \mathrm{Dprt} & Q \\ (2,1)-\text{interpretation} & & (1,2)-\text{interpretation} \end{array}.$$

Example of equation:

$$\mathrm{SIIprt}\begin{array}{c} (1,\ (2,1))-\text{interpretation} \\ (1,\ (2,1))-\text{interpretation} \\ (1,\ (2,1))-\text{interpretation} \\ (1,\ (2,1))-\text{interpretation} \\ A \end{array} = \begin{array}{ccc} x-\text{interpretation} & & (2,1)-\text{interpretation} \\ Q^{-1} & \mathrm{Dprt} & Q \\ (2,1)-\text{interpretation} & & x-\text{interpretation} \end{array},$$

x - ?

Remark. $\begin{pmatrix} f|||g \\ g \end{pmatrix}$ is generalization of usual analogues f(g).

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Part II. Elements of s-morphology

2.1 Energy of a non-living organism [1 -6],:

$$\mathrm{Wwgnd}(r, a(E_q)) = \mathrm{Dprt}\underset{\substack{D\\t_0}}{\left\{\begin{array}{ccccc}
{}^{q}\ \underset{a(t)\quad a(t)}{\overset{a(t)\quad a(t)}{\mathrm{self(SCprt}g(t)|||_{D}g(t))\mathrm{SCprt)}}} & & \underset{a(t)}{\overset{a(t)}{\mathrm{self(SCprt}g(t)|||_{Will})_q}} & & \underset{a(t)}{\overset{a(t)}{\{\mathrm{self}(|||_{Will}g(t)\mathrm{SCprt})^{d_r}\}}} \\
D^{-1} & Dprt_q & D & ,\quad Dprt & D \\
\underset{a(t)}{\overset{a(t)}{\mathrm{self(SCprt}g(t)|||_{w}))_q}} & & \underset{a(t)\quad a(t)}{\overset{a(t)\quad a(t)}{\mathrm{self(SCprt}g(t)|||_{D}g(t))\mathrm{SCprt)}}} & & \underset{a(t)}{\overset{a(t)}{(|||_{d_r}g(t)\mathrm{SCprt})^{d_r}}}
\end{array}\right\}}$$

$$\mathrm{Wwgndd}(r, a(E_q)) = \mathrm{Dprt}$$

$$\underset{\substack{D\\t_0}}{\left\{\begin{array}{ccccc}
{}^{q}\ {}^{di}\underset{a(t)\quad a(t)}{\overset{a(t)\quad a(t)}{\mathrm{self(SCprt}g(t)||\mathrm{d}|_{D}g(t))\mathrm{SCprt)}}} & & {}^{di}\underset{a(t)}{\overset{a(t)}{\mathrm{self(SCprt}g(t)||\mathrm{d}|_{Will})_q}} & & \{{}^{di}\underset{a(t)}{\overset{a(t)}{\mathrm{self}(||\mathrm{d}|_{Will}g(t)\mathrm{SCprt})^{d_r}\}}} \\
D^{-1} & Dprt_q & D & ,\quad Dprt & D \\
{}^{di}\underset{a(t)}{\overset{a(t)}{\mathrm{self(SCprt}g(t)||\mathrm{d}|_{w}))_q}} & & {}^{di}\underset{a(t)\quad a(t)}{\overset{a(t)\quad a(t)}{\mathrm{self(SCprt}g(t)||\mathrm{d}|_{D}g(t))\mathrm{SCprt)}}} & & \underset{a(t)}{\overset{a(t)}{(||\mathrm{d}|_{d_r}g(t)\mathrm{SCprt})^{d_r}}}
\end{array}\right\}}$$

$$\mathrm{Wwgnds}(r, a(E_q)) = \mathrm{Dprt}$$

$$\underset{\substack{D\\t_0}}{\left\{\begin{array}{ccccc}
{}^{q}\ {}^{IIdI}\underset{a(t)\quad a(t)}{\overset{a(t)\quad a(t)}{\mathrm{self(SCprt}g(t)|||_{D}g(t))\mathrm{SCprt)}}} & & {}^{IIdI}\underset{a(t)}{\overset{a(t)}{\mathrm{self(SCprt}g(t)|||_{Will})_q}} & & \{{}^{IIdI}\underset{a(t)}{\overset{a(t)}{\mathrm{self}(|||_{Will}g(t)\mathrm{SCprt})^{d_r}\}}} \\
D^{-1} & Dprt_q & D & ,\quad Dprt & D \\
{}^{IIdI}\underset{a(t)}{\overset{a(t)}{\mathrm{self(SCprt}g(t)|||_{w}))_q}} & & {}^{IIdI}\underset{a(t)\quad a(t)}{\overset{a(t)\quad a(t)}{\mathrm{self(SCprt}g(t)|||_{D}g(t))\mathrm{SCprt)}}} & & \underset{a(t)}{\overset{a(t)}{(|||_{d_r}g(t)\mathrm{SCprt})^{d_r}}}
\end{array}\right\}}$$

2.2 Elements of s-morphology for living organism

Division of DNA [[1 -6],]:

$$\underset{aa}{\overset{aa}{gg}}\mathrm{PrSprt}\underset{a}{\overset{a}{g}} \to \underset{a}{\overset{a\{\,\}}{g}}\,\underset{a}{g}\,\mathrm{PrSprt}\underset{a}{\overset{a}{g}} + \underset{a}{g}\,\underset{a}{\overset{\{\,\}a}{g}}\mathrm{PrSprt}\underset{a}{\overset{a}{g}} \to \underset{aa}{\overset{aa}{gg}}\mathrm{PrSprt}\underset{a}{\overset{a}{g}} + \underset{aa}{\overset{aa}{gg}}\mathrm{PrSprt}\underset{a}{\overset{a}{g}}.$$

Energy of a living organism:

$$\mathrm{Wwg}(r, a(E_q)) = \mathrm{SCprt}$$

$$\underset{\substack{D\\t_0}}{\left\{\begin{array}{ccccc}
{}^{q}\ \underset{\{\,\}\quad a(t)\quad a(t)}{\overset{\{\,\}\quad a(t)\quad a(t)}{\mathrm{self}(g(t)\mathrm{SCprt}g(t)|||_{D}g(t)\mathrm{SCprt})}} & & \underset{\{\,\}\quad a(t)}{\overset{\{\,\}\quad a(t)}{\mathrm{self}(g(t)\mathrm{SCprt}g(t)|||_{Will})_q}} & & \underset{a(t)}{\overset{a(t)}{\{\mathrm{self}(|||_{Will}g(t)\mathrm{SCprt})^{d_r}\}}} \\
 & Sprt_q & & ,\quad Sprt & \\
\underset{\{\,\}\quad a(t)}{\overset{\{\,\}\quad a(t)}{\mathrm{self}(g(t)\mathrm{SCprt}g(t)|||_{w}))_q}} & & \underset{\{\,\}\quad a(t)\quad a(t)}{\overset{\{\,\}\quad a(t)\quad a(t)}{\mathrm{self}(g(t)\mathrm{SCprt}g(t)|||_{D}g(t)\mathrm{SCprt})}} & & \underset{a(t)}{\overset{a(t)}{\mathrm{self}(|||_{d_r}g(t)\mathrm{SCprt})^{d_r}}}
\end{array}\right\}}\ (**_{2.1}).$$

$\mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}|||_{w}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})$ -internal energy of a living organism, q- a gap in the energy cocoon of a living organism, r-the position of the assemblage point d_r on the energy cocoon of a living organism, $\mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}|||_{w})_q$- energy prominences from the gap in the cocoon of a living organism, $\mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}|||_{Will})_q$-external energy entering the gap in the cocoon of a living organism,$\mathrm{self}(|||_{Will}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})^{d_r}$ - a bundle of fibers of external energy self-capacities from outside the cocoon, collected at the point of assembly of the cocoon of a living organism at time t_0, $\mathrm{self}(|||_{d_r}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})^{d_r}$ a bundle of fibers of external energy self-capacities from inside the cocoon, collected at the point of assembly of the cocoon of a living organism in the same position r of the assemblage point d_r. d_r is the subject of identifying the energy fibers of the subtle energy of the Universe in position r both outside and inside the cocoon.

2.3 Energy of a living organism of a person:

$$\mathrm{Wwpg}(r, a(E_q)) = \mathrm{SCprt}$$

$$\left\{\begin{array}{ccccc} {}^{q} \begin{array}{c} \mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}|||_{D}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}) \\ \mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}|||_{w}))_q \end{array} & Sprt_q & \begin{array}{c} \mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}|||_{Will})_q \\ \mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}|||_{D}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}) \end{array} & , \ Sprt & \begin{array}{c} \{\mathrm{self}(|||_{Will}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})^{d_r}\} \\ \mathrm{self}(\mathrm{self}(|||_{d_r}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}))^{d_r} \end{array} \\ & & \begin{array}{c} D \\ t_0 \end{array} & & \end{array}\right\} \quad (***_{2.1}),$$

where r is the assemblage point position of internal dialogue.

$(**_{2.1})$, $(***_{2.1})$ can be interpreted as program operators. May consider

$$\overbrace{WwSCprt} = \mathrm{SCprt}\underset{\overbrace{WwSCprt}}{\underset{D}{\left\{\mathrm{Wwpg}\left(\mathrm{r}_1, \mathrm{a}\left(E_q\right)\right), \mathrm{Wwpg}\left(\mathrm{r}_2, \mathrm{a}\left(E_q\right)\right), \ldots, \mathrm{Wwpg}\left(\mathrm{r}_i, \mathrm{a}\left(E_q\right)\right), \ldots, \mathrm{Wwpg}\left(\mathrm{r}_N, \mathrm{a}\left(E_q\right)\right)\right\}}}$$

$(**_{2.2})$, N is the number of assemblage point positions. This is the definition of $\overbrace{WwSCprt}$ -singularity of exit to a higher level. r_i by its action $= \underset{\{\}}{\overset{\{\}}{D}}\mathrm{SCprt}$, an assemblage point d_{r_i} by its action $= \underset{\underset{\{\}}{D}}{\overset{\overset{\{\}}{D\,\mathrm{SCprt}}}{\{\}}}\ \mathrm{SCprt}$.

Here are considered some different variants by the different dynamic operators:

$$\mathrm{Wwpgd}(\mathrm{r}, \mathrm{a}(E_q)) = \mathrm{SCprt}\underset{t_0}{\underset{D}{\left\{\begin{matrix} {}^{q}\,{}^{di}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}\|\mathrm{d}|_D\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}) \\ {}^{di}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}\|\mathrm{d}|_w))_q \end{matrix}\ Sprt_q \begin{matrix} {}^{di}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}\|\mathrm{d}|_{Will})_q \\ {}^{di}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}\|\mathrm{d}|_D\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}) \end{matrix}\ ,\ Sprt \begin{matrix} \{{}^{di}\mathrm{self}(\|\mathrm{d}|_{Will}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})^{d_r}\} \\ {}^{di}\mathrm{self}({}^{di}\mathrm{self}(\|\mathrm{d}|_{d_r}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}))^{d_r} \end{matrix}\right\}}}$$

${}^{di}\mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}\|\mathrm{d}|_w\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})$ -internal energy of a living organism, q- a gap in the energy cocoon of a living organism, r-the position of the assemblage point d_r on the energy cocoon of a living organism, ${}^{di}\mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}\|\mathrm{d}|_w)_q$- energy prominences from the gap in the cocoon of a living organism, ${}^{di}\mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}\|\mathrm{d}|_{Will})_q$-external energy entering the gap in the cocoon of a living organism, ${}^{di}\mathrm{self}(\|\mathrm{d}|_{Will}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})^{d_r}$ - a bundle of fibers of external energy self-capacities from outside the cocoon, collected at the point of assembly of the cocoon of a living organism at time t_0, ${}^{di}\mathrm{self}(\|\mathrm{d}|_{d_r}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})^{d_r}$ a bundle of fibers of external energy self-capacities from inside the cocoon, collected at the point of assembly of the cocoon of a living organism in the same position r of the assemblage point d_r. d_r is the subject of identifying the energy fibers of the subtle energy of the Universe in position r both outside and inside the cocoon.

Energy of a living organism of a person:

$$\mathrm{Wwpgdd}(\mathrm{r}, \mathrm{a}(E_q)) = \mathrm{SCprt}$$

$$\left\{\begin{matrix} {}^{q}\,{}^{IIdI}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}\|\|\mathrm{d}\|_{D}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}) \\ {}^{IIdI}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}\|\|\mathrm{d}\|_{w}))_q \end{matrix} \quad Sprt_q \underset{t_0}{\underset{D}{\begin{matrix} {}^{IIdI}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}\|\|\mathrm{d}\|_{Will})_q \\ {}^{IIdI}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}\|\|\mathrm{d}\|_{D}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}) \end{matrix}}} \quad , \quad Sprt \begin{matrix} \{{}^{IIdI}\mathrm{self}(\|\|\mathrm{d}\|_{Will}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})^{d_r}\} \\ {}^{IIdI}\mathrm{self}({}^{IIdI}\mathrm{self}(\|\|\mathrm{d}\|_{d_r}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}))^{d_r} \end{matrix}\right\}$$

${}^{IIdI}\mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}\||\,|d|\,|_{w}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})$ -internal energy of a living organism, q- a gap in the energy cocoon of a living organism, r-the position of the assemblage point d_r on the energy cocoon of a living organism, ${}^{IIdI}\mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}\||\,|d|\,|_{w})_q$- energy prominences from the gap in the cocoon of a living organism, ${}^{IIdI}\mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}\||\,|d|\,|_{Will})_q$-external energy entering the gap in the cocoon of a living organism, ${}^{IIdI}\mathrm{self}(\||\,|d|\,|_{Will}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})^{d_r}$ - a bundle of fibers of external energy self-capacities from outside the cocoon, collected at the point of assembly of the cocoon of a living organism at time t_0, ${}^{IIdI}\mathrm{self}(\||\,|d|\,|_{d_r}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})^{d_r}$ a bundle of fibers of external energy self-capacities from inside the cocoon, collected at the point of assembly of the cocoon of a living organism in the same position r of the assemblage point d_r. d_r is the subject of identifying the energy fibers of the subtle energy of the Universe in position r both outside and inside the cocoon.

Energy of a living organism of a person:

$$\mathrm{Wwpgds}(r, a(E_q)) = \mathrm{SCprt}$$

$$\begin{array}{c}\left\{\begin{array}{c} {}^{q}\,{}^{su}\overset{\{\,\}\quad a(t)\quad a(t)}{\underset{\{\,\}\quad a(t)\quad a(t)}{\mathrm{self}(g(t)\mathrm{SCprt}g(t)\|\mathrm{d}|_D g(t)\mathrm{SCprt})}} \\ {}^{su}\overset{\{\,\}\quad a(t)}{\underset{\{\,\}\quad a(t)}{\mathrm{self}(g(t)\mathrm{SCprt}g(t)\|\mathrm{d}|_w))_q}} \end{array} Sprt_q \begin{array}{c} {}^{su}\overset{\{\,\}\quad a(t)}{\underset{\{\,\}\quad a(t)}{\mathrm{self}(g(t)\mathrm{SCprt}g(t)\|\mathrm{d}|_{Will})_q}} \\ {}^{su}\overset{\{\,\}\quad a(t)\quad a(t)}{\underset{\{\,\}\quad a(t)\quad a(t)}{\mathrm{self}(g(t)\mathrm{SCprt}g(t)\|\mathrm{d}|_D g(t)\mathrm{SCprt})}} \end{array}, \; Sprt \begin{array}{c} \{{}^{su}\overset{a(t)}{\underset{a(t)}{\mathrm{self}(\|\mathrm{d}|_{Will} g(t)\mathrm{SCprt})^{d_r}}}\} \\ {}^{su}\mathrm{self}({}^{su}\overset{a(t)}{\underset{a(t)}{\mathrm{self}(\|\mathrm{d}|_{d_r} g(t)\mathrm{SCprt}))^{d_r}}} \end{array}\right\} \\ D \\ t_0 \end{array}$$

${}^{su}\overset{a(t)\qquad a(t)}{\underset{a(t)\qquad a(t)}{\mathrm{self}(\mathrm{SCprt}g(t)\|\mathrm{su}|_w g(t)\mathrm{SCprt})}}$ -internal energy of a living organism, q- a gap in the energy cocoon of a living organism, r-the position of the assemblage point d_r on the energy cocoon of a living organism, ${}^{su}\overset{a(t)}{\underset{a(t)}{\mathrm{self}(\mathrm{SCprt}g(t)\|\mathrm{su}|_w)_q}}$- energy prominences from the gap in the cocoon of a living organism, ${}^{su}\overset{a(t)}{\underset{a(t)}{\mathrm{self}(\mathrm{SCprt}g(t)\|\mathrm{su}|_{Will})_q}}$-external energy entering the gap in the cocoon of a living organism, ${}^{su}\overset{a(t)}{\underset{a(t)}{\mathrm{self}(\|\mathrm{su}|_{Will} g(t)\mathrm{SCprt})}}{}^{d_r}$ - a bundle of fibers of external energy self-capacities from outside the cocoon, collected at the point of assembly of the cocoon of a living organism at time t_0, ${}^{su}\overset{a(t)}{\underset{a(t)}{\mathrm{self}(\|\mathrm{su}|_{d_r} g(t)\mathrm{SCprt})^{d_r}}}$ a bundle of fibers of external energy self-capacities from inside the cocoon, collected at the point of assembly of the cocoon of a living organism in the same position r of the assemblage point d_r. d_r is the subject of identifying the energy fibers of the subtle energy of the Universe in position r both outside and inside the cocoon.

$$\text{Wwpgdo}(\text{r}, \text{a}(E_q)) = \text{SCprt} \underset{\substack{D\\ t_0}}{\left\{ \begin{array}{c} {}^{q}\; \overset{\{\}\quad a(t)\quad a(t)}{\underset{\{\}\quad a(t)\quad a(t)}{\text{self}(g(t)\text{SCprt}g(t)|||_{D}g(t)\text{SCprt})}} \\ \overset{\{\}\quad a(t)}{\underset{\{\}\quad a(t)}{\text{self}(g(t)\text{SCprt}g(t)|||_{w}))_q}} \end{array} \mathit{Sprt}_q \begin{array}{c} \overset{\{\}\quad a(t)}{\underset{\{\}\quad a(t)}{\text{self}(g(t)\text{SCprt}g(t)|||_{Will})_q}} \\ \overset{\{\}\quad a(t)\quad a(t)}{\underset{\{\}\quad a(t)\quad a(t)}{\text{self}(g(t)\text{SCprt}g(t)|||_{D}g(t)\text{SCprt})}} \end{array} ,\quad \mathit{Sprt} \begin{array}{c} \{\overset{a(t)}{\underset{a(t)}{\text{self}(|||_{Will}g(t)\text{SCprt})}}^{d_{r_i}}\} \\ \text{self}(\overset{n}{\underset{i=1}{V}}\ \overset{a(t)}{\underset{a(t)}{\text{self}(|||_{d_{r_i}}g(t)\text{SCprt}))}}^{d_{r_i}} \end{array} \right\}}$$

corresponds to “double”, $\overset{n}{\underset{i=1}{V}}$ is the logical addition with n objects, n ≤ 600,

$\text{self}(\overset{n}{\underset{i=1}{V}}\ \overset{a(t)}{\underset{a(t)}{\text{self}(|||_{d_{r_i}}g(t)\text{SCprt}))}}^{d_{r_i}}$ is the actualized potential energy of assemblage point positions.

$$\text{Wwpgddo}(\text{r}, \text{a}(E_q)) =$$

$$\text{SCprt} \underset{\substack{D\\ t_0}}{\left\{ \begin{array}{c} {}^{q_{\text{IIdI}}}\; \overset{\{\}\quad a(t)\quad a(t)}{\underset{\{\}\quad a(t)\quad a(t)}{\text{self}(g(t)\text{SCprt}g(t)||||\text{d}||_{D}g(t)\text{SCprt})}} \\ {}^{\text{IIdI}}\overset{\{\}\quad a(t)}{\underset{\{\}\quad a(t)}{\text{self}(g(t)\text{SCprt}g(t)||||\text{d}||_{w}))_q}} \end{array} \mathit{Sprt}_{q_{\text{IIdI}}} \begin{array}{c} {}^{\text{IIdI}}\overset{\{\}\quad a(t)}{\underset{\{\}\quad a(t)}{\text{self}(g(t)\text{SCprt}g(t)||||\text{d}||_{Will})_q}} \\ \overset{\{\}\quad a(t)\quad a(t)}{\underset{\{\}\quad a(t)\quad a(t)}{\text{self}(g(t)\text{SCprt}g(t)||||\text{d}||_{D}g(t)\text{SCprt})}} \end{array} ,\quad \mathit{Sprt} \begin{array}{c} \{{}^{\text{IIdI}}\overset{a(t)}{\underset{a(t)}{\text{self}(||||\text{d}||_{Will}g(t)\text{SCprt})}}^{d_{r_i}}\} \\ {}^{IIdI}\text{self}(\overset{n}{\underset{i=1}{V}}\ {}^{\text{IIdI}}\overset{a(t)}{\underset{a(t)}{\text{self}(||||\text{d}||_{d_{r_i}}g(t)\text{SCprt}))}}^{d_{r_i}} \end{array} \right\}}$$

corresponds to “double”, $\overset{n}{\underset{i=1}{V}}$ is the logical addition with n objects, n ≤ 600,

${}^{IIdI}\text{self}(\overset{n}{\underset{i=1}{V}}\ \overset{a(t)}{\underset{a(t)}{\text{self}(||||\text{d}||_{d_{r_i}}g(t)\text{SCprt}))}}^{d_{r_i}}$ is the actualized potential energy of assemblage point positions.

$$\text{SCprt} \underset{\substack{D\\ t_0}}{\left\{ \begin{array}{c} {}^{q}\;{}^{di}\overset{\{\}\quad a(t)\quad a(t)}{\underset{\{\}\quad a(t)\quad a(t)}{\text{self}(g(t)\text{SCprt}g(t)||\text{d}|_{D}g(t)\text{SCprt})}} \\ {}^{di}\overset{\{\}\quad a(t)}{\underset{\{\}\quad a(t)}{\text{self}(g(t)\text{SCprt}g(t)||\text{d}|_{w}))_q}} \end{array} \mathit{Sprt}_{q} \begin{array}{c} {}^{di}\overset{\{\}\quad a(t)}{\underset{\{\}\quad a(t)}{\text{self}(g(t)\text{SCprt}g(t)||\text{d}|_{Will})_q}} \\ {}^{di}\overset{\{\}\quad a(t)\quad a(t)}{\underset{\{\}\quad a(t)\quad a(t)}{\text{self}(g(t)\text{SCprt}g(t)||\text{d}|_{D}g(t)\text{SCprt})}} \end{array} ,\quad \mathit{Sprt} \begin{array}{c} \{{}^{di}\overset{a(t)}{\underset{a(t)}{\text{self}(||\text{d}|_{Will}g(t)\text{SCprt})}}^{d_{r_i}}\} \\ {}^{di}\text{self}(\overset{n}{\underset{i=1}{V}}\ {}^{di}\overset{a(t)}{\underset{a(t)}{\text{self}(||\text{d}|_{d_{r_i}}g(t)\text{SCprt}))}}^{d_{r_i}} \end{array} \right\}}$$

corresponds to “double”, $\overset{n}{\underset{i=1}{V}}$ is the logical addition with n objects, n ≤ 600,

${}^{di}\text{self}(\overset{n}{\underset{i=1}{V}}\ \overset{a(t)}{\underset{a(t)}{\text{self}(||\text{d}|_{d_{r_i}}g(t)\text{SCprt}))}}^{d_{r_i}}$ is the actualized potential energy of assemblage point positions.

$$\mathrm{SCprt}\left\{\underset{t_0}{\underset{D}{\begin{matrix} {}^{q}{}^{su}\mathrm{self}(\underset{\{\}}{\overset{\{\}}{g(t)}}\mathrm{SCprt}\underset{a(t)}{\overset{a(t)}{g(t)}}\|\mathrm{su}|_{D}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt}) & & {}^{su}\mathrm{self}(\underset{\{\}}{\overset{\{\}}{g(t)}}\mathrm{SCprt}\underset{a(t)}{\overset{a(t)}{g(t)}}\|\mathrm{su}|_{Will})_q & & \{{}^{su}\mathrm{self}(\|\mathrm{su}|_{Will}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt})^{d_{r_i}}\} \\ & Sprt_q & & ,\ Sprt & \\ {}^{su}\mathrm{self}(\underset{\{\}}{\overset{\{\}}{g(t)}}\mathrm{SCprt}\underset{a(t)}{\overset{a(t)}{g(t)}}\|\mathrm{su}|_{w}))_q & & {}^{su}\mathrm{self}(\underset{\{\}}{\overset{\{\}}{g(t)}}\mathrm{SCprt}\underset{a(t)}{\overset{a(t)}{g(t)}}\|\mathrm{su}|_{D}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt}) & & {}^{su}\mathrm{self}(\overset{n}{\underset{i=1}{V}}{}^{su}\mathrm{self}(\|\mathrm{su}|_{d_{r_i}}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt}))^{d_{r_i}} \end{matrix}}}\right\}$$

corresponds to “double”, $\overset{n}{\underset{i=1}{V}}$ is the logical addition with n objects, n ≤ 600,

${}^{su}\mathrm{self}(\overset{n}{\underset{i=1}{V}}\ \mathrm{self}(\|\mathrm{su}|_{d_{r_i}}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt}))^{d_{r_i}}$ is the actualized potential energy of assemblage point positions.

$$\mathrm{SCprt}\ \underset{\underset{a(t)}{\overset{a(t)}{|||g(t)\mathrm{SCprt}}}}{\overset{\underset{\{\}}{\overset{\{\}}{g(t)}}\mathrm{SCprt}\underset{a(t)}{\overset{a(t)}{g(t)}}|||}{g(t)}} \rightarrow \mathrm{SCprt}\ \underset{\underset{\mathrm{self}(\overset{n}{\underset{i=1}{V}}\ \mathrm{self}(|||_{d_{r_i}}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt}))^{d_{r_i}}}{\underset{g(t)}{\underset{a(t)}{\overset{a(t)}{|||g(t)\mathrm{SCprt}}}}}}{\overset{\underset{\{\}}{\overset{\{\}}{g(t)}}\mathrm{SCprt}\underset{a(t)}{\overset{a(t)}{g(t)}}|||}{g(t)}}$$

Double is $\mathrm{self}^2(\underset{\{\}}{\overset{\{\}}{g(t)}}\mathrm{SCprt}\underset{h}{\overset{E_{ex}}{g(t)}}|||\underset{h}{\overset{h}{g(t)}}\mathrm{SCprt}$, $h = \mathrm{self}(\overset{n}{\underset{i=1}{V}}\ \mathrm{self}(|||_{d_{r_i}}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt}))^{d_{r_i}}$.

Original is $\mathrm{self}^2(\underset{\{\}}{\overset{\{\}}{g(t)}}\mathrm{SCprt}\underset{h}{\overset{E_{ex}}{g(t)}}|||\underset{b}{\overset{b}{g(t)}}\mathrm{SCprt}$.

Energy of a living organism:

$$\mathrm{Wwgd}(\mathrm{r}, \mathrm{a}(E_q)) = \mathrm{Dprt}\underset{t_0}{\underset{D}{\left\{\begin{array}{cccccc}
{}^{q} & \underset{a(t)\quad a(t)}{\overset{a(t)\quad a(t)}{\mathrm{self}(\mathrm{SCprt}g(t)|||_D g(t))\mathrm{SCprt})}} & & \underset{a(t)}{\overset{a(t)}{\mathrm{self}(\mathrm{SCprt}g(t)|||_{Will})_q}} & & \underset{a(t)}{\overset{a(t)}{\{\mathrm{self}(|||_{Will}g(t)\mathrm{SCprt})^{d_r}\}}} \\
& D^{-1} & Dprt_q & D & ,\quad Dprt & D \\
& \underset{a(t)}{\overset{a(t)}{\mathrm{self}(\mathrm{SCprt}g(t)|||_w))_q}} & & \underset{a(t)\quad a(t)}{\overset{a(t)\quad a(t)}{\mathrm{self}(\mathrm{SCprt}g(t)|||_D g(t))\mathrm{SCprt})}} & & \underset{a(t)}{\overset{a(t)}{\mathrm{self}(|||_{d_r}g(t)\mathrm{SCprt})^{d_r}}}
\end{array}\right\}}}$$

$$\mathrm{Wwgdd}(\mathrm{r}, \mathrm{a}(E_q)) = \mathrm{Dprt}$$

$$\underset{t_0}{\underset{D}{\left\{\begin{array}{cccccc}
{}^{q} & \underset{a(t)\quad a(t)}{\overset{a(t)\quad a(t)}{{}_{di}\mathrm{self}(\mathrm{SCprt}g(t)\|\mathrm{d}|_D g(t))\mathrm{SCprt})}} & & \underset{a(t)}{\overset{a(t)}{{}^{di}\mathrm{self}(\mathrm{SCprt}g(t)\|\mathrm{d}|_{Will})_q}} & & \underset{a(t)}{\overset{a(t)}{\{{}^{di}\mathrm{self}(\|\mathrm{d}|_{Will}g(t)\mathrm{SCprt})^{d_r}\}}} \\
& D^{-1} & Dprt_q & D & ,\quad Dprt & D \\
& \underset{a(t)}{\overset{a(t)}{{}^{di}\mathrm{self}(\mathrm{SCprt}g(t)\|\mathrm{d}|_w))_q}} & & \underset{a(t)\quad a(t)}{\overset{a(t)\quad a(t)}{{}^{di}\mathrm{self}(\mathrm{SCprt}g(t)\|\mathrm{d}|_D g(t))\mathrm{SCprt})}} & & \underset{a(t)}{\overset{a(t)}{{}^{di}\mathrm{self}(\|\mathrm{d}|_{d_r}g(t)\mathrm{SCprt})^{d_r}}}
\end{array}\right\}}}$$

$$\mathrm{Wwgds}(\mathrm{r}, \mathrm{a}(E_q)) = \mathrm{Dprt}\underset{t_0}{\underset{D}{\left\{\begin{array}{cccccc}
{}^{q} & \underset{a(t)\quad a(t)}{\overset{a(t)\quad a(t)}{{}_{su}\mathrm{self}(\mathrm{SCprt}g(t)|||_D g(t))\mathrm{SCprt})}} & & \underset{a(t)}{\overset{a(t)}{{}^{su}\mathrm{self}(\mathrm{SCprt}g(t)|||_{Will})_q}} & & \underset{a(t)}{\overset{a(t)}{\{{}^{su}\mathrm{self}(|||_{Will}g(t)\mathrm{SCprt})^{d_r}\}}} \\
& D^{-1} & Dprt_q & D & ,\quad Dprt & D \\
& \underset{a(t)}{\overset{a(t)}{{}^{su}\mathrm{self}(\mathrm{SCprt}g(t)|||_w))_q}} & & \underset{a(t)\quad a(t)}{\overset{a(t)\quad a(t)}{{}^{su}\mathrm{self}(\mathrm{SCprt}g(t)|||_D g(t))\mathrm{SCprt})}} & & \underset{a(t)}{\overset{a(t)}{{}^{su}\mathrm{self}(|||_{d_r}g(t)\mathrm{SCprt})^{d_r}}}
\end{array}\right\}}}$$

Energy of a living organism:

$$\mathrm{Wwgdd}(\mathrm{r}, \mathrm{a}(E_q)) = \mathrm{Dprt}$$

$$\underset{t_0}{\underset{D}{\left\{\begin{array}{cccccc}
{}^{q} & \underset{a(t)\quad a(t)}{\overset{a(t)\quad a(t)}{{}_{IIdI}\mathrm{self}(\mathrm{SCprt}g(t)\|\mathrm{d}|_D g(t))\mathrm{SCprt})}} & & \underset{a(t)}{\overset{a(t)}{{}^{IIdI}\mathrm{self}(\mathrm{SCprt}g(t)\|\mathrm{d}|_{Will})_q}} & & \underset{a(t)}{\overset{a(t)}{\{{}^{IIdI}\mathrm{self}(\|\mathrm{d}|_{Will}g(t)\mathrm{SCprt})^{d_r}\}}} \\
& D^{-1} & Dprt_q & D & ,\quad Dprt & D \\
& \underset{a(t)}{\overset{a(t)}{{}^{IIdI}\mathrm{self}(\mathrm{SCprt}g(t)\|\mathrm{d}|_w))_q}} & & \underset{a(t)\quad a(t)}{\overset{a(t)\quad a(t)}{{}^{IIdI}\mathrm{self}(\mathrm{SCprt}g(t)\|\mathrm{d}|_D g(t))\mathrm{SCprt})}} & & \underset{a(t)}{\overset{a(t)}{{}^{IIdI}\mathrm{self}(\|\mathrm{d}|_{d_r}g(t)\mathrm{SCprt})^{d_r}}}
\end{array}\right\}}}$$

Energy of a living organism of a person:

$$\mathrm{Wwgdp}(\mathrm{r}, \mathrm{a}(E_q)) = \mathrm{Dprt}\underset{t_0}{\underset{D}{\left\{\begin{array}{cccccc}
{}^{q} & \underset{a(t)\quad a(t)}{\overset{a(t)\quad a(t)}{\mathrm{self}(\mathrm{SCprt}g(t)|||_D g(t))\mathrm{SCprt})}} & & \underset{a(t)}{\overset{a(t)}{\mathrm{self}(\mathrm{SCprt}g(t)|||_{Will})_q}} & & \underset{a(t)}{\overset{a(t)}{\{\mathrm{self}(|||_{Will}g(t)\mathrm{SCprt})^{d_r}\}}} \\
& D^{-1} & Dprt_q & D & ,\quad Dprt & D \\
& \underset{a(t)}{\overset{a(t)}{\mathrm{self}(\mathrm{SCprt}g(t)|||_w))_q}} & & \underset{a(t)\quad a(t)}{\overset{a(t)\quad a(t)}{\mathrm{self}(\mathrm{SCprt}g(t)|||_D g(t))\mathrm{SCprt})}} & & \underset{a(t)}{\overset{a(t)}{\mathrm{self}(|||_{d_r}g(t)\mathrm{SCprt})^{d_r}}}
\end{array}\right\}}}$$

$$\mathrm{Dprt}\left\{\begin{array}{ccc} {}^{q}\,{}^{di}\mathrm{self}(\underset{\{\}}{\overset{\{\}}{g(t)}}\mathrm{SCprt}\underset{a(t)}{\overset{a(t)}{g(t)}}\|\mathrm{d}|_{D}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt})) & {}^{di}\mathrm{self}(\underset{\{\}}{\overset{\{\}}{g(t)}}\mathrm{SCprt}\underset{a(t)}{\overset{a(t)}{g(t)}}\|\mathrm{d}|_{Will})_{q} & \\ & {}_{q} & \{{}^{di}\mathrm{self}(\|\mathrm{d}|_{Will}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt})^{d_r}\} \\ D^{-1}\quad Dprt_{q} & D & ,\quad Dprt \\ {}^{di}\mathrm{self}(\underset{\{\}}{\overset{\{\}}{g(t)}}\mathrm{SCprt}\underset{a(t)}{\overset{a(t)}{g(t)}}\|\mathrm{d}|_{w}))_{q} & {}^{di}\mathrm{self}(\underset{\{\}}{\overset{\{\}}{g(t)}}\mathrm{SCprt}\underset{a(t)}{\overset{a(t)}{g(t)}}\|\mathrm{d}|_{D}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt}) & {}^{di}\mathrm{self}({}^{di}\mathrm{self}(\|\mathrm{d}|_{d_r}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt}))^{d_r} \end{array}\right\}$$

$$\begin{array}{c} D \\ t_0 \end{array}$$

${}^{di}\mathrm{self}(\mathrm{SCprt}\underset{a(t)}{\overset{a(t)}{g(t)}}\|\mathrm{d}|_{w}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt})$ -internal energy of a living organism, q- a gap in the energy cocoon of a living organism, r-the position of the assemblage point d_r on the energy cocoon of a living organism, ${}^{di}\mathrm{self}(\mathrm{SCprt}\underset{a(t)}{\overset{a(t)}{g(t)}}\|\mathrm{d}|_{w})_{q}$- energy prominences from the gap in the cocoon of a living organism, ${}^{di}\mathrm{self}(\mathrm{SCprt}\underset{a(t)}{\overset{a(t)}{g(t)}}\|\mathrm{d}|_{Will})_{q}$-external energy entering the gap in the cocoon of a living organism, ${}^{di}\mathrm{self}(\|\mathrm{d}|_{Will}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt})^{d_r}$ - a bundle of fibers of external energy self-capacities from outside the cocoon, collected at the point of assembly of the cocoon of a living organism at time t_0, ${}^{di}\mathrm{self}(\|\mathrm{d}|_{d_r}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt})^{d_r}$ a bundle of fibers of external energy self-capacities from inside the cocoon, collected at the point of assembly of the cocoon of a living organism in the same position r of the assemblage point d_r. d_r is the subject of identifying the energy fibers of the subtle energy of the Universe in position r both outside and inside the cocoon.

Energy of a living organism of a person:

$$\underset{\substack{D\\ t_0}}{\mathrm{Dprt}\left\{\begin{array}{c}{}^{q}\;{}^{IIdI}\underset{\{\}\quad a(t)\quad a(t)}{\overset{\{\}\quad a(t)\quad a(t)}{\mathrm{self}(g(t)\mathrm{SCprt}g(t)||||\mathrm{d}||_{D}g(t)\mathrm{SCprt})}}\\ D^{-1}\\ {}^{IIdI}\underset{\{\}\quad a(t)}{\overset{\{\}\quad a(t)}{\mathrm{self}(g(t)\mathrm{SCprt}g(t)||||\mathrm{d}||_{w}))_{q}}}\end{array}\; Dprt_{q}\begin{array}{c}{}^{IIdI}\underset{\{\}\quad a(t)}{\overset{\{\}\quad a(t)}{\mathrm{self}(g(t)\mathrm{SCprt}g(t)||||\mathrm{d}||_{Will})_{q}}}\\ {}^{IIdI}\underset{\{\}\quad a(t)\quad a(t)}{\overset{\{\}\quad a(t)\quad a(t)}{\mathrm{self}(g(t)\mathrm{SCprt}g(t)||||\mathrm{d}||_{D}g(t)\mathrm{SCprt})}}\end{array},\; Dprt\begin{array}{c}\{{}^{IIdI}\underset{a(t)}{\overset{a(t)}{\mathrm{self}(||||\mathrm{d}||_{Will}g(t)\mathrm{SCprt})^{d_r}}}\}\\ {}^{IIdI}\underset{a(t)}{\overset{a(t)}{\mathrm{self}({}^{IIdI}\mathrm{self}(||||\mathrm{d}||_{d_r}g(t)\mathrm{SCprt}))^{d_r}}}\end{array}\right\}}$$

${}^{IIdI}\mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}|||\,|d|\,|_{w}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})$ -internal energy of a living organism, q- a gap in the energy cocoon of a living organism, r-the position of the assemblage point $\mathrm{d_r}$ on the energy cocoon of a living organism, ${}^{IIdI}\mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}|||\,|d|\,|_{w})_{q}$- energy prominences from the gap in the cocoon of a living organism, ${}^{IIdI}\mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}|||\,|d|\,|_{Will})_{q}$-external energy entering the gap in the cocoon of a living organism, ${}^{IIdI}\mathrm{self}(|||\,|d|\,|_{Will}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})^{d_r}$ - a bundle of fibers of external energy self-capacities from outside the cocoon, collected at the point of assembly of the cocoon of a living organism at time t_0, ${}^{IIdI}\mathrm{self}(|||\,|d|\,|_{d_r}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})^{d_r}$ a bundle of fibers of external energy self-capacities from inside the cocoon, collected at the point of assembly of the cocoon of a living organism in the same position r of the assemblage point $\mathrm{d_r}$. $\mathrm{d_r}$ is the subject of identifying the energy fibers of the subtle energy of the Universe in position r both outside and inside the cocoon.

$$\underset{\substack{D\\ t_0}}{\mathrm{Dprt}\left\{\begin{array}{c}{}^{q}\;{}^{su}\underset{\{\}\quad a(t)\quad a(t)}{\overset{\{\}\quad a(t)\quad a(t)}{\mathrm{self}(g(t)\mathrm{SCprt}g(t)||\mathrm{d}|_{D}g(t)\mathrm{SCprt})}}\\ D^{-1}\\ {}^{su}\underset{\{\}\quad a(t)}{\overset{\{\}\quad a(t)}{\mathrm{self}(g(t)\mathrm{SCprt}g(t)||\mathrm{d}|_{w}))_{q}}}\end{array}\; Dprt_{q}\begin{array}{c}{}^{su}\underset{\{\}\quad a(t)}{\overset{\{\}\quad a(t)}{\mathrm{self}(g(t)\mathrm{SCprt}g(t)||\mathrm{d}|_{Will})_{q}}}\\ {}^{su}\underset{\{\}\quad a(t)\quad a(t)}{\overset{\{\}\quad a(t)\quad a(t)}{\mathrm{self}(g(t)\mathrm{SCprt}g(t)||\mathrm{d}|_{D}g(t)\mathrm{SCprt})}}\end{array},\; Dprt\begin{array}{c}\{{}^{su}\underset{a(t)}{\overset{a(t)}{\mathrm{self}(||\mathrm{d}|_{Will}g(t)\mathrm{SCprt})^{d_r}}}\}\\ {}^{su}\underset{a(t)}{\overset{a(t)}{\mathrm{self}({}^{su}\mathrm{self}(||\mathrm{d}|_{d_r}g(t)\mathrm{SCprt}))^{d_r}}}\end{array}\right\}}$$

$^{su}\mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}||\mathrm{su}|_{w}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})$ -internal energy of a living organism, q- a gap in the energy cocoon of a living organism, r-the position of the assemblage point d_r on the energy cocoon of a living organism, $^{su}\mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}||\mathrm{su}|_{w})_q$- energy prominences from the gap in the cocoon of a living organism, $^{su}\mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}||\mathrm{su}|_{Will})_q$-external energy entering the gap in the cocoon of a living organism, $^{su}\mathrm{self}(||\mathrm{su}|_{Will}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})^{d_r}$ - a bundle of fibers of external energy self-capacities from outside the cocoon, collected at the point of assembly of the cocoon of a living organism at time t_0, $^{su}\mathrm{self}(||\mathrm{su}|_{d_r}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})^{d_r}$ a bundle of fibers of external energy self-capacities from inside the cocoon, collected at the point of assembly of the cocoon of a living organism in the same position r of the assemblage point d_r. d_r is the subject of identifying the energy fibers of the subtle energy of the Universe in position r both outside and inside the cocoon.

$$\mathrm{Dprt}\underset{t_0}{\underset{D}{\left\{\begin{array}{ccccc} ^{q}\,\mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}|||_D\overset{a(t)}{\underset{a(t)}{g(t)}})\mathrm{SCprt}) & & \mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}|||_{Will})_q & & \{\mathrm{self}(|||_{Will}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})^{d_r}\} \\ D^{-1} & Dprt_q & D & ,\ Dprt & D \\ \mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}|||_w))_q & & \mathrm{self}(\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}|||_D\overset{a(t)}{\underset{a(t)}{g(t)}})\mathrm{SCprt}) & & \mathrm{self}(\overset{n}{\underset{i=1}{V}}\mathrm{self}(|||_{d_{r_i}}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}))^{d_{r_i}} \end{array}\right\}}}$$

corresponds to “double”, $\bigvee\limits_{i=1}^{n}$ is the logical addition with n objects, n ≤ 600,

$\mathrm{self}(\bigvee\limits_{i=1}^{n}\ \mathrm{self}(|||_{d_{r_i}}\overset{a(t)}{\underset{a(t)}{g}}(t)\mathrm{SCprt}))^{d_{r_i}}$ is the actualized potential energy of assemblage point positions.

$$\mathrm{Dprt}\left\{\begin{array}{ccccc} {}^{q}{}_{\mathrm{IIdI}}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}|||_{D}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})) & & {}^{\mathrm{IIdI}}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}||||\mathrm{d}||_{Will})_{q} & & \{{}^{\mathrm{IIdI}}\mathrm{self}(||||\mathrm{d}||_{Will}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})^{d_{r_i}}\} \\ D^{-1} & Dprt_{q_{\mathrm{IIdI}}} & D & ,\ Dprt & \\ {}^{\mathrm{IIdI}}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}||||\mathrm{d}||_{w}))_{q} & & {}^{\mathrm{IIdI}}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}||||\mathrm{d}||_{D}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}) & & {}^{IIdI}\mathrm{self}(\bigvee\limits_{i=1}^{n}{}^{\mathrm{IIdI}}\mathrm{self}(||||\mathrm{d}||_{d_{r_i}}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}))^{d_{r_i}} \end{array}\right\}$$

$$\underset{t_0}{D}$$

corresponds to “double”, $\bigvee\limits_{i=1}^{n}$ is the logical addition with n objects, n ≤ 600,

${}^{IIdI}\mathrm{self}(\bigvee\limits_{i=1}^{n}\ \mathrm{self}(||||\mathrm{d}||_{d_{r_i}}\overset{a(t)}{\underset{a(t)}{g}}(t)\mathrm{SCprt}))^{d_{r_i}}$ is the actualized potential energy of assemblage point positions.

$$\mathrm{Dprt}\left\{\begin{array}{ccccc} {}^{q}{}_{di}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}||\mathrm{d}|_{D}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}) & & {}^{su}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}||\mathrm{su}|_{Will})_{q} & & \{{}^{di}\mathrm{self}(||\mathrm{d}|_{Will}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})^{d_{r_i}}\} \\ D^{-1} & Dprt_{q} & D & ,\ Dprt & \\ {}^{su}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}||\mathrm{su}|_{w}))_{q} & & {}^{su}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}||\mathrm{su}|_{D}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}) & & {}^{di}\mathrm{self}(\bigvee\limits_{i=1}^{n}{}^{di}\mathrm{self}(||\mathrm{d}|_{d_{r_i}}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}))^{d_{r_i}} \end{array}\right\}$$

$$\underset{t_0}{D}$$

corresponds to “double”, $\bigvee\limits_{i=1}^{n}$ is the logical addition with n objects, n ≤ 600,

${}^{di}\mathrm{self}(\bigvee\limits_{i=1}^{n}\ \mathrm{self}(||\mathrm{d}|_{d_{r_i}}\overset{a(t)}{\underset{a(t)}{g}}(t)\mathrm{SCprt}))^{d_{r_i}}$ is the actualized potential energy of assemblage point positions.

$$\mathrm{Dprt}\left\{\begin{array}{ccccc} {}^{q}{}_{su}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}||\mathrm{su}|_{D}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}) & & {}^{su}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}||\mathrm{su}|_{Will})_{q} & & \{{}^{su}\mathrm{self}(||\mathrm{su}|_{Will}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})^{d_{r_i}}\} \\ D^{-1} & Dprt_{q} & D & ,\ Dprt & \\ {}^{su}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}||\mathrm{su}|_{w}))_{q} & & {}^{su}\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}||\mathrm{su}|_{D}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}) & & {}^{su}\mathrm{self}(\bigvee\limits_{i=1}^{n}{}^{su}\mathrm{self}(||\mathrm{su}|_{d_{r_i}}\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt}))^{d_{r_i}} \end{array}\right\}$$

$$\underset{t_0}{D}$$

corresponds to “double”, $\bigvee_{i=1}^{n}$ is the logical addition with n objects, n ≤ 600,

${}^{su}\text{self}(\bigvee_{i=1}^{n}\text{self}(\|\text{su}|_{d_{r_i}}\overset{a(t)}{\underset{a(t)}{g}}(t)\text{SCprt}))^{d_{r_i}}$ is the actualized potential energy of assemblage point positions.

Remark. Entanglement of people in one assemblage point position (perceptually). Entanglements correspond to self-level.

May try to consider living object D as

${}^{g(t)}\text{self}(\text{Sprt}\overset{a(t)}{\underset{a(t)}{g}}(t)\|\|_D\text{Sprt}\overset{E(t)}{\underset{E(t)}{g}}(t))$, where Sprt$\overset{a(t)}{\underset{a(t)}{g}}(t)$ is usual material part of D, Sprt$\overset{E(t)}{\underset{E(t)}{g}}(t)$ is rest part of D from subtle energies, Sprt$\overset{E(t)}{\underset{E(t)}{g}}(t)$ = (Sprt$\overset{a(t)}{\underset{a(t)}{g}}(t))^{-1}$ = $\overset{a(t)}{\underset{a(t)}{g}}(t)$Sprt = ${}^{g(t)}$oself($a(t)$). Then E(t) = ${}^{g(t)}$oself(${}^{g(t)}$oself($a(t)$)) has from 1 to 6 layers depending on living object type, for bacterium with two DNA – 2 layers, for bacterium with two DNA – 1 etc. We have: the first surface layer has 1 assemblage point position, the second layer has 3 assemblage point positions etc.

A living object D is

${}^{g(t)}\text{self}((\overset{\{\}}{\underset{\{\}}{g(t)}}\text{SCprt}\overset{a(t)}{\underset{a(t)}{g}}(t) + \overset{b(t)}{\underset{b(t)}{g}}(t)\text{SCprt}\overset{b(t)}{\underset{b(t)}{g}}(t))\|\|_D(\overset{a(t)}{\underset{a(t)}{g}}(t)\text{SCprt}+ \overset{a(t)}{\underset{a(t)}{g}}(t)\text{SCprt}\overset{\{\}}{\underset{\{\}}{g}}(t)))$ (or by Self(Dprt$\overset{a}{\underset{a}{Q}}\|\|_B\overset{a}{\underset{a}{Q}}^{-1}$Dprt)). self($\overset{\{\}}{\underset{\{\}}{g(t)}}$SCprt$\overset{a(t)}{\underset{a(t)}{g}}(t)\|\|_D$ (→ $\overset{\{\}}{\underset{\{\}}{g(t)}}$SCprt$\overset{a(t)}{\underset{d(t)}{g}}(t)$) corresponds to will of this object, ${}^{g(t)}$self($\|\|_D\overset{a(t)}{\underset{a(t)}{g}}(t)$SCprt) (→ $\overset{d(t)}{\underset{a(t)}{g}}(t)$)SCprt) corresponds to assemblage point of this object, $^{g(t)}\text{self}((\overset{b(t)}{\underset{b(t)}{g}}(t)\text{SCprt}\overset{b(t)}{\underset{b(t)}{g}}(t))|||_D\overset{a(t)}{\underset{a(t)}{g}}(t)\text{SCprt})$ is “double”. Assemblage point position has form $\overset{\{\}}{\underset{\{\}}{g}}(t)\text{SCprt}(t)$, an assemblage point has form $\overset{\{\}}{\underset{\overline{d_n}(t)}{g(t)}}\ \text{SCprt}(t)$, that corresponds to n-th position of its.

$$^{g(t)}\text{self}((\overset{b(t)}{\underset{b(t)}{g}}(t)\text{SCprt}\overset{b(t)}{\underset{b(t)}{g}}(t))|||_D\overset{a(t)}{\underset{a(t)}{g}}(t)\text{SCprt}\overset{\{\}}{\underset{\{\}}{g}}(t))$$ is “double”.

$\overset{a(t)}{\underset{a(t)}{g}}(t)\text{SCprt}\overset{\{\}}{\underset{\{\}}{g}}(t)$ is “double” and consists from potential self-energy of Assemblage point positions.

2 variants of creation of double:

$$1)\ \overset{a(t)}{\underset{a(t)}{g}}(t)\text{SCprt}\overset{a(t)}{\underset{a(t)}{g}}(t)\rightarrow\overset{a(t)}{\underset{a(t)}{g}}(t)\text{SCprt}\overset{a(t)}{\underset{a(t)}{g}}(t)+\overset{\{\}}{\underset{a(t)}{g}}(t)\text{SCprt}\overset{\{\}}{\underset{a(t)}{g}}(t)$$

$$2)\ \mathrm{SCprt}\underset{a(t)}{\overset{a(t)}{g(t)}}|||\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt}\underset{\{\}}{\overset{\{\}}{g(t)}} \rightarrow \mathrm{SCprt}\underset{a(t)}{\overset{a(t)}{g(t)}}|||\left(\begin{array}{lll} a(t) & \{\} & \\ g(t)\mathrm{SCprt}g(t) & & \\ a(t) & \{\} & \{\} \\ \quad g(t) & & \mathrm{SCprt}g(t) \\ a(t) & \{\} & \{\} \\ g(t)\mathrm{SCprt}g(t) & & \\ a(t) & \{\} & \\ \quad a(t) & \quad\{\} & \\ \quad g(t)\mathrm{SCprt}g(t) & & \\ \quad a(t) & \quad\{\} & \end{array}\right) = \mathrm{SCprt}$$

$$\underset{a(t)}{\overset{a(t)}{g(t)}}|||\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt}\underset{\{\}}{\overset{\{\}}{g(t)}} + \left(\begin{array}{lll} a(t) & \{\} & \\ g(t)\mathrm{SCprt}g(t) & & \\ a(t) & \{\} & \{\} \\ \quad g(t) & & \mathrm{SCprt}g(t) \\ a(t) & \{\} & \{\} \\ g(t)\mathrm{SCprt}g(t) & & \\ a(t) & \{\} & \\ & \varnothing & \end{array}\right)(*),$$

fire from within for the magician generates from (*): $\begin{pmatrix} Q \\ \varnothing \\ \varnothing \end{pmatrix}$,

$$Q = |||_{\forall a(t)_{g(t)}}\left(\begin{array}{lll} a(t) & \{\} & \\ g(t)\mathrm{SCprt}g(t) & & \\ a(t) & \{\} & \{\} \\ \quad g(t) & & \mathrm{SCprt}g(t) \\ a(t) & \{\} & \{\} \\ g(t)\mathrm{SCprt}g(t) & & \\ a(t) & \{\} & \end{array}\right)\forall a(t)_{g(t)} \text{ for this magician.}$$

May try to consider an inorganic being D as

$${}^{g(t)}\mathrm{self}(\mathrm{SCprt}\underset{\{\}}{\overset{\{\}}{g(t)}}|||_D\underset{a(t)}{\overset{a(t)}{g(t)}})\mathrm{SCprt}.$$

May try to consider an inorganic being W into which magicians turn

as

$^{g(t)}\mathrm{self}^2(^{g(t)}\mathrm{self}(\mathrm{SCprt}g(t)\underset{\{\}}{\overset{\{\}}{|||_D}}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt}))$, that is "cocoon stripe" twisted into a "shell".

May consider

$$a_2(t) = \mathrm{SCprt}\,\underset{a_1(t)}{\overset{a_1(t)}{g(t)}}\,|||_B\,\underset{a_1(t)}{\overset{a_1(t)}{g(t)}}\,\mathrm{SCprt}, \ldots, a_{n+1}(t) = \mathrm{SCprt}\,\underset{a_n(t)}{\overset{a_n(t)}{g(t)}}\,|||_B\,\underset{a_n(t)}{\overset{a_n(t)}{g(t)}}\,\mathrm{SCprt}, \ldots$$

$$a_2(t) = \mathrm{Dprt}\underset{a_1(t)}{\overset{a_1(t)}{g^{-1}(t)}}|||_B\,\underset{a_1(t)}{\overset{a_1(t)}{g(t)}}\,\mathrm{Dprt}, \ldots, a_{n+1}(t) = \mathrm{Dprt}\underset{a_n(t)}{\overset{a_n(t)}{g^{-1}(t)}}|||_B\,\underset{a_n(t)}{\overset{a_n(t)}{g(t)}}\,\mathrm{Dprt}, \ldots$$

parelf(SCprt$\underset{a_1(t)}{\overset{a_1(t)}{g(t)}}$ pa$|||_B$ $\underset{a_1(t)}{\overset{a_1(t)}{g(t)}}$),

parelf(SCprt$\underset{a_1(t)}{\overset{a_1(t)}{g(t)}}$ pa$|||_B$ is Will,

parelf(pa$|||_B$ $\underset{a_1(t)}{\overset{a_1(t)}{g(t)}}$) is Assemblage point.

2.4 Elements of s-morphology for bacteriums

For **bacterium B**: $\underset{a}{\overset{a}{g}}\mathrm{SCprt}\underset{a}{\overset{a}{g}}$ (or Dprt$\underset{a}{\overset{a}{Q}}|||_B\underset{a}{\overset{a}{Q^{-1}}}D$prt []): 1) fungi $\underset{-a}{\overset{-a}{g}}$ SCprt $\underset{-a}{\overset{-a}{g}}$ by antibiotics 2) poisons SCprt $\underset{-a}{\overset{-a}{g}}$ 3) by $|||^{-1}$ etc.

2.5 Elements of s-morphology for viruses

For virus

$$\overset{\{\}}{\underset{\{\}}{g(t)}}\,\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}} = {}^{g(t)}\mathrm{self}(\mathrm{SCprt}\overset{\{\}}{\underset{\{\}}{g(t)}}|||_D\overset{a(t)}{\underset{a(t)}{g(t)}})\mathrm{SCprt}$$

For virus $\overset{\{\}}{\underset{\{\}}{g}}\,\mathrm{Sprt}\overset{b}{\underset{b}{g}}$ in cells $\overset{a}{\underset{a}{g}}\mathrm{SCprt}\overset{a}{\underset{a}{g}}$, i.e. $\overset{a}{\underset{a}{g}}\mathrm{SCprt}\;\overset{a+b}{\underset{a+b}{g}}$: 1) other virus $\overset{a}{\underset{a}{g}}\mathrm{SCprt}\;\overset{a-b}{\underset{a-b}{g}}$, for example bacteriophage 2) by $|||^{-1}$ 3) by pa||| etc.

DNA of viruses&their shell = $\overset{\{\}}{\underset{\{\}}{g}}\,\mathrm{SCprt}\overset{a}{\underset{a}{g}}$ is equation for a

For living organism $\mathrm{SCprt}\;\overset{\overset{a}{\underset{a}{g}}\mathrm{SCprt}\overset{a}{\underset{a}{g}}}{\underset{\overset{a}{\underset{a}{g}}\mathrm{SCprt}\overset{a}{\underset{a}{g}}}{g}}$.

Let's designate living energy fibers by f-f. 48 types of f-f are in energetic space. Each type has own kinds of fibers f-f. Let's designate bundles of emanations that provide energy to living organisms by b-f. 3 types of b-f are in energetic space.They have structure $\overset{a}{\underset{a}{g}}\mathrm{SCprt}\overset{a}{\underset{a}{g}}$-type. Analogues Will and spirits have the same structure. May consider

f-f organs, process, b-f organs, process, 3 of the basic templates:

$\overset{a}{\underset{a}{g}}\mathrm{SCprt}\overset{a}{\underset{a}{g}}$, $\mathrm{SCprt}\overset{a}{\underset{a}{g}}$, $\overset{a}{\underset{a}{g}}\mathrm{SCprt}$, $a\mathrm{pa}|||a$, ${}^{g}\mathrm{paself}(a)$, $\mathrm{parelf}(a)$, $\mathrm{singelf}(a)$, etc

May consider e-morphology:

a) Self-type morphology
b) |||-type morphology
c) pa|||-type morphology
d) Etc

May consider DNA as (program) operator. We can use any objects, actions instead 0 and1, in particular,(program) operator by DNA.

DNA = $\overset{\{\ \}}{\underset{\{\ \}}{g}}\,\mathrm{SCprt}\overset{a}{\underset{a}{g}}$ is equation for a. $a = \{\ \}\mathrm{lst}(\mathrm{DNA})$ is inverse operator for $\overset{\{\ \}}{\underset{\{\ \}}{g}}\,\mathrm{SCprt}\overset{a}{\underset{a}{g}}$.

Remark. Twins are one whole in the womb. When they separate, a twin with a left-handed energy type separates from the other with a right-handed energy type.

Remark. May consider hierarchy $\begin{pmatrix} |||CNS \\ CNS \\ NS \\ the\ rest\ of\ the\ physical\ body \end{pmatrix}$, CNS is $|||NS$, NS is $|||($$the\ rest\ of\ the\ physical\ body$$)$.

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B. GrSprt – elements and Their Applications

B.1 GrSprt – elements, self-type GrSprt - structures

Introduction.

We consider expression

$$\begin{array}{ccccccccccc} C_1 & p_1 & C_2\cdots & p_m & C_{m+1} & & A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ h_{01} & h_1 & h_{02}\cdots & h_m & h_{0(m+1)} & \mathrm{GrSprt} & v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ D_1 & f_1 & D_2\cdots & f_m & D_{m+1} & & B_1 & r_1 & B_2\cdots & r_n & B_{n+1} \end{array} (*_{B.1.1})$$

where A_1 fits into B_1 with type of containment v_{01}, A_2 fits into B_2 with type of containment v_{02}, …, A_n fits into B_n with type of containment $v_{0(n+1)}$, D_1 is forced out of C_1 with type of expelling h_{01}, D_2 is forced out of C_2 with type of expelling h_{02}, …, D_m is forced out of C_m with type of expelling $h_{0(m+1)}$ simultaneously. Here are interactions between A_i and A_{i+1} by g_i, between B_i and B_{i+1} by r_i, i = 1, 2, …, n, between C_j and C_{j+1} by p_j, between D_j and D_{j+1} by f_j, j = 1, 2, …, m. A_1, B_1, A_2, B_2, …, A_n, B_n, D_1, C_1, D_2, C_2, …, D_m, C_m may be by fuzzy sets. The result of this process will be described by the expression

$$\begin{array}{ccccccccccc} C_1 & p_1 & C_2\cdots & p_m & C_{m+1} & & A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ h_{01} & h_1 & h_{02}\cdots & h_m & h_{0(m+1)} & \mathrm{GrSrt} & v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ D_1 & f_1 & D_2\cdots & f_m & D_{m+1} & & B_1 & r_1 & B_2\cdots & r_n & B_{n+1} \end{array} \ (*_{B.1.2}).$$

If A_1, B_1, A_2, B_2, …, A_n, B_n, D_1, C_1, D_2, C_2, …, D_m, C_m are taken as fuzzy sets, then we will call $(*_{B.1.1})$ a parallel dynamic fuzzy set. The need $(*_{B.1.1})$ arose to describe processes in networks. Threshold element PrSCprt –

$$\begin{array}{ccccccccccc} B_1 & r_1 & B_2\ \cdots & r_m & B_{n+1} & & \{ax\}_1 & g_1 & \{ax\}_2\cdots & g_n & \{ax\}_{n+1} \\ h_{01} & h_1 & h_{02}\ \cdots & h_m & h_{0(m+1)} & \mathrm{GrSprt} & v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ \{qy\}_1 & f_1 & \{qy\}_2\cdots & f_m & \{qy\}_{n+1} & & B_1 & r_1 & B_2\ \cdots & r_n & B_{n+1} \end{array}$$

, B_1, B_2, …, B_n - artificial neurons of type PrSCprt (designation - mnPrSCprt) , $\tilde{x}=(x_1|\mu_{\tilde{x}}(x_1), x_2|\mu_{\tilde{x}}(x_2)|, \ldots, x_n|\mu_{\tilde{x}}(x_n)|)$ are the fuzzy values of the initial signals, $a=(a_1,a_2,\ldots,a_n)$ are the weights of PrSCprt-synapses and $\tilde{y}=(y_1|\mu_{\tilde{y}}(y_1), y_2|\mu_{\tilde{y}}(y_2)|, \ldots,$

$y_n|\mu_{\tilde{y}}(y_n)|)$ are the fuzzy values of the output signals $\{qy\}$ with weights $q=(q_1,q_2,\ldots,q_n)$. It can be considered a simpler version of the Parallel dynamic set

$$\begin{array}{llllll} & A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ \text{GrSprt} & v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}(**_{\text{B.1.1}}), \\ & B_1 & r_1 & B_2\cdots & r_n & B_{n+1} \end{array}$$

where A_1 fits into B_1 with type of containment v_{01}, A_2 fits into B_2 with type of containment v_{02}, …, A_n fits into B_n with type of containment $v_{0(n+1)}$ simultaneously. Here are interactions between A_i and A_{i+1} by g_i, between B_i and B_{i+1} by r_i, i = 1, 2, …, n, the result of this process will be described by the expression

$$\begin{array}{lllllll} & A_1 & g_1 & A_2\cdots & g_n & A_{n+1} & \\ \text{GrSrt} & v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} & (**_{\text{B.1.2}}) \\ & B_1 & r_1 & B_2\cdots & r_n & B_{n+1} & \end{array}$$

or

$$\begin{array}{lllll} C_1 & p_1 & C_2\cdots & p_m & C_{m+1} \\ h_{01} & h_1 & h_{02}\cdots & h_m & h_{0(m+1)}\text{GrSprt } (***_{\text{B.1.1}}), \\ D_1 & f_1 & D_2\cdots & f_m & D_{m+1} \end{array}$$

where D_1 is forced out of C_1 with type of expelling h_{01}, D_2 is forced out of C_2 with type of expelling h_{02}, …, D_m is forced out of C_m with type of expelling $h_{0(m+1)}$ simultaneously. Here are interactions between C_j and C_{j+1} by p_j, between D_j and D_{j+1} by f_j, j = 1, 2, …, m., the result of this process will be described by the expression

$$\begin{array}{lllll} C_1 & p_1 & C_2\cdots & p_m & C_{m+1} \\ h_{01} & h_1 & h_{02}\cdots & h_m & h_{0(m+1)}\text{GrSrt } (***_{\text{B.1.2}}) \\ D_1 & f_1 & D_2\cdots & f_m & D_{m+1} \end{array}$$

We consider the measure:

$$_{(R)}{}^{**}(R)= \frac{\mu(A_1)*\mu(A_2)*\ldots*\ \mu(A_{n+1})*\breve{v}_{01}*\breve{v}_{02}*\ldots*\breve{v}_{0(n+1)}*\breve{v}_1*\breve{v}_2*\ldots*\breve{v}_n}{\mu(D_1)*\mu(D_2)*\ldots*\ \mu(D_{n+1})*\breve{h}_{01}*\breve{h}_{02}*\ldots*\breve{h}_{0(n+1)}*\breve{h}_1*\breve{h}_2*\ldots*\breve{h}_n},$$

where

$$\begin{array}{lllllllllll} & C_1 & p_1 & C_2\cdots & p_m & C_{m+1} & A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ R = & h_{01} & h_1 & h_{02}\cdots & h_m & h_{0(m+1)}\text{GrSprt} & v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}, \\ & D_1 & f_1 & D_2\cdots & f_m & D_{m+1} & C_1 & p_1 & C_2\cdots & r_n & B_{n+1} \end{array}$$

$m(A_i)$,$m(D_i)$–usual measures of sets A_i, D_i , $\breve{v}_{0i} = \mu(v_{0i})$, $\breve{v}_i = \mu(v_i)$, $\breve{h}_{0i} = \mu(h_{0i})$, $\breve{h}_i = \mu(h_i)$–measures of corresponding actions with own types, (i = 1, 2, …, n).

Remark 0. One can consider some generalization for ($*_{B.1.1}$) , ($*_{B.1.2}$):

$$\begin{array}{cccccccccccc} q_1(C_1) & p_1 & q_2(C_2)\cdots & p_m & q_{m+1}(C_{m+1}) & & A_1 & g_1 & A_2 \;\cdots & g_n & A_{n+1} & \\ h_{01} & h_1 & h_{02} \;\cdots & h_m & h_{0(m+1)} & \text{GrSprt} & v_{01} & v_1 & v_{02} \;\cdots & v_n & v_{0(n+1)} & , \\ D_1 & f_1 & D_2 \;\cdots & f_m & D_{m+1} & & w_1(B_1) & r_1 & w_2(B_2)\cdots & r_n & w_{n+1}(B_{n+1}) & \end{array}$$

$$\begin{array}{cccccccccccc} q_1(C_1) & p_1 & q_2(C_2)\cdots & p_m & q_{m+1}(C_{m+1}) & & A_1 & g_1 & A_2 \;\cdots & g_n & A_{n+1} & \\ h_{01} & h_1 & h_{02} \;\cdots & h_m & h_{0(m+1)} & \text{GrSrt} & v_{01} & v_1 & v_{02} \;\cdots & v_n & v_{0(n+1)} & , \\ D_1 & f_1 & D_2 \;\cdots & f_m & D_{m+1} & & w_1(B_1) & r_1 & w_2(B_2)\cdots & r_n & w_{n+1}(B_{n+1}) & \end{array}$$

where A_1 fits into B_1 through w_1 with type of containment v_{01}, A_2 fits into B_2 through w_2 with type of containment v_{02}, …, A_n fits into B_n through w_n with type of containment $v_{0(n+1)}$, D_1 is forced out of C_1 through $q_1$with type of expelling h_{01}, D_2 is forced out of C_2 through $q_2$with type of expelling h_{02}, …, D_m is forced out of C_m through $q_m$with type of expelling $h_{0(m+1)}$ simultaneously. Here are interactions between A_i and A_{i+1} by g_i, between B_i and B_{i+1} by r_i, i = 1, 2, …, n, between C_j and C_{j+1} by p_j, between D_j and D_{j+1} by f_j, j = 1, 2, …, m. A_1, B_1, A_2, B_2, …, A_n, B_n, D_1, C_1, D_2, C_2, …, D_m, C_m may be by fuzzy sets.

Similarly, for ($**_{B.1.1}$): $\text{GrSprt}\begin{array}{ccccc} A_1 & g_1 & A_2 \;\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02} \;\cdots & v_n & v_{0(n+1)} \\ w_1(B_1) & r_1 & w_2(B_2)\cdots & r_n & w_{n+1}(B_{n+1}) \end{array}$,. The result of this process will be described by the expression

$\text{GrSrt}\begin{array}{ccccc} A_1 & g_1 & A_2 \;\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02} \;\cdots & v_n & v_{0(n+1)} \\ w_1(B_1) & r_1 & w_2(B_2)\cdots & r_n & w_{n+1}(B_{n+1}) \end{array}$,, for ($***_{B.1.1}$):

$\begin{array}{ccccc} q_1(C_1) & p_1 & q_2(C_2)\cdots & p_m & q_{m+1}(C_{m+1}) \\ h_{01} & h_1 & h_{02} \;\cdots & h_m & h_{0(m+1)} \\ D_1 & f_1 & D_2 \;\cdots & f_m & D_{m+1} \end{array}\text{GrSprt}$. The result of this process will be described by the expression $\begin{array}{ccccc} q_1(C_1) & p_1 & q_2(C_2)\cdots & p_m & q_{m+1}(C_{m+1}) \\ h_{01} & h_1 & h_{02} \;\cdots & h_m & h_{0(m+1)} \\ D_1 & f_1 & D_2 \;\cdots & f_m & D_{m+1} \end{array}\text{GrSprt}$.

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.

Remark 01. It is considered expression

$$\begin{array}{ccc} C_1\ \ p_1\ \ C_2\ \ \dots\ \ p_m\ \ C_{m+1} & & A_1\ \ g_1\ \ A_2\ \ \dots\ \ g_n\ \ A_{n+1} \\ \{Q\} & \text{GrSprt} & \{W\} \\ D_1\ \ f_1\ \ D_2\ \ \dots\ \ f_l\ \ D_{l+1} & & B_1\ \ r_1\ \ B_2\ \ \dots\ \ r_k\ \ B_{k+1} \end{array}$$

similarly, where $\{W\} = \begin{pmatrix} v_{11} & \dots & v_{1(k+1)} \\ \dots & \dots & \dots \\ v_{(n+1)1} & \dots & v_{(n+1)(k+1)} \end{pmatrix}$ is the matrix of interactions (in particular, containments) between A_i and B_j , i = 1, 2, …, n, j = 1, 2, …, k, $\{Q\} = \begin{pmatrix} h_{11} & \dots & h_{1(l+1)} \\ \dots & \dots & \dots \\ h_{(m+1)1} & \dots & h_{(m+1)(l+1)} \end{pmatrix}$ is the matrix of interactions (in particular, containments) between C_s and D_e , s = 1, 2, …, m, e = 1, 2, …, l. For example,

proton is $\begin{array}{c} \{\} \\ \{\} \\ \{\} \end{array}$ SCprt(t) $\begin{array}{c} \overline{p}(t) \\ g(t) \\ \overline{p}(t) \end{array} = \begin{array}{ccccc} & & \{\} & & \\ & \{\} & & \{\} & \\ \{\} & & \{\} & & \{\} \end{array}$ GrSCprt $\begin{array}{ccccc} u(t) & & g_1(t) & & u(t) \\ & g_{21}(t) & & g_{31}(t) & \\ & & d(t) & & \end{array}$,

neutron as $\begin{array}{c} \{\} \\ \{\} \\ \{\} \end{array}$ SCprt(t) $\begin{array}{c} \overline{n}(t) \\ g(t) \\ \overline{n}(t) \end{array} = \begin{array}{ccccc} \{\} & & \{\} & & \{\} \\ & \{\} & & \{\} & \\ & & \{\} & & \end{array}$ GrSCprt $\begin{array}{ccccc} & & u(t) & & \\ & g_{11}(t) & & g_{13}(t) & \\ d(t) & & g_4(t) & & d(t) \end{array}$, quarks d(t) = $\begin{array}{c} \{\} \\ \{\} \\ \{\} \end{array}$ SCprt(t) $\begin{array}{c} \overline{r}(t)) \\ g(t) \\ \overline{r}(t) \end{array}$, u(t) = $\begin{array}{c} \{\} \\ \{\} \\ \{\} \end{array}$ SCprt(t) $\begin{array}{c} \overline{d}(t) \\ g(t) \\ \overline{d}(t) \end{array}$ interact with each other by gluon fields

$g_j(t) = \begin{array}{c} \overline{h_j}(t) \\ w_j(t) \\ \overline{h_j}(t) \end{array}$SCprt(t) $\begin{array}{c} \overline{v_j}(t) \\ w(t) \\ \overline{v_j}(t) \end{array}$, j = 1, 2, 3, 4, which are manifestations of general gluon

$\overline{h}\,(t)$ $\overline{v}\,(t)$
$w(t)$ SCprt(t) $w(t)$
$\overline{h}\,(t)$ $\overline{v}\,(t)$

field in the areas between certain quarks, graviton as $w(t)$ SCprt(t)

$\overline{h}\,(t)$ $\overline{v}\,(t)$
$w(t)$ SCprt(t) $w(t)$
$\overline{h}\,(t)$ $\overline{v}\,(t)$

$\overline{h}\,(t)$ $\overline{v}\,(t)$
$w(t)$ SCprt(t) $w(t)$
$\overline{h}\,(t)$ $\overline{v}\,(t)$
$w(t)$ etc.
$\overline{h}\,(t)$ $\overline{v}\,(t)$
$w(t)$ SCprt(t) $w(t)$
$\overline{h}\,(t)$ $\overline{v}\,(t)$

B.1.1 GrSprt – elements, self-type GrSprt- structures.

Definition B.1.1.1. The set of elements $\tilde{w}$=(w$_1$|$\mu_{\tilde{w}}$(w$_1$), w$_2$|$\mu_{\tilde{w}}$(w$_2$), ..., w$_{n+1}$|$\mu_{\tilde{w}}$ (w$_{n+1}$)) at one point x = $(x_1,x_2,\ldots,x_{n+1})$ of space X we shall call GrSprt – element, and such a point x in space X is called parallel fcapacity of the GrSprt – element.

We shall denote GrSprt $\begin{array}{ccccc} w_1 & g_1 & w_2\cdots & g_n & w_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}. \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{array}$

Definition B.1.1.2. GrSprt$\begin{array}{ccccc} w_1 & g_1 & w_2\cdots & g_n & w_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{array}$ - a parallel dynamic fuzzy set $\tilde{w}$ at x.

Definition B.1.1.3. An ordered set of elements at one point in the space is called an ordered GrSprt–element.

It's possible to GrSprt$\begin{array}{ccccc} w_1 & g_1 & w_2\cdots & g_n & w_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{array}$ correspond to the set $\tilde{w}$, and the ordered GrSprt - 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 GrSprt – elements: $\text{GrSprt}\begin{matrix} w_1 & g_1 & w_2\cdots & g_n & w_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{matrix} +$

$$\text{GrSprt}\begin{matrix} b_1 & g_1 & b_2\cdots & g_n & b_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{matrix} =$$

$$\text{GrSprt}\begin{matrix} w_1 \cup b_1 & g_1 & w_2 \cup b_2\cdots & g_n & w_{n+1} \cup b_{n+1} \\ v_{01} & v_1 & v_{02} \quad \cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 \quad \ldots & r_n & x_{n+1} \end{matrix} .$$

It’s allowed to multiply GrSprt – elements: $\text{GrSprt}\begin{matrix} w_1 & g_1 & w_2\cdots & g_n & w_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{matrix} *$

$$\text{GrSprt}\begin{matrix} b_1 & g_1 & b_2\cdots & g_n & b_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{matrix} =$$

$$\text{GrSprt}\begin{matrix} w_1 \cap b_1 & g_1 & w_2 \cap b_2\cdots & g_n & w_{n+1} \cap b_{n+1} \\ v_{01} & v_1 & v_{02} \quad \cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 \quad \ldots & r_n & x_{n+1} \end{matrix} .$$

The operator $\text{GrSprt}\begin{matrix} w_1 \cup b_1 & g_1 & w_2 \cup b_2\cdots & g_n & w_{n+1} \cup b_{n+1} \\ v_{01} & v_1 & v_{02} \quad \cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 \quad \ldots & r_n & x_{n+1} \end{matrix}$ is not equal the set of $w_i \cup b_i$, (i = 1, 2, …, n+1), rather, it is Parallel dynamic — contraction of the set of $w_i \cup b_i$, (i = 1, 2, …, n+1), to the point x. Similarly, for $\text{GrSprt}\begin{matrix} w_1 \cap b_1 & g_1 & w_2 \cap b_2\cdots & g_n & w_{n+1} \cap b_{n+1} \\ v_{01} & v_1 & v_{02} \quad \cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 \quad \ldots & r_n & x_{n+1} \end{matrix}$. This is more suitable for using sets for energy space, for any objects. The operator GrSprt is adapted for ordinary energies, using their property to overlap.

Parallel capacity in itself.

Definition B.1.1.4. The fcapacity $\mathrm{GrSprt}\begin{array}{ccccc} w_1 & g_1 & w_2\cdots & g_n & w_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ A_1 & r_1 & A_2\ldots & r_n & A_{n+1} \end{array}$ is called the parallel fgcapacity $A = (A_1, A_2, \ldots, A_{n+1})$ for $\tilde{w}=(w_1|\mu_{\tilde{w}}(w_1), w_2|\mu_{\tilde{w}}(w_2), \ldots, w_{n+1}|\mu_{\tilde{w}}(w_{n+1}))$.

Definition B.1.1.4.1. The parallel fgcapacity A in itself of the first type is the parallel fgcapacity containing itself as an element. Denote GrS_1fA. $GrS_1fA =$

$$\mathrm{GrSprt}\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}. \\ A_1 & r_1 & A_2\ldots & r_n & A_{n+1} \end{array}$$

Definition B.1.1.5. The parallel fgcapacity A in itself of the second type is the parallel fcapacity that contains elements from which it can be generated. Denote GrS_2fA.

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

Definition B.1.1.6. Partial parallel fgcapacity A in itself of the third type is the parallel fgcapacity A in itself, which partially contains itself or contains fuzzy elements from which it can be generated in part or both simultaneously. Let us denote $\mathrm{Gr}S_3fA$.

Let us introduce the following notations: A*B = $\mathrm{GrSprt}\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\ldots & r_n & B_{n+1} \end{array}$, A^2 = GrSelf A, A^3 = GrSelf^2A, …, A^{n+1} = GrSelf^nA, ….There is no commutativity here: A*B ≠ B*A. We can consider operator functions: $e^A = 1 + \frac{A}{1!} + \frac{A^2}{2!} + \frac{A^3}{3!} + \ldots$, $(A+B)^n = \sum_{k=0}^{n}\binom{n}{k} A^k B^{n-k}$, $(1 + A)^n = 1 + \frac{Ax}{1!} + \frac{n(n-1)A^2}{2!} + \ldots$, etc.

You can consider a more “hard” option: A*B= $P\mathrm{GrSprt}\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\ldots & r_n & B_{n+1} \end{array}$, where

$$P\mathrm{GrSprt}\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_n \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\ldots & r_n & B_n \end{array}$$ – operator, v_{0i}-containing A_i in every element of B_i, i = 1, 2, …, n, A^2 = PGrSelf A, A^3 = $\mathrm{PGrSelf}^2$A, …, A^{n+1} = $\mathrm{PGrSelf}^n$A, ….There is no commutativity here: A*B ≠ B*A. We can consider operator functions: $e^A = 1 + \frac{A}{1!} + \frac{A^2}{2!} + \frac{A^3}{3!} + \ldots$, $(A+B)^n = \sum_{k=0}^{n}\binom{n}{k} A^k B^{n-k}$, $(1+A)^n = 1 + \frac{Ax}{1!} + \frac{n(n-1)A^2}{2!} + \ldots$, etc.

All parallel capacities in parallel self-space are parallel capacities in themselves by definition. Parallel capacities in themselves can appear as GrSprt -capacities and ordinary capacities. In these cases, the usual measures and methods of topology are used.

Connection of GrSprt – elements with parallel capacities in themselves.

For example, GrSprt $\begin{array}{ccccc} R_1 & g_1 & R_2\ \cdots & g_n & R_{n+1} \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ g\{R\}_1 & r_1 & g\{R\}_2\ldots & r_n & g\{R\}_{n+1} \end{array}$ is the parallel capacity in itself of the second type if $g\{R\}$ is a parallel program capable of generating $\{R\}$. Consider a third type of parallel fcapacity in itself. For example, based on

$\mathrm{GrSprt}\begin{array}{ccccc} w_1 & g_1 & w_2\cdots & g_n & w_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{array}$, where $\tilde{w}$=($w_1|\mu_{\tilde{w}}(w_1)$, $w_2|\mu_{\tilde{w}}(w_2)$, …, $w_{n+1}|\mu_{\tilde{w}}(w_{n+1})$), i.e. n - elements at one point x = $(x_1,x_2,\ldots,x_{n+1})$, we can consider the fgcapacity GrS_3f in itself with m elements from $\tilde{w}$, m<n, which is formed according to the form (1.1) [2-6], that is, the structure GrS_3f contains only m elements, or in forms (1.1.1) - (1.1.5) [2-6], summarizing it. fcapacities in themselves of the third type can be formed for any other structure, not necessarily GrS_3f only by necessarily reducing the number of elements in the structure, in particular, using form (1.2) [2-6]. Structures more complex than GrS_3f can be introduced. For example, through a form (1.3) [2-6], where A is compressed (fits) in C in the compression structure B in C (i.e., in the structure GrS_3f); or through the forms (1.3.1) - (1.4) [2-6] and corresponding generalizations of (1.4) on (1.3.1) - (1.3.4) [2-6] etc.

(1.3.1) - (1.3.4) schematically interpret the formation of capacity in itself through a pseudo 3-connected form with a 2-connected form. The ideology of GrSprt and GrS_3f can be used for programming.

Remark B.1.1.1. self, in particular, according to a form-analogue of the form of type (1.1): (2.1*) [2-6].

By analogy the same for the form of type (1.1.1) – (1.4) [2-6].

Math GrSelf.

Let's consider GrSprt arithmetic first:

1. Simultaneous parallel addition of sets elements $\tilde{u}_i = (u_{i_1}|\mu_{\tilde{u}_i}(u_{i_1}), u_{i_2}|\mu_{\tilde{u}_i}(u_{i_2}), \ldots, u_{i_{m_j}}|\mu_{\tilde{u}_i}(u_{i_{m_j}}))$, i = 1,2,…,n, j =1,2,…,k is carried out using

   $$\text{GrSprt}\begin{array}{ccccccc} \{u_1\}+ & g_1 & \{u_2\}+\ldots & g_n & \{u_{n+1}\}+ \\ v_{01} & v_1 & v_{02} \;\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 \;\cdots & r_n & x_{n+1} \end{array}.$$

2. Similarly, for simultaneous parallel multiplication:

   $$\text{GrSprt}\begin{array}{ccccc} \{u_1\}* & g_1 & \{u_2\}*\ldots & g_n & \{u_{n+1}\}* \\ v_{01} & v_1 & v_{02} \;\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 \;\cdots & r_n & x_{n+1} \end{array},$$ the notation of the set B_l, l =1,2,…,n+1, with elements $b_{li_1i_2\ldots i_{m_j}} =$

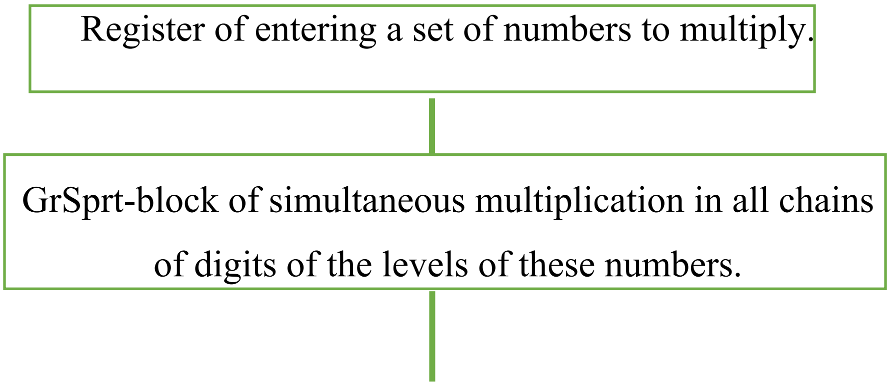
   $Sprt_{x_l}^{\left\{u_{l_{1_{i_1}}}*,\ u_{l_{2_{i_2}}}*,\ldots,\ u_{l_{m_{j_{i_{m_j}}}}}\right\}})_{R_l}$ for any $\left\{l_{i_1}, l_{i_2}, \ldots, l_{i_{m_j}}\right\}$ without repetitions, x_l = $Sprt_w^{\{K_l\}}$, K_l-set of any $\left\{k_{l_{i_1}}*, k_{l_{i_2}}*, \ldots, k_{l_{i_{m_j}}}*\right\}$ without repeating them, l = 1,2,…,n+1, $k_{l_{i_j}}$-any digit, i =1,2,…, m_j, $R_l = Sprt_w^{\left\{l_{i_1}+, l_{i_2}+, \ldots, l_{i_{m_j}}\right\}}$, R_l is the index of the lower discharge (we choose an index on the scale of discharges):

   Table B.1.1. Index on the scale of discharges

index	discharge

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

Then GrSprt $\begin{array}{cccccc} \{B_1\}+ & g_1 & \{B_2\}+\dots & g_n & \{B_{n+1}\}+ \\ v_{01} & v_1 & v_{02}\ \dots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ \dots & r_n & x_{n+1} \end{array}$ 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 GrSprt-multiplication:



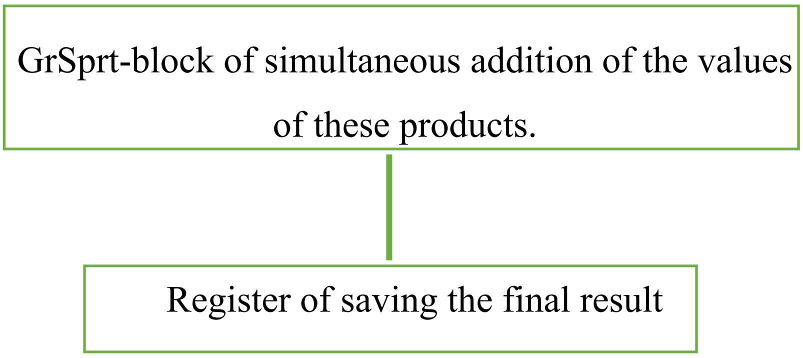


Fig. B.1.1. The straightforward functional scheme of the assumed arithmetic-logical device for GrSprt-multiplication.

Remark. The algorithm for simultaneously adding 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:

$$\mathrm{GrSprt}\begin{array}{cccccc} \{u_1Q_1\} & g_1 & \{u_2Q_2\}\dots & & g_n & \{u_{n+1}Q_{n+1}\} \\ v_{01} & v_1 & v_{02} & \dots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 & \dots & r_n & x_{n+1} \end{array}$$

, where $\tilde{Q}=(Q_1|\mu_{\tilde{Q}}(Q_1), Q_2|\mu_{\tilde{Q}}(Q_2), \dots, Q_{n+1}|\mu_{\tilde{Q}}(Q_{n+1}))$. Q_i -an operation, i = 1, …, n+1.

4. Similarly, for the simultaneous execution of various operators:

$$\mathrm{GrSprt}\begin{array}{cccccc} \{F_1u_1\} & g_1 & \{F_2u_2\}\dots & & g_n & \{F_{n+1}u_{n+1}\} \\ v_{01} & v_1 & v_{02} & \dots & v_n & v_{0(n+1)} \\ w_1 & r_1 & w_2 & \dots & r_n & w_{n+1} \end{array}$$

, where $\tilde{F}=(F_1|\mu_{\tilde{F}}(F_1), F_2|\mu_{\tilde{F}}(F_2), \dots, F_{n+1}|\mu_{\tilde{F}}(F_{n+1}))$. F_i is an operator, i = 1, …, n+1.

5. The arithmetic itself for capacities in themselves will be similar: addition - $GrS_1f\{u+\}$, (or $GrS_3f\{u+\}$) for the third type), multiplication $GrS_1f\{u*\}$, ($GrS_3f\{u*\}$).

6. Similarly with different operations: $GrS_1 f\{uq\}$, ($GrS_3 f\{uq\}$), and with different operators: $GrS_1 f\{Fu\}$, ($GrS_3 f\{Fu\}$).

7. $$\mathrm{GrSrt}\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\ldots & r_n & B_{n+1} \end{array} -$$

the result of the containment operator. For sets A_i, B_i, (i = 1, 2, …, n+1), we have

$$\mathrm{GrSrt}\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\ldots & r_n & B_{n+1} \end{array} =$$

$$\left\{\sum_{i=1}^{n+1} (A_i|g_i) \cup (B_i|r_i) - (A_i|g_i) \cap (B_i|r_i)\ , \sum_{i=1}^{n+1} D_i\right\} =$$

$$\left\{\begin{array}{c} \sum_{i=1}^{n+1} D_i \\ \sum_{i=1}^{n+1} (A_i|g_i) \cup (B_i|r_i) - (A_i|g_i) \cap (B_i|r_i) \end{array}\right\}$$, where D_i is Grself-(set)

for $(A_i|g_i) \cap (B_i|r_i)$ (i = 1, 2, …, n+1). There is the same for structures if they are considered as sets. Similarly, for sets C_i, D_i:

$$\begin{array}{ccccc} C_1 & p_1 & C_2\cdots & p_m & C_{m+1} \\ h_{01} & h_1 & h_{02}\cdots & h_m & h_{0(m+1)} \\ D_1 & f_1 & D_2\ldots & f_m & D_{m+1} \end{array}\mathrm{GrSrt} =$$

$$\left\{\begin{array}{c} \sum_{i=1}^{m+1} Q_i + \overset{\{\}}{(D_1|f_1) - (D_1|f_1) \cap (C_1|p_1)}\quad \overset{\{\}\ \ldots}{(D_2|f_2) - (D_2|f_2) \cap (C_2|p_2)}\ \ldots\ \overset{\{\}}{(D_m|f_m) - (D_m|f_m) \cap (C_m|p_m)}^{\mathrm{GrSrt}} \\ \sum_{i=1}^{m} \big((C_i|p_i) - (D_i|f_i) \cap (C_i|p_i)\big) - ((D_i|f_i) - (D_i|f_i) \cap (C_i|p_i)) \end{array}\right\}$$

, where Q_i is Groself-(set) for $\left((D_i|f_i) \cap (C_i|p_i)\right)$ (i = 1, 2, …, m+1) [2-6].

8. GrSprt-derivative of f(x_1,x_2,…,x_n) = $\left(\begin{array}{c} f_1(x_1,x_2,\ldots,x_n) \\ f_2(x_1,x_2,\ldots,x_n) \\ \ldots \\ f_k(x_1,x_2,\ldots,x_n) \end{array}\right)$ is

$$\mathrm{GrSprt}\begin{array}{ccccc} \frac{\partial}{\partial x_{1_i}} & g_1 & \frac{\partial}{\partial x_{2_i}} & \ldots\ g_n & \frac{\partial}{\partial x_{k_i}} \\ v_{01} & v_1 & v_{02} & \ldots\ v_n & v_{0(n+1)} \\ f_1(x_1,x_2,\ldots,x_n) & r_1 & f_2(x_1,x_2,\ldots,x_n)\ldots & r_n & f_k(x_1,x_2,\ldots,x_n) \end{array}$$, where

x=(x_{1_i}, x_{2_i},… x_{k_i})- any set from $\tilde{x}$=($x_1|\mu_{\tilde{x}}(x_1)$, $x_2|\mu_{\tilde{x}}(x_2)$, …, $x_n|\mu_{\tilde{x}}(x_n)$). The same is done for GrSprt- $\frac{\partial^k f(x)}{\partial x_{1_i}\partial x_{2_i}\ldots\partial x_{k_i}}$. GrSprt-integral off ($x_1$,$x_2$,…,$x_n$) is

$$\mathrm{GrSprt}\begin{array}{cccccc} \int()dx_{1_i} & g_1 & \int()dx_{2_i} & \cdots & g_n & \int()dx_{k_i} \\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)} \\ f_1(x_1,x_2,\dots,x_n) & r_1 & f_2(x_1,x_2,\dots,x_n)\dots & & r_n & f_k(x_1,x_2,\dots,x_n) \end{array}$$

, where ($x_{1_i}, x_{2_i},\dots x_{k_i}$)- any set from $\tilde{x}$=($x_1|\mu_{\tilde{x}}(x_1)$, $x_2|\mu_{\tilde{x}}(x_2)$, …, $x_n|\mu_{\tilde{x}}(x_n)$)). The same is done for GrSprt-∫…∫ $f(x)dx_{1_i}dx_{2_i}\dots dx_{k_i}$-k-multiple integral. GrSprt-lim off $\tilde{x}$=($x_1|\mu_{\tilde{x}}(x_1)$, $x_2|\mu_{\tilde{x}}(x_2)$, …, $x_n|\mu_{\tilde{x}}(x_n)$)) is

$$\mathrm{GrSprt}\begin{array}{cccccc} \lim\limits_{x_{1_i}\to a_{1_i}} & g_1 & \lim\limits_{x_{2_i}\to a_{2_i}} & \cdots & g_n & \lim\limits_{x_{k_i}\to a_{k_i}} \\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)} \\ f_1(x_1,x_2,\dots,x_n) & r_1 & f_2(x_1,x_2,\dots,x_n)\dots & & r_n & f_k(x_1,x_2,\dots,x_n) \end{array}.$$

The same is done for GrSprt- $\lim\limits_{\substack{x_{1_i} \to a_{1_i}\\ \cdot\ \ \cdot\ \ \cdot\\ x_{k_i} \to a_{k_i}}}$ f($x_1,,x_2,\dots,x_n$). $GrS_3f\{\lim\limits_{x\to a}\}$ =

$$\mathrm{GrSprt}\begin{array}{cccccc} \lim\limits_{x_{1_i}\to a_{1_i}} & g_1 & \lim\limits_{x_{2_i}\to a_{2_i}} & \cdots & g_n & \lim\limits_{x_{k_i}\to a_{k_i}} \\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)} \\ \lim\limits_{x_{1_i}\to a_{1_i}} & r_1 & \lim\limits_{x_{2_i}\to a_{2_i}} & \cdots & r_n & \lim\limits_{x_{k_i}\to a_{k_i}} \end{array}.$$

9. In the case of GrSelf-derivatives, inclusions of multiple derivatives are obtained. The same is true for GrSelf-integrals: we get inclusions of multiple integrals.
10. Let's denote GrSelf-(GrSelf-Q) through GrSelf^2-Q , ffSC(n,Q)= GrSelf-(GrSelf-(…(GrSelf-Q))) = GrSelf^n-Q for n-multiple GrSelf.

Operator Gritself.

Definition B.1.1.7. An operator that transforms $\mathrm{GrSprt}\begin{array}{cccccc} w_1 & g_1 & w_2 & \cdots & g_n & w_{n+1} \\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 & \dots & r_n & x_{n+1} \end{array}$

into any Gr$S_if\{\tilde{b}\}$, $i = 2,3$; where $\{\tilde{b}\} \subset \{\tilde{g}\}$ is the operator Gritself.

Example. The operator contains the set in Gritself.

Lim-Gritself.

1. Lim GrSprt

For example, the double limit: $\lim\limits_{\substack{xa1\\ ya2}} G(x,y)$ corresponds to

$$\mathrm{GrSprt}\begin{array}{ccc} G(x,y) & g_1 & G(x,y) \\ v_{01} & v_1 & v_{02} \\ \mathrm{xa1} & r_1 & \mathrm{ya2} \end{array}.$$

Similarly, for lim GrSprt with n variables.

In the case of lim-Gritself, for example, for m variables, it suffices to use the form (1.1) of lim GrSprt 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).

About GrSprt and GrS$_3$f programming.

The ideology of GrSprt and GrS$_3$f can be used for programming. Here are some of the GrSprt programming operators.

1. Simultaneous assignment of the expressions $\tilde{p}=(p_1|\mu_{\tilde{p}}(p_1), p_2|\mu_{\tilde{p}}(p_2), \ldots, p_n|\mu_{\tilde{p}}(p_n))$ to the variables $\tilde{x}=(x_1|\mu_{\tilde{x}}(x_1), x_2|\mu_{\tilde{x}}(x_2), \ldots, x_n|\mu_{\tilde{x}}(x_n))$. This is implemented via GrSprt $\begin{array}{ccccccc} x_1 := & g_1 & x_2 := & \cdots & g_n & x_{n+1} := \\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)} \\ p_1 & r_1 & p_2 & \cdots & r_n & p_{n+1} \end{array}$.
2. Simultaneous checking the set of conditions $\tilde{w}=(w_1|\mu_{\tilde{w}}(w_1), w_2|\mu_{\tilde{w}}(w_2), \ldots, w_{n+1}|\mu_{\tilde{w}}(w_{n+1}))$ for the set of expressions $\tilde{B}=(B_1|\mu_{\tilde{B}}(B_1), B_2|\mu_{\tilde{B}}(B_2), \ldots, B_{n+1}|\mu_{\tilde{B}}(B_{n+1}))$. Implemented via

   $$\mathrm{GrSprt}\begin{array}{cccccc} IF\{B_1 w_1\}\ then & g_1 & IF\{B_2 w_2\}\ then \cdots & g_n & IF\{B_{n+1} w_{n+1}\}\ then \\ v_{01} & v_1 & v_{02} & \cdots\ v_n & v_{0(n+1)} \\ u_1 & r_1 & u_2 & \cdots\ r_n & u_{n+1} \end{array},$$

   where u_i (i = 1, …, n+1) can be anything.
3. Similarly for loop operators and others.

GrS_3f- software operators will differ only in that the aggregates $\{\tilde{w}\},\{\tilde{p}\},\{\tilde{B}\},\{\tilde{x}\}$ will be formed from the corresponding GrSprt program operators in form (1.1) [2-6] and for more complex operators in the forms (1.1.1) –(1.4), (2.1*) [2-6] and analogs of forms (1.1.1) - (1.4) by type (2.1*) [2-6].

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 monographs.

Using elements of the mathematics of GrSrt we introduce the concept of GrSrt – the change in physical quantity B: GrSprt $\begin{array}{ccccc} \Delta_1 B & g_1 & \Delta_2 B \cdots & g_n & \Delta_{n+1} B \\ v_{01} & v_1 & v_{02} \cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 \cdots & r_n & x_{n+1} \end{array}$.

Then the mean PrSCrt - velocity will be $v_{cpGrSrt}(t, \Delta t) =$ GrSprt$\begin{array}{ccccc} \frac{\Delta_1 B}{\Delta t} & g_1 & \frac{\Delta_2 B}{\Delta t} \cdots & g_n & \frac{\Delta_{n+1} B}{\Delta t} \\ v_{01} & v_1 & v_{02} \cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 \cdots & r_n & x_{n+1} \end{array}$ and PrSCrt-velocity at time t:$v_{Grfsrt} =$ $\lim\limits_{\Delta t \to 0} v_{cpGrfst}(t,\Delta t)$. GrSrt – acceleration $a_{Prffsrt} = \frac{dv_{Grfsrt}}{dt}$. The nuclei of atoms can be considered as GrSprt elements.

Remark B.1.1.2. GrSprt – 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 GrSelf. 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 fgself-energy of the object. GrSprt$\begin{array}{ccccc} A_1 & g_1 & A_2 \cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02} \cdots & v_n & v_{0(n+1)} \\ A_1 & r_1 & A_2 \cdots & r_n & A_{n+1} \end{array}$allows you to reach the level of self-energy {A}. The law of self-energy conservation operates already at the level of self-energy. Also, in addition to capacities in themselves, you can consider the types of containment of oneself in oneself: the first type of the containment of oneself in oneself: the second type of the containment of oneself in oneself: potentially, for example, in the form of programming oneself, the third type is partial containment of oneself in themselves—for example, GrSelf-operator, GrSelf-action, whirlwind. A container containing itself can be formed by self-containment, i.e., containment in oneself. Let us clarify the concept of the term capacity in itself: it is a capacity containing itself potentially. Consider GrSelf-Q, where Q can be anything, including Q=GrSelf; in particular, it can be any action. Therefore, GrSelf-Q is when Q is made by Gritself; it makes itself. There is a partial GrSelf-Q for any Q with partial GrSelf-fulfillment. Let's consider several examples for capacities in themselves: ordinary lightning, electric arc discharge, and ball lightning.

GrSprt is also great for working with structures, for example:

1) GrSprt $\begin{matrix} fstrA_1 & g_1 & fstrA_2 \cdots & g_n & fstrA_{n+1} \\ v_{01} & v_1 & v_{02} \;\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2 \;\cdots & r_n & B_{n+1} \end{matrix}$ - the structure A$_i$ that fits into B$_i$ with type of containment μ_{i1}, where B$_i$ (i = 1, …, n+1) can be any capacity, another structure etc.

2) GrSprt $\begin{matrix} fstr_{Q_1} & g_1 & fstr_{Q_2} \cdots & g_n & fstr_{Q_{n+1}} \\ v_{01} & v_1 & v_{02} \;\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2 \;\cdots & r_n & B_{n+1} \end{matrix}$ is embedding structure from Q$_i$ into B$_i$. Similarly for displacement:

1) $\begin{matrix} C_1 & p_1 & C_2 \;\cdots & p_m & C_{m+1} \\ h_{01} & h_1 & h_{02} \;\cdots & h_m & h_{0(m+1)} \\ fstrD_1 & f_1 & fstrD_2 \cdots & f_m & fstrD_{m+1} \end{matrix}$ GrSrt - displacement of structure $fstrD_j$ from C$_j$ with type h_{0j}, (j = 1, …, m),

2) $\begin{matrix} C_1 & p_1 & C_2 \;\cdots & p_m & C_{m+1} \\ h_{01} & h_1 & h_{02} \;\cdots & h_m & h_{0(m+1)} \\ fstr_{Q_1} & f_1 & fstr_{Q_2} \cdots & f_m & fstr_{Q_{m+1}} \end{matrix}$ GrSprt -displacement of the structure Q$_i$ from C$_i$, (i = 1, …, m+1). To work with structures, you can introduce a special operators GrCprt: GrCprt$\begin{matrix} A_1 & g_1 & A_2 \cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02} \cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2 \cdots & r_n & B_{n+1} \end{matrix}$ structures B$_i$ with the structure A$_i$, (i = 1, …, n+1), and Grstrprt$\begin{matrix} Q_1 & g_1 & Q_2 \cdots & g_n & Q_{n+1} \\ v_{01} & v_1 & v_{02} \cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2 \cdots & r_n & B_{n+1} \end{matrix}$ structures B$_i$ with the structure from Q$_i$, (i = 1, …, n+1),

$\begin{matrix} C_1 & p_1 & C_2 \cdots & p_m & C_{m+1} \\ h_{01} & h_1 & h_{02} \cdots & h_m & h_{0(m+1)} \\ D_1 & f_1 & D_2 \cdots & f_m & D_{m+1} \end{matrix}$GrCprt destructors C$_i$ by the structure of D_i,

$C_1 \quad p_1 \quad C_2 \cdots \quad p_m \quad C_{m+1}$
$h_{01} \quad h_1 \quad h_{02} \cdots \quad h_m \quad h_{0(m+1)}Grstr$prt destructors C_i from the structure that
$Q_1 \quad f_1 \quad Q_2 \ldots \quad f_m \quad Q_{m+1}$
structures Q_i, (i = 1, …, m+1).

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

$A_1 \quad g_1 \quad A_2 \cdots \quad g_n \quad A_{n+1}$
In particular, GrCprt$v_{01} \quad v_1 \quad v_{02} \cdots \quad v_n \quad v_{0(n+1)}$, Grstrrt
$A_1 \quad r_1 \quad A_2 \ldots \quad r_n \quad A_{n+1}$

$A_1 \quad g_1 \quad A_2 \cdots \quad g_n \quad A_{n+1}$
$v_{01} \quad v_1 \quad v_{02} \cdots \quad v_n \quad v_{0(n+1)}$ are such structures.
$A_1 \quad r_1 \quad A_2 \ldots \quad r_n \quad A_{n+1}$

Similarly, for working with models, each is structured by its structure; for example, use GrSprt-groups, GrSprt-rings, GrSprt-fields, GrSprt-spaces, GrSelf-groups, GrSelf-rings, GrSelf-fields, and GrSelf-spaces. Like any task, this is also a structure of the appropriate capacity .
GrSelf-H (GrSelf-hydrogen), like other GrSelf-particles, does not exist in the ordinary, but all GrSelf-molecules, GrSelf-atoms, and GrSelf-particles are elements of the energy space.
Remark B.1.1.3. The concept of elements of physics GrSprt is introduced for energy space. The ideology of GrSprt elements allows us to go to the border of the world familiar to us, which allows us to act more effectively.
B.1.2 *Dynamic GrSprt – elements.*
We considered stationary GrSprt – elements earlier. Here we consider dynamic GrSprt – elements.
Definition B.1.2.1. The process of fitting a set of elements $\widetilde{w(t)}$=($w_1(t)|\mu_{\widetilde{w(t)}}$ $(w_1(t))$, $w_2(t)|\mu_{\tilde{w}(t)}(w_2(t))$, …, $w_{n+1}(t)|\mu_{\widetilde{w(t)}}(w_{n+1}(t))$) into one point x= $(x_1,x_2,\ldots,x_{n+1})$

of the space X at time t will be called a dynamic GrSprt – element. We will denote

$$\text{GrSprt(t)}\begin{array}{ccccc} w_1(t) & g_1 & w_2(t)\dots & g_n & w_{n+1}(t)\\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}\\ x_1 & r_1 & x_2\dots & r_n & x_{n+1}\end{array}.$$

Definition B.1.2.2. fitting an ordered set of elements into one point in space is called a dynamic ordered GrSprt–element.

It is allowed to sum dynamic GrSprt – elements:

$$\text{GrSprt(t)}\begin{array}{ccccc} w_1(t) & g_1 & w_2(t)\dots & g_n & w_{n+1}(t)\\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}\\ x_1 & r_1 & x_2\dots & r_n & x_{n+1}\end{array}+$$

$$\text{GrSprt(t)}\begin{array}{ccccc} b_1(t) & g_1 & b_2(t)\dots & g_n & b_{n+1}(t)\\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}\\ x_1 & r_1 & x_2\dots & r_n & x_{n+1}\end{array}=$$

$$\text{GrSprt}(t)\begin{array}{ccccc} w_1(t)\cup b_1(t) & g_1 & w_2(t)\cup b_2(t)\dots & g_n & w_{n+1}(t)\cup b_{n+1}(t)\\ v_{01} & v_1 & v_{02}\quad\cdots & v_n & v_{0(n+1)}\\ x_1 & r_1 & x_2\quad\dots & r_n & x_{n+1}\end{array}.$$

It’s allowed to multiply GrSprt – elements:

$$\text{GrSprt(t)}\begin{array}{ccccc} w_1(t) & g_1 & w_2(t)\dots & g_n & w_{n+1}(t)\\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}\\ x_1 & r_1 & x_2\dots & r_n & x_{n+1}\end{array}*$$

$$\text{GrSprt(t)}\begin{array}{ccccc} b_1(t) & g_1 & b_2(t)\dots & g_n & b_{n+1}(t)\\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}\\ x_1 & r_1 & x_2\dots & r_n & x_{n+1}\end{array}=$$

$$\text{GrSprt}(t)\begin{array}{ccccc} w_1(t)\cap b_1(t) & g_1 & w_2(t)\cap b_2(t)\dots & g_n & w_{n+1}(t)\cap b_{n+1}(t)\\ v_{01} & v_1 & v_{02}\quad\cdots & v_n & v_{0(n+1)}\\ x_1 & r_1 & x_2\quad\dots & r_n & x_{n+1}\end{array}.$$

Parallel dynamic containment of oneself.

Definition B.1.2.3. Parallel dynamic Gprt- capacity

$$\text{GrSprt(t)}\begin{array}{ccccc} R_1(t) & g_1 & R_2(t)\dots & g_n & R_{n+1}(t)\\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}\\ Q_1(t) & r_1 & Q_2(t)\dots & r_n & Q_{n+1}(t)\end{array}$$ is the process of embedding

$R_i(t)$ into $Q_i(t)$, ($i = 1, \dots, n+1$), simultaneously.

Definition B.1.2.4. Parallel dynamic fgcapacity $\widetilde{Q(t)}$=($Q_1(t)|\mu_{\widetilde{Q(t)}}(Q_1(t))$, $Q_2(t)|\mu_{\tilde{Q}(t)}(Q_2(t))$, ..., $Q_{n+1}(t)|\mu_{\widetilde{Q(t)}}(Q_{n+1}(t))$) containing itself as an element of the first type is the process of parallel containing $\widetilde{Q(t)}$ in *itself* as element $\mathrm{GrSprt}(t)\ \begin{array}{cccccc} Q_1(t) & g_1 & Q_2(t)\cdots & g_n & Q_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ Q_1(t) & r_1 & Q_2(t)\ldots & r_n & Q_{n+1}(t) \end{array}$. Denote $GrS_1f(t)\widetilde{Q(t)}$.

Definition B.1.2.5. Parallel dynamic capacity C(t) in itself of the second type is the process of parallel containing elements from which it can be parallel generated. Let's denote $GrS_2f(t)C(t)$.

Definition B.1.2.6. Parallel dynamic partial capacity B(t) in itself of the third type is a process of partial parallel containment of B(t) in itself or parallel embedding elements from which it can be parallel generated partially or both at the same time. Denote $GrS_3f(t)B(t)$.

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

Connection of dynamic GrSprt – elements with parallel dynamic containment of oneself.

Consider third type of parallel dynamic partial containment of oneself. For example, based on $\mathrm{GrSprt}(t)\ \begin{array}{cccccc} Q_1(t) & g_1 & Q_2(t)\cdots & g_n & Q_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ x_1(t) & r_1 & x_2(t)\ldots & r_n & x_{n+1}(t) \end{array}$, where $\widetilde{Q(t)}$ =($Q_1(t)|\mu_{\widetilde{Q(t)}}(Q_1(t))$, $Q_2(t)|\mu_{\tilde{Q}(t)}(Q_2(t))$, ..., $Q_{n+1}(t)|\mu_{\widetilde{Q(t)}}(Q_{n+1}(t))$), i.e. (n+1) – elements at one point $x(t) = (x_1(t), x_2(t), \ldots, x_{n+1}(t))$, we can consider the parallel dynamic capacity in itself $GrS_3f(t)$ with m elements from $\widetilde{Q(t)}$, m<n, which is

process formed according to the form (1.1), that is, only m elements from $\widetilde{Q(t)}$ are

in the structure GrSprt (t) $\begin{array}{ccccc} Q_1(t) & g_1 & Q_2(t)\cdots & g_n & Q_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ x_1(t) & r_1 & x_2(t)\cdots & r_n & x_{n+1}(t) \end{array}$.

Parallel dynamic containment of oneself of the third type can be formed for any other structure, not necessarily GrSprt, only through the obligatory reduction in the number of elements in the structure. In particular, using the forms (1.1.1) - (1.4), (2.1*) [2-6] and analogs of forms (1.1.1) - (1.4) by type (2.1*) [2-6].

It is possible to introduce structures more complex than $PrS_3Cf(t)$.

Parallel dynamic math itself.

1. The process of simultaneous parallel addition of sets elements $\{\widetilde{u_i(t)}\}$ = $\left(u_{i_1}(t)|\mu_{\widetilde{u_i(t)}}(u_{i_1}(t)),\ u_{i_2}(t)|\mu_{\widetilde{u_i(t)}}(u_{i_2}(t)),\ \ldots,\ u_{i_{m_j}}(t)|\mu_{\widetilde{u(t)}}(u_{i_{m_j}}(t))\right)$, i = 1,2,…,n+1, j =1,2,…,k are realized by

$$\mathrm{GrSprt(t)}\ \begin{array}{cccccc} \{\widetilde{u_1(t)}\}+ & g_1 & \{\widetilde{u_2(t)}\}+\cdots & g_n & \{\widetilde{u_{n+1}(t)}\}+ \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ \cdots & r_n & x_{n+1} \end{array}.$$

2. By analogy, for simultaneous multiplication:

$$\mathrm{GrSprt(t)}\ \begin{array}{cccccc} \{\widetilde{u_1(t)}\}* & g_1 & \{\widetilde{u_2(t)}\}*\cdots & g_n & \{\widetilde{u_{n+1}(t)}\}* \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ \cdots & r_n & x_{n+1} \end{array}.$$

3. Similarly for simultaneous execution of various operations:

$$\mathrm{GrSprt(t)}\ \begin{array}{ccccc} w_1(t)Q_1(t) & g_1 & w_2(t)Q_2(t)\cdots & g_n & w_{n+1}(t)Q_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ \cdots & r_n & x_{n+1} \end{array}, \text{ where}$$

$\widetilde{Q(t)}$=($Q_1(t)|\mu_{\widetilde{Q(t)}}(Q_1(t))$, $Q_2(t)|\mu_{\tilde{Q}(t)}(Q_2(t))$, …, $Q_{n+1}(t)|\mu_{\widetilde{Q(t)}}(Q_{n+1}(t))$), $Q_i(t)$-an operation, i = 1, …, n+1, $\widetilde{w(t)}$=($w_1(t)|\mu_{\widetilde{w(t)}}(w_1(t))$, $w_2(t)|\mu_{\tilde{w}(t)}(w_2(t))$, …, $w_{n+1}(t)|\mu_{\widetilde{w(t)}}(w_{n+1}(t))$).

4. Similarly, for the simultaneous execution of various operators:

$$\text{GrSprt(t)}\begin{array}{cccccc} F_1(t)\,w_1(t) & g_1 & F_2(t)\,w_2(t)\dots & g_n & F_{n+1}(t)\,w_{n+1}(t) \\ v_{01} & v_1 & v_{02} & \dots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 & \dots & r_n & x_{n+1} \end{array}$$, where

$\widetilde{F(t)}$=($F_1(t)|\mu_{\widetilde{F(t)}}(F_1(t))$, $F_2(t)|\mu_{\tilde{F}(t)}(F_2(t))$, …, $F_{n+1}(t)|\mu_{\widetilde{F(t)}}(F_{n+1}(t))$), $F_i(t)$ is an operator, i = 1, …, n+1.

4. Parallel dynamic arithmetic itself for containments of oneself will be similar: Parallel dynamic addition - $GrS_1 f(t)\{\widetilde{w(t)}\,+\}$, (or $GrS_3 f(t)\{\widetilde{w(t)}\,+\}$ for the third type), Parallel dynamic multiplication $GrS_1 f(t)\{\widetilde{w(t)}\,*\}$, ($GrS_3 f(t)\{\widetilde{w(t)}\,*\}$).

5. Similarly with different operations: $GrS_1 f(t)\{\widetilde{w(t)}\,\widetilde{Q(t)}\}$, ($GrS_3 f(t)\{\widetilde{w(t)}\,\widetilde{Q(t)}\}$) and with different operators: $GrS_1 f(t)\{\widetilde{F(t)}\widetilde{w(t)}\}$, ($GrS_3 f(t)\{\widetilde{F(t)}\widetilde{w(t)}\}$).

6. $$\text{GrSprt(t)}\begin{array}{cccccc} A_1(t) & g_1 & A_2(t)\dots & g_n & A_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \dots & v_n & v_{0(n+1)} \\ B_1(t) & r_1 & B_2(t)\dots & r_n & B_{n+1}(t) \end{array}$$ gives the result

$$\text{GrSrt(t)}\begin{array}{cccccc} A_1(t) & g_1 & A_2(t)\dots & g_n & A_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \dots & v_n & v_{0(n+1)} \\ B_1(t) & r_1 & B_2(t)\dots & r_n & B_{n+1}(t) \end{array} =$$

$$\left\{\sum_{i=1}^{n+1}(A_i(t)\,|g_i(t))\cup(B_i(t)\,|r_i(t))-(A_i(t)\,|g_i(t))\cap(B_i(t)\,|r_i(t))\,,\sum_{i=1}^{n+1}D_i(t)\right\}=$$

$$\left\{\begin{array}{c}\sum_{i=1}^{n+1}D_i(t)\\ \left\{\sum_{i=1}^{n+1}(A_i(t)\,|g_i(t))\cup(B_i(t)\,|r_i(t))-(A_i(t)\,|g_i(t))\cap(B_i(t)\,|r_i(t))\right\}\end{array}\right\}$$

, for sets $A_i(t)$, $B_i(t)$,where $D_i(t)$ is self-set for $(A_i(t)\,|g_i(t))\cap(B_i(t)\,|r_i(t))$, (i = 1, 2, …, n+1). The same is true for structures if they are treated as sets,

7. $$\begin{array}{cccccc} C_1(t) & p_1 & C_2(t) \cdots & p_m & C_{m+1}(t) & \\ h_{01} & h_1 & h_{02} \cdots & h_m & h_{0(m+1)} & \mathrm{GrSrt}(t) = \\ D_1(t) & f_1 & D_2(t) \cdots & f_m & D_{m+1}(t) & \end{array}$$
   $$\left\{ \begin{array}{c} \sum_{i=1}^{m+1} Q_i(t) + \begin{array}{cccc} \{\} & \{\} & \cdots & \{\} \\ R_1(t) & & \cdots & R_m(t) \end{array} \mathrm{GrSrt} \\ \sum_{i=1}^{m+1} \left((C_i(t) \mid p_i(t)) - (D_i(t) \mid f_i(t)) \cap (C_i(t) \mid p_i(t)) \right) - R_i(t)) \end{array} \right\},$$
   $R_i(t) = (D_i(t) \mid f_i(t)) - (D_i(t) \mid f_i(t)) \cap (C_i(t) \mid p_i(t))$,
   for sets $C_i(t), D_i(t)$, where $Q_i(t)$ is oself-set for $\left(D_i(t) \cap C_i(t)\right)$(i = 1, 2, …, m+1) [2-6].
8. Similarly, for dynamic GrSprt-derivatives, dynamic GrSprt-integrals, dynamic GrSprt-lim, parallel dynamic self-derivatives, parallel dynamic self-integrals
9. Denote dynamic Grself-(dynamic Grself-Q(t)) through dynamic Grself^2-Q(t) , pgS(t)(n,Q(t))= dynamic Grself-(dynamic Grself-(…((dynamic Grself)-Q(t)))) = (dynamic Grself^n)-Q(t) for n-multiple parallel dynamic Grself.

Remark B.1.2.1. Then the notation

$$\begin{array}{ccccc} C_1(t) & p_1 & C_2(t) \cdots & p_m & C_{m+1}(t) \\ h_{01} & h_1 & h_{02} \cdots & h_m & h_{0(m+1)} \\ D_1(t) & f_1 & D_2(t) \cdots & f_m & D_{m+1}(t) \end{array} \mathrm{GrSprt}(t) \begin{array}{ccccc} A_1(t) & g_1 & A_2(t) \cdots & g_n & A_{n+1}(t) \\ v_{01} & v_1 & v_{02} \cdots & v_n & v_{0(n+1)} \\ B_1(t) & r_1 & B_2(t) \cdots & r_n & B_{n+1}(t) \end{array}$$

where $A_1(t)$ fits into $B_1(t)$ with type of containment v_{01}, $A_2(t)$ fits into $B_2(t)$ with type of containment v_{02}, …, $A_n(t)$ fits into $B_n(t)$ with type of containment $v_{0(n+1)}$, $D_1(t)$ is forced out of $C_1(t)$ with type of expelling h_{01}, $D_2(t)$ is forced out of $C_2(t)$ with type of expelling h_{02}, …, $D_m(t)$ is forced out of $C_m(t)$ with type of expelling $h_{0(m+1)}$ simultaneously. Here are interactions between $A_i(t)$ and $A_{i+1}(t)$ by g_i, between $B_i(t)$ and $B_{i+1}(t)$ by r_i, i = 1, 2, …, n+1, between $C_j(t)$ and $C_{j+1}(t)$ by p_j, between $D_j(t)$ and $D_{j+1}(t)$ by f_j, j = 1, 2, …, m+1. It is dynamic GrSprt-containment of $A_i(t)$ in $B_i(t)$ and dynamic GrSprt-displacement of $D_j(t)$ from $C_j(t)$ simultaneously, (i = 1, 2, …, n, j = 1, 2, …, m+1). The result of this process will be described by the expression

$$\begin{array}{ccccc} C_1(t) & p_1 & C_2(t)\dots & p_m & C_{m+1}(t)\\ h_{01} & h_1 & h_{02}\;\cdots & h_m & h_{0(m+1)}\\ D_1(t) & f_1 & D_2(t)\dots & f_m & D_{m+1}(t)\end{array} \text{GrSrt(t)} \begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\dots & g_n & A_{n+1}(t)\\ v_{01} & v_1 & v_{02}\;\cdots & v_n & v_{0(n+1)}\\ B_1(t) & r_1 & B_2(t)\dots & r_n & B_{n+1}(t)\end{array}$$

,

$$\text{GrSprt(t)} \begin{array}{ccccc} B_1(t) & g_1 & B_2(t)\dots & g_n & B_{n+1}(t)\\ v_{01} & v_1 & v_{02}\;\cdots & v_n & v_{0(n+1)}\\ B_1(t) & r_1 & B_2(t)\dots & r_n & B_{n+1}(t)\end{array} \text{ will mean } \text{GrS}_1\text{f(t)B(t).}$$

$$\begin{array}{ccccc} C_1(t) & p_1 & C_2(t)\dots & p_m & C_{m+1}(t)\\ h_{01} & h_1 & h_{02}\;\cdots & h_m & h_{0(m+1)}\\ C_1(t) & f_1 & C_2(t)\dots & f_m & C_{m+1}(t)\end{array} \text{GrSprt(t) denotes the parallel dynamic}$$

expelling $\widetilde{C(t)}=(C_1(t)|\mu_{\widetilde{C(t)}}(C_1(t)), C_2(t)|\mu_{\widetilde{C(t)}}(C_2(t)), \dots, C_{n+1}(t)|\mu_{\widetilde{C(t)}}(C_{n+1}(t)))$

oneself out of oneself,

$$\begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\dots & g_n & A_{n+1}(t)\\ v_{01} & v_1 & v_{02}\;\cdots & v_n & v_{0(n+1)}\\ A_1(t) & r_1 & A_2(t)\dots & r_n & A_{n+1}(t)\end{array} \text{GrSprt(t)} \begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\dots & g_n & A_{n+1}(t)\\ v_{01} & v_1 & v_{02}\;\cdots & v_n & v_{0(n+1)}\\ A_1(t) & r_1 & A_2(t)\dots & r_n & A_{n+1}(t)\end{array}$$

—simultaneous parallel dynamic containment $\widetilde{A(t)}=(A_1(t)|\mu_{\widetilde{A(t)}}(A_1(t)), A_2(t)|\mu_{\widetilde{A(t)}}(A_2(t)), \dots, A_{n+1}(t)|\mu_{\widetilde{A(t)}}(A_{n+1}(t)))$ of oneself in oneself and parallel dynamic expelling $\widetilde{A(t)}$ oneself out of oneself.

$$\begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\dots & g_n & A_{n+1}(t)\\ v_{01} & v_1 & v_{02}\;\cdots & v_n & v_{0(n+1)}\\ B_1(t) & r_1 & B_2(t)\dots & r_n & B_{n+1}(t)\end{array} \text{GrSprt(t) will be called parallel dynamic anti-}$$

fgcapacity from oneself. For example, “white hole” in physics is such simple anti-fgcapacity.

We may consider the following axiom: any fgcapacity is the fgcapacity of oneself. This is for each energy fgcapacity.

About dynamic GrSprt and $\text{GrS}_3\text{f(t)}$ programming.

The ideology of dynamic GrSprt and $\text{GrS}_3\text{f(t)}$ can be used for programming:

1. The process of simultaneous assignment of the expressions $\widetilde{p(t)}=(p_1(t)|\mu_{\widetilde{p(t)}}(p_1(t)), p_2(t)|\mu_{\widetilde{p(t)}}(p_2(t)), \dots, p_{n+1}(t)|\mu_{\widetilde{p(t)}}(p_{n+1}(t)))$ to the variables $\widetilde{x(t)}=(x_1(t)|\mu_{\widetilde{x(t)}}$

($x_1(t)$), $x_2(t)|\mu_{\tilde{x}(t)}(x_2(t))$, …, $x_{n+1}(t)|\mu_{\widetilde{x(t)}}(x_{n+1}(t))$) is implemented through

$$\mathrm{GrSprt}(t)\begin{array}{ccccccc} x_1(t) := & g_1 & x_2(t) :=\dots & g_n & x_{n+1}(t) := \\ v_{01} & v_1 & v_{02} \ \cdots & v_n & v_{0(n+1)} \\ p_1(t) & r_1 & p_2(t)\ \dots & r_n & p_{n+1}(t) \end{array}.$$

2. The process of simultaneous check the set of conditions $\widetilde{A(t)}$=($A_1(t)|\mu_{\widetilde{A(t)}}(A_1(t))$, $A_2(t)|\mu_{\tilde{A}(t)}(A_2(t))$, …, $A_{n+1}(t)|\mu_{\widetilde{A(t)}}(A_{n+1}(t))$) for a set of expressions $\widetilde{B(t)}$=($B_1(t)|\mu_{\widetilde{B(t)}}$ ($B_1(t)$), $B_2(t)|\mu_{\tilde{B}(t)}(B_2(t))$, …, $B_{n+1}(t)|\mu_{\widetilde{B(t)}}(B_{n+1}(t))$) is implemented through

$$\mathrm{GrSprt}(t)\begin{array}{ccccc} IF\{B_1(t)\,A_1(t)\}\ then & g_1 & IF\{B_2(t)\,A_2(t)\}\ then\dots & g_n & IF\{B_{n+1}(t)\,A_{n+1}(t)\}\ then \\ v_{01} & v_1 & v_{02} \quad \cdots & v_n & v_{0(n+1)} \\ w_1(t) & r_1 & w_2(t) \quad \dots & r_n & w_{n+1}(t) \end{array}$$

,

here w(t) = $(w_1(t),w_2(t),\dots,w_{n+1}(t))$. can be any.

3.Similarly for loop operators and others.

$GrS_3f(t)$– software operators will differ only in that the aggregates $\{\widetilde{A(t)}\},\{\widetilde{p(t)}\},\{\widetilde{B(t)}\},\{\widetilde{x(t)}\}$ will be formed from corresponding processes GrSprt(t) for the above-mentioned programming operators through form (1.1) [2-6] or forms (1.1.1) - (.1.4), (2.1*) [2-6] and analogs of forms (1.1.1) – (1.4) by type (2.1*) [2-6] for more complex operators.

Remark B.1.2.2. It is the parallel containment of oneself in oneself that can "give birth" to the parallel capacities in itself – that is what parallel self-organization is.

Remark B.1.2.3.

$$\mathrm{GrSprt}(t)\begin{array}{cccc} \mathrm{GrSprt}(t)\begin{array}{ccccc} B_1(t) & g_1 & B_2(t)\dots & g_n & B_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ B_1(t) & r_1 & B_2(t)\dots & r_n & B_{n+1}(t) \end{array} & g_1 & \dots & \mathrm{GrSprt}(t)\begin{array}{ccccc} B_1(t) & g_1 & B_2(t)\dots & g_n & B_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ B_1(t) & r_1 & B_2(t)\dots & r_n & B_{n+1}(t) \end{array} \\ v_{01} & v_1 & \cdots & v_{0(n+1)} \\ \mathrm{GrSprt}(t)\begin{array}{ccccc} B_1(t) & g_1 & B_2(t)\dots & g_n & B_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ B_1(t) & r_1 & B_2(t)\dots & r_n & B_{n+1}(t) \end{array} & r_1 & \dots & \mathrm{GrSprt}(t)\begin{array}{ccccc} B_1(t) & g_1 & B_2(t)\dots & g_n & B_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ B_1(t) & r_1 & B_2(t)\dots & r_n & B_{n+1}(t) \end{array} \end{array}$$

can increase parallel self- level of $\widetilde{B(t)}$=($B_1(t)|\mu_{\widetilde{B(t)}}(B_1(t))$, $B_2(t)|\mu_{\tilde{B}(t)}(B_2(t))$, …, $B_{n+1}(t)|\mu_{\widetilde{B(t)}}$ ($B_{n+1}(t)$)).

Remark B.1.2.4. For example, the operator Gritself is $GrS_1f(t)$.

Remark B.1.2.5. May be considered the following derivatives:

$$\frac{d\mathrm{GrSprt(t)}\begin{matrix} A_1(t) & g_1 & A_2(t)\dots & g_n & A_{n+1}(t)\\ v_{01} & v_1 & v_{02}\dots & v_n & v_{0(n+1)}\\ B_1(t) & r_1 & B_2(t)\dots & r_n & B_{n+1}(t)\end{matrix}}{dt}, \frac{d\begin{matrix} C_1(\mathrm{t}) & p_1 & C_2(\mathrm{t})\dots & p_m & C_{m+1}(\mathrm{t})\\ h_{01} & h_1 & h_{02}\dots & h_m & h_{0(m+1)}\\ D_1(\mathrm{t}) & f_1 & D_2(\mathrm{t})\dots & f_m & D_{m+1}(\mathrm{t})\end{matrix}\mathrm{GrSrt(t)})}{dt},$$

$$\frac{d\begin{matrix} C_1(\mathrm{t}) & p_1 & C_2(\mathrm{t})\dots & p_m & C_{m+1}(\mathrm{t})\\ h_{01} & h_1 & h_{02}\dots & h_m & h_{0(m+1)}\\ D_1(\mathrm{t}) & f_1 & D_2(\mathrm{t})\dots & f_m & D_{m+1}(\mathrm{t})\end{matrix}\mathrm{GrSrt(t)}\begin{matrix} A_1(t) & g_1 & A_2(t)\dots & g_n & A_{n+1}(t)\\ v_{01} & v_1 & v_{02}\dots & v_n & v_{0(n+1)}\\ B_1(t) & r_1 & B_2(t)\dots & r_n & B_{n+1}(t)\end{matrix}}{dt}, \frac{dGr\mathrm{S}_i\mathrm{f(t)}}{dt},$$

i=1,2,3.

Remark B.1.2.6. It is the parallel containment of oneself in itself as an element that can be interpreted as parallel dynamic capacities in itself.

Remark B.1.2.7. Not every capacity parallel containing itself as an element will manifest itself as a sedentary parallel capacity or parallel capacity.

B.1.3 *GrSprt – elements for continual sets.*

Earlier, we considered finite-dimensional discrete GrSprt-elements and self-fcapacities in itself as an element. Here we believe some continual GrSprt-elements and continual parallel ffself-capacities in themselves as an element.

Definition B.1.3.1. The dynamic set of continual elements $\tilde{w}=(\mathrm{w}_1|\mu_{\tilde{w}}(\mathrm{w}_1), \mathrm{w}_2|\mu_{\tilde{w}}(\mathrm{w}_2), \dots, \mathrm{w}_{n+1}|\mu_{\tilde{w}}(\mathrm{w}_{n+1}))$ at one point x = $(x_1,x_2,\dots,x_{n+1})$ of space X will be called continual GrSprt – element, and such a point in space will be called parallel fgcapacity of the continual GrSprt – element. We will denote

$$\mathrm{GrSprt}\begin{matrix} w_1 & g_1 & w_2\cdots & g_n & w_{n+1}\\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}\\ x_1 & r_1 & x_2\dots & r_n & x_{n+1}\end{matrix}.$$

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

It's allowed to sum continual GrSprt – elements: :

$$\mathrm{GrSprt}\begin{matrix} w_1 & g_1 & w_2\cdots & g_n & w_{n+1}\\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}\\ x_1 & r_1 & x_2\dots & r_n & x_{n+1}\end{matrix} + \mathrm{GrSprt}\begin{matrix} b_1 & g_1 & b_2\cdots & g_n & b_{n+1}\\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}\\ x_1 & r_1 & x_2\dots & r_n & x_{n+1}\end{matrix} =$$

$$\text{GrSprt}\begin{array}{cccccc} w_1\cup b_1 & g_1 & w_2\cup b_2\cdots & & g_n & w_{n+1}\cup b_{n+1}\\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)}\\ x_1 & r_1 & x_2 & \cdots & r_n & x_{n+1}\end{array}$$

, where some or any elements may be ordered continual elements. It’s allowed to multiply continual GrSprt – elements:

$$\text{GrSprt}\begin{array}{ccccc} w_1 & g_1 & w_2\cdots & g_n & w_{n+1}\\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}\\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1}\end{array} * \text{GrSprt}\begin{array}{ccccc} b_1 & g_1 & b_2\cdots & g_n & b_{n+1}\\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}\\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1}\end{array} =$$

$$\text{GrSprt}\begin{array}{cccccc} w_1\cap b_1 & g_1 & w_2\cap b_2\cdots & & g_n & w_{n+1}\cap b_{n+1}\\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)}\\ x_1 & r_1 & x_2 & \cdots & r_n & x_{n+1}\end{array}.$$

Definition B.1.3.3. The continual GrSelf-capacity A in itself as an element of the first type is the continual capacity parallel containing itself as an element. Denote

$$GrS_1A.\ PrS_1CA = \text{GrSrt}\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1}\\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}\\ A_1 & r_1 & A_2\ldots & r_n & A_{n+1}\end{array}.$$

Definition B.1.3.4. The ordered continual GrSelf-capacity A in itself as an element of the first type is the ordered continual fgcapacity parallel containing itself as an element. Denote $\overrightarrow{GrS_1fA}$.

For example,

$$\text{GrSprt}\begin{array}{cccccc} \sin\infty & g_1 & \mathrm{tg}(-\infty)\ldots & & g_n & \sin(-\infty)\\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)}\\ x_1 & r_1 & x_2 & \cdots & r_n & x_{n+1}\end{array}$$

$$= \text{GrSprt}\begin{array}{cccccc} \uparrow \mathrm{I} \downarrow_{-1}^{1} & g_1 & \downarrow \mathrm{I} \uparrow_{-\infty}^{\infty}\cdots & & g_n & \downarrow \mathrm{I} \uparrow_{-1}^{1})\\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)}\\ x_1 & r_1 & x_2 & \cdots & r_n & x_{n+1}\end{array}.$$

,

don’t confuse with values of these functions.

Definition B.1.3.5. The continual GrSelf-capacity A in itself, as an element of the second type, is the capacity parallel containing continual elements from which it can be parallel generated. Let's denote GrS_2fA.

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

Definition B.1.3.6. Partial continual GrSelf-capacity in itself as an element of the third type is called continual GrSelf-capacity in itself as an element that partially parallel contains itself or parallel contains elements from which it can be parallel generated in part or both simultaneously. Denote GrS_3f.

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

The connection of continual GrSprt – elements with continual GrSelf-capacities in themselves as an element.

Consider a third type of continual GrSelf- fgcapacity in itself as an element. For example, based on GrSprt$\begin{array}{ccccc} w_1 & g_1 & w_2\cdots & g_n & w_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{array}$, where $\tilde{w}=(w_1|\mu_{\tilde{w}}(w_1), w_2|\mu_{\tilde{w}}(w_2), \ldots, w_{n+1}|\mu_{\tilde{w}}(w_{n+1}))$, i.e. n - continual elements at one point x = $(x_1,x_2,\ldots,x_{n+1})$, The continual GrSelf- fgcapacity in itself as an element with m continual elements from $\tilde{w}$, at m<n, can be considered as GrS_3f, which is formed by the form (1.1), i.e., only m continual elements are located in the structure GrSprt$\begin{array}{ccccc} w_1 & g_1 & w_2\cdots & g_n & w_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{array}$. Continual fself-capacities in itself as an element of the third type can be formed for any other structure, not necessarily GrSprt, only by obligatory reducing the number of continual elements in the structure. In particular, using the forms (1.1.1) - (1.4), (2.1*) [2-6] and analogs of forms (1.1.1) - (1.4) by type (2.1*) [2-6]. Structures more complex than GrS_3f can be introduced.

Mathematics Gritself for continual elements.

1.Simultaneous parallel addition of the sets continual elements $\tilde{w}=(w_1|\mu_{\tilde{w}}(w_1), w_2|\mu_{\tilde{w}}(w_2), \ldots, w_n|\mu_{\tilde{w}}(w_n))$, $i = 1,2,\ldots,n$, $j = 1,2,\ldots,k$, is implemented using

$$\mathrm{GrSprt}\begin{array}{ccccc} w_1\cup & g_1 & w_2\cup\cdots & g_n & w_{n+1}\cup \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\cdots & r_n & x_{n+1} \end{array}$$

2. By analogy, for simultaneous multiplication:

$$\mathrm{GrSprt}\begin{array}{ccccc} w_1\cap & g_1 & w_2\cap\cdots & g_n & w_{n+1}\cap \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\cdots & r_n & x_{n+1} \end{array}.$$

3. Similarly for simultaneous execution of various operations:

$$\mathrm{GrSprt}\begin{array}{ccccc} \{u_1Q_1\} & g_1 & \{u_2Q_2\}\cdots & g_n & \{u_{n+1}Q_{n+1}\} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\cdots & r_n & x_{n+1} \end{array}$$

, where $\tilde{Q}=(Q_1|\mu_{\tilde{Q}}(Q_1), Q_2|\mu_{\tilde{Q}}(Q_2), \ldots, Q_{n+1}|\mu_{\tilde{Q}}(Q_{n+1}))$. Q_i -an operation, $i = 1, \ldots, n+1$.

4. Similarly, for the simultaneous execution of various operators:

$$\mathrm{GrSprt}\begin{array}{ccccc} \{F_1u_1\} & g_1 & \{F_2u_2\}\cdots & g_n & \{F_{n+1}u_{n+1}\} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ w_1 & r_1 & w_2\cdots & r_n & w_{n+1} \end{array}$$

, where $\tilde{F}=(F_1|\mu_{\tilde{F}}(F_1), F_2|\mu_{\tilde{F}}(F_2), \ldots, F_{n+1}|\mu_{\tilde{F}}(F_{n+1}))$. F_i is an operator, $i = 1, \ldots, n+1$.

5. The arithmetic itself for parallel continual capacities in themselves will be similar: addition - $GrS_1f\{w\cup\}$, (or $GrS_3f\{w\cup\}$)for the third type), multiplication $GrS_1f\{w\cap\}$, (or $GrS_3f\{w\cap\}$).
6. Similarly with different operations: $GrS_1f\{gQ\}$, ($GrS_3f\{gQ\}$), and with different operators: $GrS_1f\{Fw\}$, ($GrS_3f\{Fw\}$).
7. $$\mathrm{GrSrt}\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\cdots & r_n & B_{n+1} \end{array} -$$

   the result of the containment operator. For continual sets A_i, B_i, ($i = 1, 2, \ldots, n+1$), we have

$$\mathrm{GrSrt}\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\cdots & r_n & B_{n+1} \end{array} =$$

$$\left\{\Sigma_{i=1}^{n+1}(A_i|g_i)\cup(B_i|r_i)-(A_i|g_i)\cap(B_i|r_i)\ ,\Sigma_{i=1}^{n+1}D_i\right\}=$$

$$\left\{\begin{array}{c}\sum_{i=1}^{n+1} D_i \\ \sum_{i=1}^{n+1} (A_i \,|\, g_i) \cup (B_i \,|\, r_i) - (A_i \,|\, g_i) \cap (B_i \,|\, r_i)\end{array}\right\}$$, where D$_i$ is Grself-(set)

for $(A_i \,|\, g_i) \cap (B_i \,|\, r_i)$ (i = 1, 2, …, n+1). There is the same for structures if they are considered as continual sets. Similarly, for sets C$_i$, D$_i$:

$$\begin{array}{ccccc} C_1 & p_1 & C_2 \cdots & p_m & C_{m+1} \\ h_{01} & h_1 & h_{02} \cdots & h_m & h_{0(m+1)} \\ D_1 & f_1 & D_2 \cdots & f_m & D_{m+1} \end{array}\mathrm{GrSrt} =$$

$$\left\{\begin{array}{c}\sum_{i=1}^{m+1} Q_i + \overset{\{\}}{(D_1|f_1) - (D_1|f_1) \cap (C_1|p_1)} \quad \overset{\{\}\ \ldots}{(D_2|f_2) - (D_2|f_2) \cap (C_2|p_2)} \quad \ldots \quad \overset{\{\}}{(D_m|f_m) - (D_m|f_m) \cap (C_m|p_m)}^{\mathrm{GrSrt}} \\ \sum_{i=1}^{m} \big((C_i|p_i) - (D_i|f_i) \cap (C_i|p_i) \big) - ((D_i|f_i) - (D_i|f_i) \cap (C_i|p_i)) \end{array}\right\}$$

, where Q$_i$ is Groself-(set) for $\big((D_i \,|\, f_i) \cap (C_i \,|\, p_i) \big)$ (i = 1, 2, …, m+1) [2-6].

Remark B.1.3.1. $\begin{array}{ccccc} C_1 & p_1 & C_2 \cdots & p_m & C_{m+1} \\ h_{01} & h_1 & h_{02} \cdots & h_m & h_{0(m+1)} \\ D_1 & f_1 & D_2 \cdots & f_m & D_{m+1} \end{array}$GrSprt, where continual D$_1$ is forced out of continual C$_1$ with type of expelling g_{12}, continual D$_2$ is forced out of continual C$_2$ with type of expelling g_{22}, …, continual D$_m$ is forced out of continual C$_m$ with type of expelling g_{m2}.

$$\begin{array}{ccccc} C_1 & p_1 & C_2 \cdots & p_m & C_{m+1} \\ h_{01} & h_1 & h_{02} \cdots & h_m & h_{0(m+1)} \\ D_1 & f_1 & D_2 \cdots & f_m & D_{m+1} \end{array}\mathrm{GrSprt}\begin{array}{ccccc} A_1 & g_1 & A_2 \cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02} \cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2 \cdots & r_n & B_{n+1} \end{array}$$

where continual A$_1$ fits into continual B$_1$ with type of containment g_{11}, continual A$_2$ fits into continual B$_2$ with type of containment g_{21}, …, continual A$_n$ fits into continual B$_n$ with type of containment g_{n1}, continual D$_1$ is forced out of continual C$_1$ with type of expelling g_{12}, continual D$_2$ is forced out of continual C$_2$ with type of expelling g_{22}, …, continual D$_m$ is forced out of continual C$_m$ with type of expelling g_{m2} simultaneously. Here are interactions between A$_i$ and A$_{i+1}$ by g_i, between B$_i$ and B$_{i+1}$ by r_i, i = 1, 2, …, n+1, between C$_j$ and C$_{j+1}$ by p_j, between D$_j$ and D$_{j+1}$ by f_j, j = 1, 2, …, m. A$_1$, B$_1$, A$_2$, B$_2$, …, A$_n$, B$_n$, D$_1$, C$_1$, D$_2$, C$_2$, …, D$_m$, C$_m$ may be by fuzzy sets. We can consider the concept of a continual GrSprt - element as GrSprt$\begin{array}{ccccc} A_1 & g_1 & A_2 \cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02} \cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2 \cdots & r_n & B_{n+1} \end{array}$, where continual A$_1$ fits into continual B$_1$

with type of containment g, continual A_2 fits into continual B_2 with type of containment g_{21}, …, continual A_n fits into continual B_n with type of containment g_{n1}. Then GrSprt$\begin{matrix} B_1 & g_1 & B_2\cdots & g_n & B_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\ldots & r_n & B_{n+1} \end{matrix}$ will mean GrS_1f B.

These elements are used for GrSprt-coding, GrSprt translation, coding GrSelf, and translation GrSelf 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 - CSelb-space. Then we introduce the scalar product for functions or vectors and get the Hilbert space. We call this space CSelh-space. In particular, one can try to describe some processes with these elements by differential equations and use methods from [18]. You can also try to optimize and research some processes with these elements using the techniques from [19]. Let's introduce operators for transforming capacity to GrSelf-capacity in itself as an element: $GrfQ_1S(A)$ transforms A to PrS_1CA, $GrfQ_0S(B)$ transforms B to $\begin{matrix} B_1 & g_1 & B_2\cdots & g_n & B_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\ldots & r_n & B_{n+1} \end{matrix}$ GrSprt .

Can be considered Q(

$$\begin{matrix} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\ldots & r_n & B_{n+1} \end{matrix}\text{GrSprt}\begin{matrix} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\ldots & r_n & B_{n+1} \end{matrix}\text{, Q-any}$$

operator.

B.1.4 *Dynamic continual GrSprt – elements.*

Definition B.1.4.1. The process of containing the set of continual elements $\tilde{w}$ $=(w_1|\mu_{\tilde{w}}(w_1), w_2|\mu_{\tilde{w}}(w_2), \ldots, w_{n+1}(t)|\mu_{\widetilde{w(t)}}(w_{n+1}(t)))$ into one point x= $(x_1, x_2, \ldots, x_{n+1})$ of the space X at time will be called the dynamic continual GrSprt – element. We will denote GrSprt(t) $\begin{array}{cccccc} w_1(t) & g_1 & w_2(t)\ldots & g_n & w_{n+1}(t) \\ v_{01} & v_1 & v_{02} \;\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 \;\cdots & r_n & x_{n+1} \end{array}$.

Definition B.1.4.2. The process of containing an ordered set of continual elements at one point in space is called dynamic continual ordered GrSprt – element.

It is allowed to sum dynamic continual GrSprt – elements:

$$\mathrm{GrSprt}(t) \begin{array}{ccccc} w_1(t) & g_1 & w_2(t)\ldots & g_n & w_{n+1}(t) \\ v_{01} & v_1 & v_{02} \;\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 \;\cdots & r_n & x_{n+1} \end{array} +$$

$$\mathrm{GrSprt}(t) \begin{array}{ccccc} b_1(t) & g_1 & b_2(t)\ldots & g_n & b_{n+1}(t) \\ v_{01} & v_1 & v_{02} \;\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 \;\cdots & r_n & x_{n+1} \end{array} =$$

$$\mathrm{GrSprt}(t) \begin{array}{cccccc} w_1(t) \cup b_1(t) & g_1 & w_2(t) \cup b_2(t)\ldots & & g_n & w_{n+1}(t) \cup b_{n+1}(t) \\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 & \cdots & r_n & x_{n+1} \end{array}.$$

It's allowed to multiply dynamic continual GrSprt – elements:

$$\mathrm{GrSprt}(t) \begin{array}{ccccc} w_1(t) & g_1 & w_2(t)\ldots & g_n & w_{n+1}(t) \\ v_{01} & v_1 & v_{02} \;\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 \;\cdots & r_n & x_{n+1} \end{array} *$$

$$\mathrm{GrSprt}(t) \begin{array}{ccccc} b_1(t) & g_1 & b_2(t)\ldots & g_n & b_{n+1}(t) \\ v_{01} & v_1 & v_{02} \;\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 \;\cdots & r_n & x_{n+1} \end{array} =$$

$$\mathrm{GrSprt}(t) \begin{array}{cccccc} w_1(t) \cap b_1(t) & g_1 & w_2(t) \cap b_2(t)\ldots & & g_n & w_{n+1}(t) \cap b_{n+1}(t) \\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 & \cdots & r_n & x_{n+1} \end{array}.$$

Parallel dynamic continual containment of oneself in oneself as an element.

Definition B.1.4.3. The dynamic continual GrSprt- fgcapacity

$\mathrm{GrSprt}(t) \begin{array}{ccccc} R_1(t) & g_1 & R_2(t)\ldots & g_n & R_{n+1}(t) \\ v_{01} & v_1 & v_{02} \;\cdots & v_n & v_{0(n+1)} \\ Q_1(t) & r_1 & Q_2(t)\ldots & r_n & Q_{n+1}(t) \end{array}$ is the process of embedding continual $R_i(t)$ into continual $Q_i(t)$, (i = 1, …, n+1).

Definition B.1.4.4. Parallel dynamic continual fgcapacity $\widetilde{Q(t)}$=(Q$_1$(t)|μ$_{\widetilde{Q(t)}}$(Q$_1$(t)), Q$_2$(t)|μ$_{\tilde{Q}(t)}$(Q$_2$(t)), …, Q$_{n+1}$(t)|μ$_{\widetilde{Q(t)}}$(Q$_{n+1}$(t))) containing itself as an element of the first type is the process of parallel containing $\widetilde{Q(t)}$ in $\widetilde{Q(t)}$

$$\mathrm{GrSprt}\,(\mathrm{t})\ \begin{array}{ccccc} Q_1(t) & g_1 & Q_2(t)\cdots & g_n & Q_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ Q_1(t) & r_1 & Q_2(t)\ldots & r_n & Q_{n+1}(t) \end{array}.$$ Denote $GrS_1f(t)\widetilde{Q(t)}$.

Definition B.1.4.5. The dynamic parallel containment continual C(t) of oneself of the second type parallel contains the continual elements from which it can be parallel generated. Denote $GrS_2f(t)C(t)$.

Definition B.1.4.6. The partial parallel dynamic containment continual B(t) of oneself of the third type is the process of partial parallel embedding continual B(t) into oneself or parallel embedding continual elements from which it can be parallel generated in part or both simultaneously. Denote $GrS_3f(t)B(t)$.

The connection of dynamic continual GrSprt – elements with parallel dynamic continual containment of oneself in oneself as an element.

Let us consider the partial parallel dynamic continual containment of oneself in oneself as an element of the third type. For example, based on

$$\mathrm{GrSprt}\,(\mathrm{t})\ \begin{array}{ccccc} Q_1(t) & g_1 & Q_2(t)\cdots & g_n & Q_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ x_1(t) & r_1 & x_2(t)\ldots & r_n & x_{n+1}(t) \end{array},$$ where $\widetilde{Q(t)}$=(Q$_1$(t)|μ$_{\widetilde{Q(t)}}$(Q$_1$(t)), Q$_2$(t)|μ$_{\tilde{Q}(t)}$(Q$_2$(t)), …, Q$_{n+1}$(t)|μ$_{\widetilde{Q(t)}}$(Q$_{n+1}$(t))), i.e. n – continual elements at one point x(t) = $(x_1(t), x_2(t), \ldots, x_n(t))$, we can consider the parallel dynamic continual capacity in itself $GrS_3f(t)$ with m elements from $\widetilde{Q(t)}$, m<n, which is process formed according to the form (1.1), that is, only m elements from $\widetilde{Q(t)}$ are in the

$$\text{structure } \mathrm{GrSprt}\,(\mathrm{t})\ \begin{array}{ccccc} Q_1(t) & g_1 & Q_2(t)\cdots & g_n & Q_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ x_1(t) & r_1 & x_2(t)\ldots & r_n & x_{n+1}(t) \end{array}..$$

Parallel dynamic continual containments of oneself in oneself as an element of the third type can be formed for any other structure, not necessarily GrSprt, only by necessarily reducing the number of continual elements in the structure. In particular, with the help of forms (1.1.1) - (1.4), (2.1*) [2-6] and analogs of forms (1.1.1) - (1.4) by type (2.1*) [2-6].

It is possible to introduce structures more complex than $GrS_3f(t)$.

Parallel dynamic continual mathematics self.

1. The process of simultaneous parallel addition of sets continual elements $\{\widetilde{u_i(t)}\} = \left(u_{i_1}(t)|\mu_{\widetilde{u_i(t)}}(u_{i_1}(t)), u_{i_2}(t)|\mu_{\widetilde{u_i(t)}}(u_{i_2}(t)), \ldots, u_{i_{m_j}}(t)|\mu_{\widetilde{u(t)}}(u_{i_{m_j}}(t)) \right)$, i = 1,2,…,n, j =1,2,…,k are realized by

$$\text{GrSprt(t)} \begin{array}{ccccccc} \{\widetilde{u_1}(t)\} \cup & g_1 & \{\widetilde{u_2}(t)\} \cup \ldots & g_n & \{\widetilde{u_{n+1}}(t)\} \cup \\ v_{01} & v_1 & v_{02} & \ldots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 & \ldots & r_n & x_{n+1} \end{array}.$$

2. By analogy, for simultaneous multiplication:

$$\text{GrSprt(t)} \begin{array}{ccccccc} \{\widetilde{u_1}(t)\} \cap & g_1 & \{\widetilde{u_2}(t)\} \cap \ldots & g_n & \{\widetilde{u_{n+1}}(t)\} \cap \\ v_{01} & v_1 & v_{02} & \ldots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 & \ldots & r_n & x_{n+1} \end{array}.$$

   Similarly for simultaneous execution of various operations:

$$\text{GrSprt(t)} \begin{array}{ccccccc} w_1(t)Q_1(t) & g_1 & w_2(t)Q_2(t)\ldots & g_n & w_{n+1}(t)Q_{n+1}(t) \\ v_{01} & v_1 & v_{02} & \ldots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 & \ldots & r_n & x_{n+1} \end{array}, \text{ where}$$

   $\widetilde{Q(t)}$=(Q_1(t)|$\mu_{\widetilde{Q(t)}}$(Q_1(t)), Q_2(t)|$\mu_{\tilde{Q}(t)}$(Q_2(t)), …, Q_{n+1}(t)|$\mu_{\widetilde{Q(t)}}$(Q_{n+1}(t))), Q_i(t)-an operation, i = 1, …, n, $\widetilde{w(t)}$=(w_1(t)|$\mu_{\widetilde{w(t)}}$(w_1(t)), w_2(t)|$\mu_{\tilde{w}(t)}$(w_2(t)), …, w_{n+1}(t)|$\mu_{\widetilde{w(t)}}$ (w_{n+1}(t))).

3. Similarly, for the simultaneous execution of various operators:

$$\text{GrSprt(t)} \begin{array}{ccccccc} F_1(t)\,w_1(t) & g_1 & F_2(t)\,w_2(t)\ldots & g_n & F_{n+1}(t)\,w_{n+1}(t) \\ v_{01} & v_1 & v_{02} & \ldots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 & \ldots & r_n & x_{n+1} \end{array}, \text{ where}$$

   $\widetilde{F(t)}$=(F_1(t)|$\mu_{\widetilde{F(t)}}$(F_1(t)), F_2(t)|$\mu_{\tilde{F}(t)}$(F_2(t)), …, F_{n+1}(t)|$\mu_{\widetilde{F(t)}}$(F_{n+1}(t))), F_i(t) is an operator, i = 1, …, n.

4. Parallel dynamic arithmetic itself for continual containments of oneself will be similar: Parallel dynamic addition - $GrS_1f(t)\{\widetilde{w(t)} \cup\}$, (or

$GrS_3f(t)\{\widetilde{w}(t)\cup\}$, for the third type), Parallel dynamic multiplication $GrS_1f(t)\{\widetilde{w}(t)\cap\}$, (or $GrS_3f(t)\{\widetilde{w}(t)\cap\}$.

5. Similarly with different operations: $GrS_1f(t)\{\widetilde{w}(t)\;\widetilde{Q}(t)\}$, ($GrS_3f(t)\{\widetilde{w}(t)\;\widetilde{Q}(t)\}$) and with different operators: $PrS_1Cf(t)\{\widetilde{F}(t)\widetilde{w}(t)\}$, ($PrS_3Cf(t)\{\widetilde{F}(t)\widetilde{w}(t)\}$).

6. GrSprt (t) $\begin{matrix} A_1(t) & g_1 & A_2(t)\cdots & g_n & A_{n+1}(t) \\ v_{01} & v_1 & v_{02}\;\cdots & v_n & v_{0(n+1)} \\ B_1(t) & r_1 & B_2(t)\ldots & r_n & B_{n+1}(t) \end{matrix}$ gives the result

8. PrSCrt (t) $\begin{matrix} A_1(t) & g_1 & A_2(t)\cdots & g_n & A_{n+1}(t) \\ v_{01} & v_1 & v_{02}\;\cdots & v_n & v_{0(n+1)} \\ B_1(t) & r_1 & B_2(t)\ldots & r_n & B_{n+1}(t) \end{matrix} =$

$$\left\{\sum_{i=1}^{n+1}(A_i(t)\,|g_i(t))\cup(B_i(t)\,|r_i(t))-(A_i(t)\,|g_i(t))\cap(B_i(t)\,|r_i(t))\;,\sum_{i=1}^{n+1}D_i(t)\right\}=$$

$$\left\{\begin{matrix}\sum_{i=1}^{n+1}D_i(t)\\ \left\{\sum_{i=1}^{n+1}(A_i(t)\,|g_i(t))\cup(B_i(t)\,|r_i(t))-(A_i(t)\,|g_i(t))\cap(B_i(t)\,|r_i(t))\;\right\}\end{matrix}\right\}$$

, for continual sets $A_i(t)$, $B_i(t)$,where $D_i(t)$ is self- (continual set) for $(A_i(t)\,|g_i(t))\cap(B_i(t)\,|r_i(t))$, (i = 1, 2, …, n+1). The same is true for structures if they are treated a continual sets,

9. $\begin{matrix} C_1(\text{t}) & p_1 & C_2(\text{t})\cdots & p_m & C_{m+1}(\text{t}) \\ h_{01} & h_1 & h_{02}\;\cdots & h_m & h_{0(m+1)} \\ D_1(\text{t}) & f_1 & D_2(\text{t})\cdots & f_m & D_{m+1}(\text{t}) \end{matrix}$ GrSrt(t) $=$

$$\left\{\begin{matrix}\sum_{i=1}^{m+1}Q_i(t)+\begin{matrix}\{\,\} & \{\,\} & \cdots & \{\,\}\\ R_1(t) & & \cdots & R_m(t)\end{matrix}\text{GrSrt}\\ \sum_{i=1}^{m+1}\Big(\,(C_i(t)\,|\,p_i(t))-(D_i(t)\,|\,f_i(t))\cap(C_i(t)\,|\,p_i(t))\Big)-R_i(t)\,)\end{matrix}\right\},$$

$R_i(t)=(D_i(t)\,|\,f_i(t))-(D_i(t)\,|\,f_i(t))\cap(C_i(t)\,|\,p_i(t))$,

for continual sets $C_i(t)$, $D_i(t)$, where $Q_i(t)$ is oself-set for $\big(D_i(t)\cap C_i(t)\big)$(i = 1, 2, …, m+1) [2-6].

10. Similarly, for dynamic continual GrSprt-derivatives, dynamic continual GrSprt-integrals, dynamic continual GrSprt-lim, dynamic continual GrSelf-derivatives, dynamic continual GrSelf-integrals

7. Denote dynamic continual GrSelf-(dynamic continual GrSelf-Q(t)) through dynamic continual GrSelf^2-Q(t), PrCfS(t)(n,Q(t))= dynamic continual GrSelf-(dynamic continual GrSelf-(...(dynamic continual GrSelf-Q(t)))) = dynamic continual GrSelf^n-Q(t) for n-multiple dynamic continual GrSelf.

Remark B.1.4.1. The parallel dynamic continual GrSprt-displacement will be denote by $\begin{array}{cccc} C_1(t) & C_2(t) & \dots & C_m(t) \\ g_{11} & g_{21} & \dots & g_{n1} \\ D_1(t) & D_2(t) & \dots & D_m(t) \end{array}$ GrSprt(t) , where continual D$_1$(t) is forced out of continual C$_1$(t) with type of expelling g_{12}, continual D$_2$(t) is forced out of continual C$_2$(t) with type of expelling g_{22}, …, continual D$_m$(t) is forced out of continual C$_m$(t) with type of expelling g_{m2} simultaneously, the result of this process will be described by the expression $\begin{array}{ccccccc} C_1(t) & p_1 & C_2(t) & \dots & p_m & C_{m+1}(t) \\ h_{01} & h_1 & h_{02} & \dots & h_m & h_{0(m+1)} \\ D_1(t) & f_1 & D_2(t) & \dots & f_m & D_{m+1}(t) \end{array}$ PrSCrt(t). Then the notation

$$\begin{array}{cccccc} C_1(t) & p_1 & C_2(t) \dots & p_m & C_{m+1}(t) \\ h_{01} & h_1 & h_{02} \dots & h_m & h_{0(m+1)} \\ D_1(t) & f_1 & D_2(t) \dots & f_m & D_{m+1}(t) \end{array} \text{GrSprt(t)} \begin{array}{ccccc} A_1(t) & g_1 & A_2(t) \dots & g_n & A_{n+1}(t) \\ v_{01} & v_1 & v_{02} \dots & v_n & v_{0(n+1)} \\ B_1(t) & r_1 & B_2(t) \dots & r_n & B_{n+1}(t) \end{array}$$

where continual A$_1$(t) fits into continual B$_1$(t) with type of containment g_{11}, continual A$_2$(t) fits into continual B$_2$(t) with type of containment g_{21}, …, continual A$_n$(t) fits into continual B$_n$(t) with type of containment g_{n1}, continual D$_1$(t) is forced out of continual C$_1$(t) with type of expelling g_{12}, continual D$_2$(t) is forced out of continual continual C$_2$(t) with type of expelling g_{22}, …, continual D$_m$(t) is forced out of C$_m$(t) with type of expelling g_{m2} simultaneously. It is dynamic continual GrSprt-containment of continual A$_i$(t) in continual B$_i$(t) and dynamic continual GrSprt-displacement of continual D$_j$(t) from continual C$_j$(t) simultaneously, (i = 1, 2, …, n, j = 1, 2, …, m). Here are interactions between A$_i$(t) and A$_{i+1}$(t) by g_i, between B$_i$(t) and B$_{i+1}$(t) by r_i, i = 1, 2, …, n, between C$_j$(t) and C$_{j+1}$(t) by p_j, between D$_j$ (t) and D$_{j+1}$(t) by f_j, j = 1, 2, …, m. The result of this process will be described by the expression

$$\begin{array}{cccccc} C_1(\mathrm{t}) & p_1 & C_2(\mathrm{t})\cdots & p_m & C_{m+1}(\mathrm{t}) \\ h_{01} & h_1 & h_{02}\ \cdots & h_m & h_{0(m+1)} \\ D_1(\mathrm{t}) & f_1 & D_2(\mathrm{t})\cdots & f_m & D_{m+1}(\mathrm{t}) \end{array} \text{GrSrt(t)} \begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\cdots & g_n & A_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ B_1(t) & r_1 & B_2(t)\cdots & r_n & B_{n+1}(t) \end{array}$$

.

$$\text{GrSprt}(\text{t}) \begin{array}{ccccc} B_1(t) & g_1 & B_2(t)\cdots & g_n & B_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ B_1(t) & r_1 & B_2(t)\cdots & r_n & B_{n+1}(t) \end{array} \text{ will mean GrS1f (t) B (t) .}$$

$$\begin{array}{ccccc} C_1(\mathrm{t}) & p_1 & C_2(\mathrm{t})\cdots & p_m & C_{m+1}(\mathrm{t}) \\ h_{01} & h_1 & h_{02}\ \cdots & h_m & h_{0(m+1)} \\ C_1(\mathrm{t}) & f_1 & C_2(\mathrm{t})\cdots & f_m & C_{m+1}(\mathrm{t}) \end{array} \text{GrSprt(t) denotes the parallel dynamic}$$

expelling continual $\widetilde{C(t)}$=(C$_1$(t)|μ$_{\widetilde{C(t)}}$(C$_1$(t)), C$_2$(t)|μ$_{\widetilde{C(t)}}$(C$_2$(t)), …, C$_{n+1}$(t)|μ$_{\widetilde{C(t)}}$ (C$_{n+1}$(t))) oneself out of oneself,

$$\begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\cdots & g_n & A_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ A_1(t) & r_1 & A_2(t)\cdots & r_n & A_{n+1}(t) \end{array} \text{GrSprt(t)} \begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\cdots & g_n & A_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ A_1(t) & r_1 & A_2(t)\cdots & r_n & A_{n+1}(t) \end{array}$$

——simultaneous parallel dynamic containment continual $\widetilde{A(t)}$=(A$_1$(t)|μ$_{\widetilde{A(t)}}$ (A$_1$(t)), A$_2$(t)|μ$_{\widetilde{A(t)}}$(A$_2$(t)), …, A$_{n+1}$(t)|μ$_{\widetilde{A(t)}}$(A$_{n+1}$(t))) of oneself in oneself and parallel dynamic expelling continual A(t) oneself out of oneself.

$$\begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\cdots & g_n & A_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ B_1(t) & r_1 & B_2(t)\cdots & r_n & B_{n+1}(t) \end{array} \text{GrSprt(t) will be called parallel dynamic}$$

anti-(continual fgcapacity) from oneself.

Remark B.1.4.2. GrSprt(t) $\begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\cdots & g_n & A_{n+1}(t) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ A_1(t) & r_1 & A_2(t)\cdots & r_n & A_{n+1}(t) \end{array}$ can be interpreted as a multilayer shell of a self-object from the first layer, which is specified by $A_1(t)$ to the nth, which is specified by $A_n(t)$. Based on this, the atomic model can be interpreted as

$$\text{GrSprt(t)} \begin{array}{cc} \cup\{p,n\} & g_0 \\ & g_{11} \\ \textit{position of atomic nucleus} & \end{array} \begin{array}{cccccccc} A_1(t) & g_1 & \cdots A_1(t) & g_1 & A_2(t)\cdots & g_n & A_{n+1}(t) \\ v_{01} & v_1 & \cdots\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ A_1(t) & r_1 & \cdots A_1(t) & r_1 & A_2(t)\cdots & r_n & A_{n+1}(t) \end{array},$$

$\{p,n\}$ - protons, neutrons, $A_i(t)$ correspond to orbitals, i = 1, …, n.

$$\mathrm{GrSprt}(t)\begin{array}{cccccc} \textit{physical body of a living organism} & & V_1(t) & d_1 & \dots & V_{n+1}(t)\\ & g_{11} & q_1 & s_1 & \dots & q_{0(n+1)}\\ \textit{position of physical body} & & V(t) & w_1 & \dots & V_{n+1}(t)\end{array}$$ - model

of a living organism with the multilayer shell of a living organism from the first layer, which is specified by $V_1(t)$ to the nth, which is specified by $V_n(t)$. In humans:

$$\mathrm{GrSprt}(t)\begin{array}{cccc} \textit{energy fibers that create a physical body of a living organism} & V_1(t) & \dots & V_{n+1}(t)\\ g_{11} & q_1 & \dots & q_{0(n+1)}\\ \textit{energy fibers that create a physical body of a living organism} & V(t) & \dots & V_{n+1}(t)\end{array}.$$

You can also try to consider the operator GrSprt $\begin{array}{cccccc} B_1 & d_1\dots & B_i^a & \dots & B_n\\ q_1 & s_1 & g_{i1} & \dots & g_{n1}\\ r_1 & w_1\dots & r_i^a & \dots & r_n\end{array}$, which represents the interpretation of the position of the assemblage point on the cocoon of a living organism, r_j is its potential position, B_j is a potential set of subtle energies in this position (i = 1, ..., i-1, i+1, ..., n), r_i^a is its active position, B_i^a is an active set of subtle energies in this position, i = 1, ..., n.

Connection of dynamic continual GrSprt – elements with target weights with parallel dynamic continual containment of oneself with target weights.

Consider a third type of parallel partial dynamic continual containment of oneself with target weights g(t). For example, based on

$$\mathrm{GrSprt}(t)\begin{array}{ccccccc} w_1(t)tw(t) & g_1 & w_2(t)tw(t)\dots & & g_n & w_{n+1}(t)tw(t)\\ v_{01} & v_1 & v_{02} & \dots & v_n & v_{0(n+1)}\\ x_1 & r_1 & x_2 & \dots & r_n & x_{n+1}\end{array}$$

, where $\widetilde{w(t)}$=(w$_1$(t)|μ$_{\widetilde{w(t)}}$(w$_1$(t)), w$_2$(t)|μ$_{\widetilde{w(t)}}$(w$_2$(t)), ..., w$_{n+1}$(t)|μ$_{\widetilde{w(t)}}$(w$_{n+1}$(t))).

i.e. n - continual elements with target weights{w(t)} at one point x = $(x_1, x_2, \dots, x_{n+1})$, we can consider the dynamic continual containment

Gr$S_3 f(t)\widetilde{w(t)}t$w(t) of oneself with target weights with m continual elements with target weights{w(t)} from $\widetilde{w(t)}$, m<n, which is the process of formation according to the form (1.1) [], i.e., only m continual elements with target weights{tw(t)} from $\widetilde{w(t)}$are located in the structure Gr$S_3 f(t)\widetilde{w(t)}$tw(t). Parallel dynamic containments of oneself with target weights of the third type can be formed for any

other structure, not necessarily GrSprt, only by reducing the number of continual elements with target weights in the structure. In particular, using the forms (1.1.1) - (1.4), (2.1*) [2-6] and analogs of forms (1.1.1) - (1.4) [2-6] by type (2.1*) [2-6]. Structures more complex than $\mathrm{Gr}S_3 f(t)\widetilde{w(t)}\mathrm{tw}(t)$ can be introduced.

Definition B.1.4.7. The parallel dynamic embedding of continual A(t) into itself with target weights {tw(t)} of the first type is the process of parallel embedding A(t) into A(t) with target weights. Denote $GrS_1 f(t)A(t)t\mathrm{w}(t)$.

Definition 30. The parallel dynamic containment of continual C(t) itself into itself with target weights{tw(t)} of the second type is the process of parallel containment of the continual elements from which it can be parallel generated. Let's denote $GrS_2 f(t)\,C(t)\,\mathrm{tw}(\mathrm{t})$.

Definition B.1.4.8. Partial parallel dynamic containment of continual B(t) itself into itself with target weights {tw(t)} of the third type is the process of partial parallel containment of continual B(t) into itself or continual elements from which it can be parallel generated partially, or both at the same time. Denote $GrS_3 f(t)\,B(t)\,\mathrm{tw}(\mathrm{t})$.

B.1.5 The usage of GrSprt-elements for networks.

A. Galushkin's comprehensive monograph [20] covers all aspects of networks, but traditional approaches go through classical mathematics, mainly through the usual correspondence operators. Here we consider a different approach - through a new mathematical process with parallel containment operators, which, although they can be interpreted as the result of some correspondence operators, are not themselves correspondence operators. Parallel containment operators are more convenient for networks. Also, the main emphasis was placed on using processors operating using triodes, which are generally not used in Sprt-networks. GrSprt-networks (SmnGrSprt) are a GrSprt-structure that can be built for the required weights. GrSprt-OS (GrSprt operating system) uses GrSprt-coding and GrSprt-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. GrSprt-coding (or GrSelf-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. GrSprt-translation is carried out by inversion. In this case, GrSelf-coding and GrSelf-translation will be more stable. The target weights $r_i(t)$ in

GrSprt(t) $\begin{array}{cccccc} \textit{activation with } r_1(t) & g_1 & \textit{activation with } r_2(t) & \dots & g_n & \textit{activation with } r_n(t) \\ v_{01} & v_1 & v_{02} & \dots & v_n & v_{0(n+1)} \\ \text{SmnGrSprt} & r_1 & \text{SmnGrSprt} & \dots & r_n & \text{SmnGrSprt} \end{array}$ are

chosen for necessary tasks. We will not touch on the issues of applications, or network optimization. They are described in detail by Galushkin [20]. 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 GrSprt (designation -   mnGrSprt) for simple information processing. More complex executing programs are used for mnGrSprt nodes. GrSprt-threshold element –sgn(

GrSprt(t) $\begin{array}{cccccc} p_1(t)w_1(t) & g_1 & p_2(t)w_2(t) & \dots & g_n & p_n(t)w_{n+1}(t) \\ v_{01} & v_1 & v_{02} & \dots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 & \dots & r_n & x_{n+1} \end{array}$), $x=(x_1,x_2,\dots,x_n)$ -

mnGrSprt, $\widetilde{W}(t)=(w_1(t)|\mu_{\widetilde{w(t)}}(w_1(t)), w_2(t)|\mu_{\widetilde{w(t)}}(w_2(t)), \dots, w_{n+1}(t)|\mu_{\widetilde{w(t)}}$

$(w_{n+1}(t)))$.

– source signals values, $\{p(t)\} = (p_1(t), p_2(t), \dots, p_{n+1}(t))$ – GrSprt-synapses weights. The first level of mnGrSprt consists of simple mnGrSprt. The second level of mnGrSprt consists of GrSprt(t)

$\begin{array}{cccccc} \text{mnGrSprt} & g_1 & \text{mnGrSprt} & \dots & g_n & \text{mnGrSprt} \\ v_{01} & v_1 & v_{02} & \dots & v_n & v_{0(n+1)} \\ D_1 & r_1 & D_2 & \dots & r_n & D_{n+1} \end{array}$ – GrSprt-node of mnGrSprt in

range $D = (D_1, D_2, \dots, D_{n+1})$, D- capacity for mnGrSprt node. The third level of

mnGrSprt consists of GrSprt(t) $\begin{array}{cccccc} f & g_1 & f & \dots & g_n & f \\ v_{01} & v_1 & v_{02} & \dots & v_n & v_{0(n+1)} \\ D_1 & r_1 & D_2 & \dots & r_n & D_{n+1} \end{array}$-GrSprt^2- node of mnGrSprt in range D, f =

$$\mathrm{GrSprt}(t)\ \begin{array}{cccccc} \mathrm{mnGrSprt} & g_1 & \mathrm{mnGrSprt} & \ldots & g_n & \mathrm{mnGrSprt} \\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)} \\ D_1 & r_1 & D_2 & \ldots & r_n & D_{n+1} \end{array}$$

, thus D becomes capacity of itself in itself as an element for mnGrSprt. For our networks, it is sufficient to use GrSprt^2- nodes of mnGrSprt, but self-level is higher in living organisms, particularly GrSprt^n-, $n \geq 3$. The target structure or the corresponding program enters the target unit using alternating current. 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 B.1.5.0. A neural network can be thought of as a learnable parallel dynamic operator.

Remark B.1.5.1. 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. mnGrSprt contains GrSprt(t)

$$\begin{array}{cccc} & \mathrm{ceprogram}_2(t) & \ldots\mathrm{ceprogram}_n(t)) & \\ g_{11} & g_{21} & \cdots & g_{n1} \\ \mathrm{mnGrSprt} & \mathrm{mnGrSprt} & \ldots & \mathrm{mnGrSprt} \end{array}$$

$$\begin{array}{cccccc} \mathrm{cgeprogram}_1(t) & g_1 & \mathrm{cgeprogram}_2(t) & \ldots & g_n & \mathrm{cgeprogram}_{n+1}(t)\mathrm{t} \\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)} \\ \mathrm{mnGrSprt} & r_1 & \mathrm{mnGrSprt} & \ldots & r_n & \mathrm{mnGrSprt} \end{array}$$

*cg*eprogram −executing program in GrSprt- OS. GrSprt-OS (or GrSelf-OS) is based on GrSprt-assembly language (or GrSelf-assembly language), which is based on assembly language through GrSprt-approach in turn, if the base of elements of GrSprt-networks is sufficient. The ffeprograms are in GrSprt-programming environments (or GrSelf-programming environments), but this question and GrSprt-networks base will be considered in the following monographs. In particular, ceprograms may contain GrSprt- programming operators. In mnGrSprt cores, the constant memory GrSprt with correspondent ceprograms depending on mnGrSprt.

The OS (operating system) and the principles and modes of operation of the GrSprt-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 rotors based on GrSprt – physics and special neural networks with artificial neurons operating in normal and GrSprt-modes. Let's denote this model through SmnGrSprt. To do this, it's proposed to use mnGrSprt of different levels; for example, for the usual mode, mnGrSprt 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 GrSprt–mode with the desired "target weight" is realized in this section, etc., to the center. In the case of a monster during the test, SmnGrSprt is activated with the desired "target weight." Here are realized other tasks also. To reach the self-energy level, the mode $Sprt_{\mathrm{SmnGrSprt}}^{\mathrm{SmnGrSprt}}$ is used. In normal mode, it's planned to carry out the movement of SmnGrSprt 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 SmnGrSprt 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 SmnGrSprt. SmnGrSprt is represented by a neural network that extends from the center of one of the main clusters of GrSprt - artificial neurons to the shell, turning into the body itself. 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 SmnGrSprt's actions is below the operator's cab. In GrSprt – mode, the entire network or its sections are GrSprt – activated to perform specific tasks, in particular, with "target weights." In the target, block used GrSprt -coding, GrSprt -translation for activation of all networks to "target weights" simultaneously, then –the reset of this GrSprt-coding after activation. Unfortunately, triodes are not suitable for GrSprt -neural networks. In the most primitive case, usual separators with corresponding resistances and cores for ceprograms may be used instead triodes since there is no necessity to unbend the alternating current to direct. The GrSprt-operative memory belt is disposed around a central core of SmnGrSprt. There are GrSprt-coding, GrSprt-translation, and GrSprt-realize of eprograms and the programs from the archives without extraction, GrSprt-coding and GrSprt-translation may be used in high-intensity, ultra-short optical pulses laser of Nobel laureates 2018-year Gerard Mourou, Donna, Strickland. GrSprt – structure or an eprogram if one is present of needed «target weight» are taken in target block at GrSprt – activation of the networks. $Sprt_{activation}^{\mathrm{SmnGrSprt},f}$ derives SmnGrSprt to the self-level boundary with target weight f.

It's used an alternating current of above high frequency and ultra-violet light, which can work with GrSprt – structures in GrSprt–modes by its nature to activate the networks or some of its parts in GrSprt–modes and locally using GrSprt–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 GrSprt-networks is realized to indicate "target weights."

B.1.6 *Variable hierarchical dynamical parallel structures (models) for dynamic, singular, hierarchical sets.*

Here we will consider variable parallel 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,

$$\begin{array}{ccccc} C_1 & p_1 & C_2\cdots & p_m & C_{m+1} \\ h_{01} & h_1 & h_{02}\cdots & h_m & h_{0(m+1)} \\ D_1 & f_1 & D_2\cdots & f_m & D_{m+1} \end{array} \mathrm{GrSprt}(t) \begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\cdots & r_n & B_{n+1} \end{array} =$$

$$\begin{cases} \left(\begin{array}{ccccc} C_1 & p_1 & C_2\cdots & p_m & C_{m+1} \\ h_{01} & h_1 & h_{02}\cdots & h_m & h_{0(m+1)} \\ D_1 & f_1 & D_2\cdots & f_m & D_{m+1} \end{array} \mathrm{GrSprt},\ q_2 \ge t \ge q_1\right) | \mu_1 \\ \left(\begin{array}{ccccc} B_1 & p_1 & B_2\cdots & p_m & B_{m+1} \\ h_{01} & h_1 & h_{02}\cdots & h_m & h_{0(m+1)} \\ D_1 & f_1 & D_2\cdots & f_m & D_{m+1} \end{array} \mathrm{GrSprt} \begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\cdots & r_n & B_{n+1} \end{array},\ q_3 \ge t > q_2\right) | \mu_2 \\ \left(\begin{array}{ccccc} C_1 & p_1 & C_2\cdots & p_m & C_{m+1} \\ h_{01} & h_1 & h_{02}\cdots & h_m & h_{0(m+1)} \\ D_1 & f_1 & D_2\cdots & f_m & D_{m+1} \end{array} \mathrm{GrSprt} \begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\cdots & r_n & B_{n+1} \end{array},\ q_4 \ge t > q_3\right) | \mu_3 \\ \left(\mathrm{GrSprt} \begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\cdots & r_n & B_{n+1} \end{array},\ q_5 \ge t > q_4\right) | \mu_4 \\ \left(\begin{array}{ccccc} \{\} & p_1 & \{\}\cdots & p_m & \{\} \\ h_{01} & h_1 & h_{02}\cdots & h_m & h_{0(m+1)} \\ D_1 & f_1 & D_2\cdots & f_m & D_{m+1} \end{array} \mathrm{GrSprt},\ t > q_5\right) | \mu_5 \\ \cdots \end{cases}$$

$(*_{B.1.3})$,

μ_i- measures of fuzziness, i = 1, ..., 5. In particular,

$\begin{array}{ccccc} B_1 & p_1 & B_2\cdots & p_m & B_{m+1} \\ h_{01} & h_1 & h_{02}\cdots & h_m & h_{0(m+1)} \\ D_1 & f_1 & D_2\cdots & f_m & D_{m+1} \end{array} \mathrm{GrSprt} \begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\cdots & r_n & B_{n+1} \end{array}$ can be interpreted as a game: player 1 fits A_i into B_i, i = 1, 2, …, n+1, and the other pushes D_j out of Bj, j = 1, 2, …, m+1 at the same time.

The example of variable parallel hierarchy

$$\begin{array}{ccccc} C_1 & p_1 & C_2\cdots & p_m & C_{m+1}\\ h_{01} & h_1 & h_{02}\cdots & h_m & h_{0(m+1)}\mathrm{GrSprt(t)}_1\\ D_1 & f_1 & D_2\cdots & f_m & D_{m+1}\end{array} \begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1}\\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}\\ B_1 & r_1 & B_2\cdots & r_n & B_{n+1}\end{array} = =$$

$$\begin{cases} (RT,\quad q_2 \ge t \ge q_1)|\mu_1 \\ \left(\sum_{i=1}^{n}\left(\begin{array}{c} S^{1e}_{\;0}fB_i * \\ {}^{\;\;B_i}_{Q_i-B_i}S^1t^{A_i-B_i}_{B_i}\end{array}\right), q_3 \ge t > q_2\right)|\mu_2 \\ \left(\sum_{j=1}^{m}\sum_{i=1}^{n}\left(\begin{array}{c} S^{et}_{01}fB_i \\ {}^{C_j-B_i}_{C_j-B_i}S_1t^{A-B_i}_{B_i} \\ {}^{\;\;C_j-B_i}_{D_j-C_j-B_i}S_1t^{A-B_i}_{B_i}\end{array}\right), q_4 \ge t > q_3\right)|\mu_3 \\ \left(\left\{\begin{array}{c} \sum_{i=1}^{n+1} D_i \\ \sum_{i=1}^{n+1}(A_i|g_i)\cup(B_i|r_i)-(A_i|g_i)\cap(B_i|r_i)\end{array}\right\}, ,q_5 \ge t > q_4\right)|\mu_4 \\ \left(\begin{array}{ccccc} \{\} & p_1 & \{\}\cdots & p_m & \{\} \\ h_{01} & h_1 & h_{02}\cdots & h_m & h_{0(m+1)}\mathrm{GrSprt}, \\ D_1 & f_1 & D_2\cdots & f_m & D_{m+1}\end{array} t > q_5\right)|\mu_5 \\ \cdots \end{cases} \qquad (*_{\mathrm{B.1.4}}),$$

RT =

$$\left\{\begin{array}{c} \sum_{i=1}^{m} Q_i + \begin{array}{c}\{\}\\ (D_1|f_1)-(D_1|f_1)\cap(C_1|p_1)\end{array} \begin{array}{c}\{\}\\ (D_2|f_2)-(D_2|f_2)\cap(C_2|p_2)\end{array} \begin{array}{c}\cdots\\ \cdots\end{array} \begin{array}{c}\{\}\\ (D_m|f_m)-(D_m|f_m)\cap(C_m|p_m)\end{array}^{\mathrm{GrSrt}} \\ \sum_{i=1}^{m}\big((C_i|p_i)-(D_i|f_i)\cap(C_i|p_i)\big)-((D_i|f_i)-(D_i|f_i)\cap(C_i|p_i)) \end{array}\right\}.$$

Where μ_i- measures of fuzziness, i = 1, ..., 5, Q_i is oself-(set) for $\big((D_i|f_i)\cap(C_i|p_i)\big)$ (i = 1, 2, …, m) [14]., D_i is self-(set) for $(A_i|g_i)\cap(B_i|r_i)$ (i = 1, 2, …, n)., $S^{et}_{01}fB$, ${}^{C-B}_{C-B}S_1t^{A-B}_B$, ${}^{\;\;C-B}_{D-C-B}S_1t^{A-B}_B$ are considered in [13], ${}^{\;\;B}_{Q-B}S^1t^{A-B}_B$ is considered in [10].

In what follows, we will denote variable parallel dynamic structure (model) through GrVS, parallel fself-type variable dynamic structures (models) through GrSVS, and parallel foself-type variable dynamic structures (models) through GrOSVS.

Examples: a) discrete variable parallel dynamic structure

$$\begin{array}{cccccccccc}
C_1 & C_2 & \dots & C_m & a & b & g & A_1 & A_2 & \dots & A_n \\
D_1 & D_2 & \dots & D_m & c & GrVSC & w & B_1 & B_2 & \dots & B_n \\
A_1 & A_2 & \dots & A_n & d & q & r & C_1 & C_2 & \dots & C_m \\
B_1 & B_2 & \dots & B_n & & & & D_1 & D_2 & \dots & D_m
\end{array}$$

Fig. B.1.2

c) continuous variable parallel dynamic structure

Fig.B.1.3.

Where a continuous set represents the rim of the Fig.B.1.3.

We introduce the notation m_{PrVCS_N}– the number of elements, N - the number of connections between them in the discrete variable parallel 2-hierarchical dynamic structure GrVSC. We introduce the notation q_{GrVCS_R}– any, R - connections in q_{GrVCS_R} in the variable parallel dynamic 2-hierarchical structure GrVSC, in particular, q_{PrVCS_R}, R can be sets both discrete and continuous and discrete-continuous. We consider the functional cg(Q), which gives a numerical value for the structurability of Q from the interval [0,1], where 0 corresponds to "no parallel dynamic structure"," and 1 corresponds to the value " parallel dynamic structure". Then for joint dynamic A, B: cg(A+B)=cg(A)+cg(B)-cg(A*B)+cgS(D), D- parallel Grself-type structures from A*B, cgS(x)- the value of GrSelf for parallel fself-type structures x; for dependent parallel dynamic structures: cg(A*B)=cga(A)*cg(B/A)=cg(B)*cg(A/B), where cg(B/A)- conditional structurability of the parallel dynamic structure B at the parallel dynamic structure A, cg(A/B)- conditional dynamic structure of the parallel dynamic structure A at the parallel dynamic structure B. Adding inconsistent parallel dynamic structures: cg(A+B) =cg(A) + cg(B). The formula of complete parallel dynamic structure: cg(A)=$\sum_{k=1}^{n} cg\,(B_k) * cg(A/B_k)$, B_1, B_{2},.., B_n-full group of hypotheses- containments: $\sum_{k=1}^{n} cg\,(B_k)$=1(“parallel dynamic structure”).

GrSprt- structure of the first type for set of parallel dynamic structures A={A_1, A_2,…,A_n}: $\mathrm{GrSprt}\begin{matrix} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\cdots & r_n & x_{n+1} \end{matrix}$,

$\mathrm{GrSprt}\begin{matrix} cg(A_1) & g_1 & cg(A_2)\cdots & g_n & cg(A_{n+1}) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ \cdots & r_n & x_{n+1} \end{matrix}$ - GrSprt- structurability for these structures. It is possible to consider the parallel dynamic self-type structure GrS_3A with m parallel dynamic structures from A, at m<n, which is formed by the form (1.1), that is, only m parallel dynamic structures from A are located in the structure $\mathrm{GrSprt}\begin{matrix} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\cdots & r_n & x_{n+1} \end{matrix}$. The same for parallel dynamic fself-type structurability $GrS_3\{\mathrm{cg}(A_1),\mathrm{cg}(\mathrm{A}_2),\ldots,\mathrm{cg}(\mathrm{A}_{n+1})$.

Can be considered N-hierarchical parallel 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 parallel 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.

It can be considered discrete hierarchical parallel structure, continuous hierarchical parallel structure, and discrete-continuous hierarchical parallel structure.

The example PrQHSC=

$$HSCprt_x\left\| \begin{matrix} \mathrm{GrSprt}\begin{matrix} \text{K–level of hierarchical structure}_1 & g_1 & \text{K–level of hierarchical structure}_2\cdots & g_n & \text{K–level of hierarchical structure}_{n+1} \\ v_{01} & v_1 & v_{02} & \cdots\ v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 & \cdots\ r_n & x_{n+1} \end{matrix} \\ \cdots \\ \mathrm{GrSprt}\begin{matrix} \text{2–level of hierarchical structure}_1 & g_1 & \text{2–level of hierarchical structure}_2\cdots & g_n & \text{2–level of hierarchical structure}_{n+1} \\ v_{01} & v_1 & v_{02} & \cdots\ v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 & \cdots\ r_n & x_{n+1} \end{matrix} \\ \cdots \\ \mathrm{GrSprt}\begin{matrix} \text{1–level of hierarchical structure}_1 & g_1 & \text{1–level of hierarchical structure}_2\cdots & g_n & \text{1–level of hierarchical structure}_{n+1} \\ v_{01} & v_1 & v_{02} & \cdots\ v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 & \cdots\ r_n & x_{n+1} \end{matrix} \end{matrix} \right\| -$$

K-hierarchical structure compression into point x = $(x_1,x_2,\ldots,x_{n+1})$.

Let Pr(K, PrQHSC)= $\mathrm{PrQHSC}^{\mathrm{PrQHSC}^{\mathrm{PrQHSC}^{\cdots^{\mathrm{PrQHSC}}}}}\left.\vphantom{\begin{matrix}a\\a\\a\end{matrix}}\right\}\text{-N levels}$

It can be considered GrSelf- PrQHSC, Pr(y, PrQHSC) for any y, Pr(PrQHSC, PrQHSC).

Parallel Compression Hierarchy Example:

1)

$$\mathrm{GrSprt}\begin{array}{ccccc}
\begin{array}{r}(\,)\quad(\,)\quad\ldots(\,)\\ \mathrm{GrSprt}\,(\,)\quad(\,)\quad\ldots(\,)\\ (\,)\quad(\,)\quad\ldots(\,)\end{array} &
\begin{array}{r}(\,)\quad(\,)\quad\ldots(\,)\\ \mathrm{GrSprt}\,(\,)\quad(\,)\quad\ldots(\,)\\ (\,)\quad(\,)\quad\ldots(\,)\end{array} & \ldots &
\begin{array}{r}(\,)\quad(\,)\quad\ldots(\,)\\ \mathrm{GrSprt}\,(\,)\quad(\,)\quad\ldots(\,)\\ (\,)\quad(\,)\quad\ldots(\,)\end{array} \\
\begin{array}{r}(\,)\quad(\,)\quad\ldots(\,)\\ \mathrm{GrSprt}\,(\,)\quad(\,)\quad\ldots(\,)+B\\ (\,)\quad(\,)\quad\ldots(\,)\end{array} &
\begin{array}{r}(\,)\quad(\,)\quad\ldots(\,)\\ \mathrm{GrSprt}\,(\,)\quad(\,)\quad\ldots(\,)+B\\ (\,)\quad(\,)\quad\ldots(\,)\end{array} & \ldots &
\begin{array}{r}(\,)\quad(\,)\quad\ldots(\,)\\ \mathrm{GrSprt}\,(\,)\quad(\,)\quad\ldots(\,)+B\\ (\,)\quad(\,)\quad\ldots(\,)\end{array}
\end{array}$$

$$=\left(\begin{array}{l}
\mathrm{GrSprt}\begin{array}{cccc}
\begin{array}{r}(\,)\quad(\,)\quad\ldots(\,)\\ \mathrm{GrSprt}\,(\,)\quad(\,)\quad\ldots(\,)\\ (\,)\quad(\,)\quad\ldots(\,)\end{array} &
\begin{array}{r}(\,)\quad(\,)\quad\ldots(\,)\\ \mathrm{GrSprt}\,(\,)\quad(\,)\quad\ldots(\,)\\ (\,)\quad(\,)\quad\ldots(\,)\end{array} & \ldots &
\begin{array}{r}(\,)\quad(\,)\quad\ldots(\,)\\ \mathrm{GrSprt}\,(\,)\quad(\,)\quad\ldots(\,)\\ (\,)\quad(\,)\quad\ldots(\,)\end{array} \\
\begin{array}{r}(\,)\quad(\,)\quad\ldots(\,)\\ \mathrm{GrSprt}\,(\,)\quad(\,)\quad\ldots(\,)\\ (\,)\quad(\,)\quad\ldots(\,)\end{array} &
\begin{array}{r}(\,)\quad(\,)\quad\ldots(\,)\\ \mathrm{GrSprt}\,(\,)\quad(\,)\quad\ldots(\,)\\ (\,)\quad(\,)\quad\ldots(\,)\end{array} & \ldots &
\begin{array}{r}(\,)\quad(\,)\quad\ldots(\,)\\ \mathrm{GrSprt}\,(\,)\quad(\,)\quad\ldots(\,)\\ (\,)\quad(\,)\quad\ldots(\,)\end{array}
\end{array}\\
\mathrm{GrSprt}\begin{array}{cccc}
\begin{array}{r}(\,)\quad(\,)\quad\ldots(\,)\\ \mathrm{GrSprt}\,(\,)\quad(\,)\quad\ldots(\,)\\ (\,)\quad(\,)\quad\ldots(\,)\end{array} &
\begin{array}{r}(\,)\quad(\,)\quad\ldots(\,)\\ \mathrm{GrSprt}\,(\,)\quad(\,)\quad\ldots(\,)\\ (\,)\quad(\,)\quad\ldots(\,)\end{array} & \ldots &
\begin{array}{r}(\,)\quad(\,)\quad\ldots(\,)\\ \mathrm{GrSprt}\,(\,)\quad(\,)\quad\ldots(\,)\\ (\,)\quad(\,)\quad\ldots(\,)\end{array}
\end{array}\\
\begin{array}{cccc} \quad g_{11} & \quad g_{21} & \ldots & g_{n1} \\ \quad B & \quad B & \ldots & B \end{array}
\end{array}\right)$$

Let's consider two versions: 1) containment is interpreted through the concept of containment, and 2) fgcapacity is interpreted through the concept of containment as a rest point of containment. GrSelf-containment is interpreted as a rest point of GrSelf-containment. We consider the functional cag(Q), which gives a numerical value for the accommodation of Q from the interval [0,1], where 0 corresponds to " parallel containment", and one corresponds to the value " parallel capacity. " Then for joint dynamic A, B: cag(A+B)=cag(A)+cag(B)-cag(A*B)+cagS(D), D- GrSelf-containment for A*B, cagS(x)- the value of GrSelf-capacity for GrSelf-containment of x; for dependent parallel containments: cag(A*B)=cag(A)*cag(B/A)=cag(B)*cag(A/B), where cag(B/A)- conditional accommodation of the parallel containment B at the parallel containment A, cag(A/B)- conditional parallel fgcapacity of the parallel containment A at the parallel containment B. Adding the parallel fgcapacity values of inconsistent parallel containments: cag(A+B)=cag(A)+cag(B). The formula of complete parallel fgcapacity : cag(A)=$\sum_{k=1}^{n} cag\,(B_k) * cag(A/B_k)$, B_1, B_2,..,B_n-full group of hypotheses-(parallel containments): $\sum_{k=1}^{n} cag\,(B_k)$=1(“parallel fgcapacity ”).

GrSprt- containment for set of parallel containments A={A$_1$, A$_2$,…,A$_{n+1}$}:

$$\mathrm{GrSprt}\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{array},$$

$$\mathrm{GrSprt}\begin{array}{ccccccc} cag(A_1) & g_1 & cag(A_2) & \ldots & g_n & cag(A_{n+1}) \\ v_{01} & v_1 & v_{02} & \ldots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 & \ldots & r_n & x_{n+1} \end{array}$$

- GrSprt- accommodation for these parallel containments. It is possible to consider the GrSelf- containment PrS_3CA with m containments from A, at m<n, which is formed by the form (1.1), that is, only m parallel containments from A are located in the parallel containment

$$\mathrm{GrSprt(t)}\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{array}$$

. The same for GrSelf- accommodation - GrS_3{ cag(A_1),cag(A$_2$),...,cag(A$_n$).

We consider the functional hg(Q), which gives a numerical value for the parallel dynamic hierarchization of Q from the interval [0,1], where 0 corresponds to "no parallel dynamic hierarchy," and 1 corresponds to the value " parallel dynamic hierarchy. " Then for joint parallel dynamic hierarchies A, B: hg(A+B)=hg(A)+hg(B)-hg(A*B)+hgSC(D), D- GrSelf- hierarchy from A*B, hgSC(x)- the value of GrSelf- hierarchy for GrSelf- hierarchy x; for dependent parallel dynamic hierarchies: hg(A*B) = hg(A)*hg(B/A) = hg(B)*hg(A/B), where hg(B/A)- conditional parallel dynamic hierarchization of the parallel dynamic hierarchy B at the parallel dynamic hierarchy A, hg(A/B)- conditional parallel dynamic hierarchy of the parallel dynamic hierarchy A at the parallel dynamic structure B. Adding the parallel dynamic hierarchy values of inconsistent parallel dynamic hierarchies: hg(A+B)=hg(A)+hg(B). The formula of complete parallel dynamic hierarchy: hg(A)=$\sum_{k=1}^{n} hg\,(B_k) * hg(A/B_k)$, B$_1$, B$_2$, .., B$_n$-full group of hypotheses-(parallel dynamic hierarches): $\sum_{k=1}^{n} hg\,(B_k)$=1(“parallel dynamic hierarchy”).

GrSprt- structure for set of parallel dynamic hierarches $A=\{A_1, A_2,\ldots,A_{n+1}\}$:

$$\text{GrSprt(t)}\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{array}, \text{GrSprt(t)}$$

$$\begin{array}{ccccc} hg(A_1) & g_1 & hg(A_2)\ldots & g_n & hg(A_n) \\ v_{01} & v_1 & v_{02}\ \ldots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ \ldots & r_n & x_n \end{array}$$ - GrSprt- hierarchization for these parallel dynamic hierarches. It is possible to consider the GrSelf- hierarchy GrS_3A with m parallel dynamic hierarches from A, at m<n, which is formed by the form (1.1) [], that is, only m parallel dynamic hierarches from A are located in the parallel dynamic hierarchy $\text{GrSprt(t)}\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{array}$. The same for GrSelf- hierarchization $GrS_3\{\mathrm{hg}(A_1),\mathrm{hg}(A_2),\ldots,\mathrm{hg}(A_{n+1})$.Can be considered

$$\text{GrSprt(t)}\begin{array}{ccccc} \{cag(A_1),\mathrm{cg}(A_1),\mathrm{hg}(A_1)\} & g_1 & \{cag(A_2),\mathrm{cg}(A_2),\mathrm{hg}(A_2)\}\ldots & g_n & \{cag(A_{n+1}),\mathrm{cg}(A_{n+1}),\mathrm{hg}(A_{n+1})\} \\ v_{01} & v_1 & v_{02} & \ldots\ v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 & \ldots\ r_n & x_{n+1} \end{array} -$$

Very interesting next parallel dynamic hierarchy type:

$$\begin{array}{ccccc} \text{hierarchy } A_1 & g_1 & \text{hierarchy } A_2\ldots & g_n & \text{hierarchy } A_{n+1} \\ v_{01} & v_1 & v_{02}\ \ldots & v_n & v_{0(n+1)} \\ \text{hierarchy } A_1 & r_1 & \text{hierarchy } A_2\ldots & r_n & \text{hierarchy } A_{n+1} \end{array} \text{GrSprt(t)} \begin{array}{ccccc} \text{hierarchy } A_1 & g_1 & \text{hierarchy } A_2\ldots & g_n & \text{hierarchy } A_{n+1} \\ v_{01} & v_1 & v_{02}\ \ldots & v_n & v_{0(n+1)} \\ \text{hierarchy } A_1 & r_1 & \text{hierarchy } A_2\ldots & r_n & \text{hierarchy } A_{n+1} \end{array}.$$

. You can enter special operator GrCprt to work with dynamic structures:

$$\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\ldots & r_n & B_{n+1} \end{array} \text{GrCprt} \begin{array}{ccccc} R_1 & g_1 & R_2\cdots & g_m & R_{m+1} \\ v_{01} & v_1 & v_{02}\cdots & v_m & v_{0(m+1)} \\ Q_1 & r_1 & Q_2\ldots & r_m & Q_{m+1} \end{array}$$ structures R_j with the structure from Q_j with type of containment v_{0j}, unstructures A_i by the structure B_i with type of expelling v_{0i}, simultaneously, (i = 1, 2, …, n+1, j = 1, 2, …, m+1). Very interesting next parallel dynamic structure type:

$$\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ A_1 & r_1 & A_2\ldots & r_n & A_{n+1} \end{array} \text{GrCrt(t)} \begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ A_1 & r_1 & A_2\ldots & r_n & A_{n+1} \end{array},$$

You can enter special parallel operator GrHprt to work with dynamic hierarches:

$$\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\ldots & r_n & B_{n+1} \end{array} \text{GrHprt} \begin{array}{ccccc} R_1 & g_1 & R_2\cdots & g_m & R_{m+1} \\ v_{01} & v_1 & v_{02}\cdots & v_m & v_{0(m+1)} \\ Q_1 & r_1 & Q_2\ldots & r_m & Q_{m+1} \end{array}$$

hierarchizes R_j with the hierarchy from Q_j with type of containment v_{0j}, unhierarchizes A_i from the hierarchy B_i with type of expelling v_{0i}, simultaneously, (i = 1, 2, …, n+1, j = 1, 2, …, m+1).

B.1.7 *Program operators GrSprt, GrtSpr.*

Here it is supposed to use a symbiosis of parallel actions and conventional calculations through sequential actions. This must be done through GrSprt-Networks in one of the central departments of which a conventional computer system is located. The parallel processor is itself prgeprogram with direct parallel computing not through serial computing.

Using conventional GrSprt -coding by a parallel computer system, through a Target-block with a GrSprt -program operator -

$$\mathrm{GrSprt}(t)\quad \begin{array}{ccccc} u_1(t)w_1(t) & g_1 & u_2(t)w_2(t)\ldots & g_n & u_{n+1}(t)w_{n+1}(t) \\ v_{01} & v_1 & v_{02}\quad\cdots & v_n & v_{0(n+1)} \\ activation & r_1 & activation\ldots & r_n & activation \end{array}$$

, it will be possible to obtain the execution of the parallel actions $(u_1(t), u_2(t), \ldots, u_{n+1}(t))$ with the desired target weights w(t)=($w_1(t), w_2(t), \ldots, w_{n+1}(t)$). Each code for a neural network from a conventional computer we "bind" (match) to the corresponding value of current (or voltage). For GrSprt-coding and GrSprt-translation may be use alternating current of ultrahigh frequency or high-intensity ultra-short optical pulses laser of Nobel laureates 2018-year Gerard Mourou, Donna Strickland, or a combination of them. For the desired action, for example, using the direct parallel program of operator GrSprt(t)

$$\begin{array}{ccccc} (\mathrm{UHF\ AC})_1(t) := Q_1(t) & g_1 & (\mathrm{UHF\ AC})_2(t) := Q_2(t)\ldots & g_n & (\mathrm{UHF\ AC})_{n+1}(t) := Q_{n+1}(t) \\ v_{01} & v_1 & v_{02}\quad\cdots & v_n & v_{0(n+1)} \\ activation & r_1 & activation\quad\ldots & r_n & activation \end{array}$$

, we simultaneously enter the desired set of codes $Q_i(t)$, i = 1, 2, …, n+1, using a microwave current or high-intensity ultra-short optical pulses laser in Target-block.

In a conventional computer, the process of sequential calculation takes a certain time interval, in a directly parallel calculation by a neural network, the calculation is instantaneous, but it occupies a certain region of the space of calculation objects.

Consider the types of direct parallel program operators:

1) GrSprt-program operators
2) GrtSpr-program operators

Here are some of the GrSprt-program operators:

1) Simultaneous assignment of the expressions $\tilde{p}=(p_1|\mu_{\tilde{p}}(p_1), p_2|\mu_{\tilde{p}}(p_2), \ldots, p_{n+1}|\mu_{\tilde{p}}(p_{n+1}))$ to the variables $\tilde{x}=(x_1|\mu_{\tilde{x}}(x_1), x_2|\mu_{\tilde{x}}(x_2), \ldots, x_{n+1}|\mu_{\tilde{x}}(x_{n+1}))$.

   This is implemented via R = GrSprt $\begin{array}{ccccccc} x_1 := & g_1 & x_2 := & \cdots & g_n & x_{n+1} := \\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)} \\ p_1 & r_1 & p_2 & \cdots & r_n & p_{n+1} \end{array}$.

2) Simultaneous checking the set of conditions $\tilde{w}=(w_1|\mu_{\tilde{w}}(w_1), w_2|\mu_{\tilde{w}}(w_2), \ldots, w_{n+1}|\mu_{\tilde{w}}(w_{n+1}))$ for the set of expressions $\tilde{B}=(B_1|\mu_{\tilde{B}}(B_1), B_2|\mu_{\tilde{B}}(B_2), \ldots, B_n|\mu_{\tilde{B}}(B_n))$. Implemented via GrSprt

$$\begin{array}{cccccc} IF\{B_1 w_1\}\ then & g_1 & IF\{B_2 w_2\}\ then\ldots & g_n & IF\{B_{n+1} w_{n+1}\}\ then \\ v_{01} & v_1 & v_{02} & \cdots\ v_n & v_{0(n+1)} \\ u_1 & r_1 & u_2 & \cdots\ r_n & u_{n+1} \end{array},$$

   where u_i (i = 1, …, n+1) can be anything.

3) Similarly for loop operators and others.

GrSprt-algorithm Examples:

1) Simultaneous addition and simultaneous parallel multiplication of sets elements (See point 1, 2 in **Math GrSelf**
2) parallel pattern recognition: GrSprt

$$\begin{array}{cccccc} IF\{q_1 \epsilon\ image\ archive_1\}\ then & g_1 & IF\{q_2 \epsilon\ image\ archive_2\}\ then\ldots & g_n & IF\{q_{n+1} \epsilon\ image\ archive_{n+1}\}\ then \\ v_{01} & v_1 & v_{02} & \cdots\ v_n & v_{0(n+1)} \\ Name\ of\ q_1 & r_1 & Name\ of\ q_2 & \cdots\ r_n & Name\ of\ q_{n+1} \end{array}$$

The example of GrSprt-program is

$$\begin{array}{lcccc} & R & \text{GrSprt}\begin{array}{cccccc} IF\{B_1 w_1\}\ then & g_1 & IF\{B_2 w_2\}\ then\ldots & g_n & IF\{B_{n+1} w_{n+1}\}\ then \\ v_{01} & v_1 & v_{02} & \cdots\ v_n & v_{0(n+1)} \\ u_1 & r_1 & u_2 & \cdots\ r_n & u_{n+1} \end{array} & \ldots & \text{GrSprt}\begin{array}{ccccc} w_1 & g_1 & w_2\cdots & g_n & w_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ w_1 & r_1 & w_2\ldots & r_n & w_{n+1} \end{array}, \\ \text{GrSprt} & & & & \\ & g_{11} & g_{21} & \ldots & g_{n1} \\ & r_1 & r_2 & \ldots & r_n \end{array}$$

GrS_3f- software operators will differ only just because aggregates $\{\tilde{w}\},\{\tilde{p}\},\{\tilde{B}\},\{\tilde{x}\}$ will be formed from corresponding GrSprt-program operators in form (1.1) [2-6] for more complex operators in forms (1.1.1) – (1.4) , (2.1*) [2-6] and analogs of forms (1.1.1) - (1.4) by type (2.1*) [2-6].

For example, $f\mathrm{GrSprt}\begin{array}{cccccc} R_1 & g_1 & R_2 & \cdots & g_n & R_{n+1} \\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)} \\ g\{R\}_1 & r_1 & g\{R\}_2 & \ldots & r_n & g\{R\}_{n+1} \end{array}$ is the fgcapacity in itself of the second type if $g\{R\}$ is a program capable of generating $\{R\}$.

The example of self-program of the first type is

$$\mathrm{GrSprt}\,g_{11}\begin{array}{ccc} R\ \mathrm{GrSprt}\begin{array}{cccccc} IF\{B_1w_1\}\ then & g_1 & IF\{B_2w_2\}\ then\ldots & & g_n & IF\{B_{n+1}w_{n+1}\}\ then \\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)} \\ u_1 & r_1 & u_2 & \cdots & r_n & u_{n+1} \end{array} & \cdots & \mathrm{GrSprt}\begin{array}{ccccc} w_1 & g_1 & w_2\cdots & g_n & w_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ w_1 & r_1 & w_2\ldots & r_n & w_{n+1} \end{array}, \\ g_{21} & \cdots & g_{n1} \\ R\ \mathrm{GrSprt}\begin{array}{cccccc} IF\{B_1w_1\}\ then & g_1 & IF\{B_2w_2\}\ then\ldots & & g_n & IF\{B_{n+1}w_{n+1}\}\ then \\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)} \\ u_1 & r_1 & u_2 & \cdots & r_n & u_{n+1} \end{array} & \cdots & \mathrm{GrSprt}\begin{array}{ccccc} w_1 & g_1 & w_2\cdots & g_n & w_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ w_1 & r_1 & w_2\ldots & r_n & w_{n+1} \end{array} \end{array}.$$

GrSprt-coding: 1) set A_i to set B_i, 2) set A_i to a point q_i, where the elements of the sets A_i, B_i can be continuous, (i = 1, 2, …, n+1; j = 1, 2, …, m+1). For example,

$$\mathrm{GrSprt}\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ B_1 & r_1 & B_2\ldots & r_n & B_{n+1} \end{array}.$$

There are GrSprt -coding, GrSprt-translation, GrSprt-realize of prgeprograms and of the programs from the archives without extraction theirs

GrSelf-coding: 1) set A_i to set A_i, i.e. A_i on itself 2) set A_i to a point q_i in forms (1.1) - (1.4) [2-6], where the elements of the sets A_i can be continuous. For example, $\mathrm{GrSprt}\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ A_1 & r_1 & A_2\ldots & r_n & A_{n+1} \end{array}.$

One of the central departments of the control system should be a computer system of the usual type of the desired level. In symbiosis with GrSprt-Networks, it will provide a holistic operation of the control system in three modes: conventional serial through a conventional type computer system, direct parallel through GrSprt -Networks and series-parallel. Codes from a conventional type computer system will be used via GrSprt -connectors in GrSprt - coding, for example:

$$\mathrm{GrSprt}(t)\begin{array}{cccccc} (\mathrm{UHF\ AC})_1(t) := Q_1(t) & g_1 & (\mathrm{UHF\ AC})_2(t) := Q_2(t)\cdots & & g_n & (\mathrm{UHF\ AC})_{n+1}(t) := Q_{n+1}(t) \\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)} \\ activation & r_1 & activation & \ldots & r_n & activation \end{array},$$

UHF AC field activation is used.

Consider the dynamic GrSprt and $GrS_3f(t)$ programming:

1. The process of simultaneous assignment of the expressions $\widetilde{p(t)}=(p_1(t)|\mu_{\widetilde{p(t)}}(p_1(t)), p_2(t)|\mu_{\widetilde{p(t)}}(p_2(t)), \ldots, p_{n+1}(t)|\mu_{\widetilde{p(t)}}(p_{n+1}(t)))$ to the variables $\widetilde{x(t)}=(x_1(t)|\mu_{\widetilde{x(t)}}(x_1(t)), x_2(t)|\mu_{\tilde{x}(t)}(x_2(t)), \ldots, x_{n+1}(t)|\mu_{\widetilde{x(t)}}(x_{n+1}(t)))$ is implemented through GrSprt

$$\begin{array}{ccccccc} x_1(t) := & g_1 & x_2(t) :=\ldots & g_n & x_{n+1}(t) := \\ v_{01} & v_1 & v_{02} \quad \cdots & v_n & v_{0(n+1)} & . \\ p_1(t) & r_1 & p_2(t) \quad \ldots & r_n & p_{n+1}(t) \end{array}$$

2. The process of simultaneous check the set of conditions $\tilde{w}=(w_1|\mu_{\tilde{w}}(w_1), w_2|\mu_{\tilde{w}}(w_2), \ldots, w_{n+1}|\mu_{\tilde{w}}(w_{n+1}))$ for the set of expressions $\widetilde{B(t)}=(B_1(t)|\mu_{\widetilde{B(t)}}(B_1(t)), B_2(t)|\mu_{\tilde{B}(t)}(B_2(t)), \ldots, B_{n+1}(t)|\mu_{\widetilde{B(t)}}(B_{n+1}(t)))$ is implemented through GrSprt

$$\begin{array}{cccccc} IF\{B_1(t)\, A_1(t)\}\ then & g_1 & IF\{B_2(t)\, A_2(t)\}\ then\ldots & g_n & IF\{B_{n+1}(t)\, A_{n+1}(t)\}\ then \\ v_{01} & v_1 & v_{02} \quad \cdots & v_n & v_{0(n+1)} & \text{where} \\ u_1(t) & r_1 & u_2(t) \quad \ldots & r_n & u_{n+1}(t) \end{array}$$

$u(t) = (u_1(t), u_2(t), \ldots, u_{n+1}(t))$ can be any.

3.Similarly for loop operators and others.

$GrS_3f(t)$– software operators will differ only in that the aggregates $\{\widetilde{w(t)}\}, \{\widetilde{p(t)}\}, \{\widetilde{B(t)}\}, \{\widetilde{x(t)}\}$ will be formed from corresponding processes GrSprt(t) for the above-mentioned programming operators through form (1.1) [2-6] or forms (1.1.1) – (1.4) [2-6] for more complex operators, (2.1*) [2-6] and analogs of forms (1.1.1) - (1.4) by type (2.1*) [2-6].

Consider GrftSpr-program operators. The ideology of GrtSpr and Prt_{S_4Cf} is parallel analogue of t_{S_4Cf} [2-6] can be used for programming. Here are some of the GrtSpr -program operators.

1. Simultaneous expelling assignment of the expressions $\tilde{p}=(p_1|\mu_{\tilde{p}}(p_1), p_2|\mu_{\tilde{p}}(p_2), \ldots, p_{n+1}|\mu_{\widetilde{p(t)}}(p_{n+1}))$ from the variables $\tilde{x}=(x_1|\mu_{\tilde{x}}(x_1), x_2|\mu_{\tilde{x}}(x_2), \ldots, x_{n+1}|\mu_{\tilde{x}}(x_{n+1}))$. It's implemented through

$$\begin{array}{ccccc} x_1 := & g_1 & x_2 :=\ldots & g_n & x_{n+!} := \\ v_{01} & v_1 & v_{02} \quad \cdots & v_n & v_{0(n+1)}\text{GrSprt.} \\ p_1 & r_1 & p_2 \quad \cdots & r_n & p_{n+1} \end{array}$$

2. Simultaneous expelling checks the set of conditions $\tilde{w}$=($w_1|\mu_{\tilde{w}}(w_1)$, $w_2|\mu_{\tilde{w}}(w_2)$, ..., $w_{n+1}|\mu_{\tilde{w}}(w_{n+1})$) for the set of expressions $\tilde{B}$=($B_1|\mu_{\tilde{B}}(B_1)$, $B_2|\mu_{\tilde{B}}(B_2)$, ..., $B_{n+1}|\mu_{\tilde{B}}(B_{n+1})$). It's implemented through

   $$\begin{array}{cccccccc} IF\{B_1 w_1\}\ then & g_1 & IF\{B_2 w_2\}\ then\dots & g_n & IF\{B_{n+1} w_{n+1}\}\ then & \\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)} & \text{GrSprt,} \\ u_1 & r_1 & u_2 & \cdots & r_n & u_{n+1} & \end{array}$$

   where u_i (i = 1, ..., n + 1) can be anything.
3. Similarly for loop operators and others.

$Grt_{S_4 f}$ – software operators will differ only just because aggregates $\{\tilde{w}\},\{\tilde{p}\},\{\tilde{B}\},\{\tilde{x}\}$ will be formed from corresponding GrtSCpr program operators in form (1.1) [2-6] for more complex operators in forms (1.1.1) – (1.4) , (2.1*) [2-6] and analogs of forms (1.1.1) - (1.4) by type (2.1*) [2-6].

Consider hierarchical PrtSpr-program operator

5. $$\begin{array}{cccccc} C_1(t) & p_1 & C_2(t)\cdots & p_m & C_{m+1}(t) & \\ h_{01} & h_1 & h_{02}\ \cdots & h_m & h_{0(m+1)} & \text{GrSrt(t)} = \\ D_1(t) & f_1 & D_2(t)\dots & f_m & D_{m+1}(t) & \end{array}$$

   $$\left\{\begin{array}{c} \sum_{i=1}^{m+1} Q_i(t) + \begin{array}{cccc} \{\,\} & \{\,\} & \cdots & \{\,\} \\ R_1(t) & & \cdots & R_m(t) \end{array}\text{GrSrt} \\ \sum_{i=1}^{m+1}\Big(\,(C_i(t)\,|\,p_i(t)) - (D_i(t)\,|\,f_i(t)) \cap (C_i(t)\,|\,p_i(t))\Big) - R_i(t)\,) \end{array}\right\},$$

   $R_i(t) = (D_i(t)\,|\,f_i(t)) - (D_i(t)\,|\,f_i(t)) \cap (C_i(t)\,|\,p_i(t))$,

   for sets $C_i(t), D_i(t)$, where $Q_i(t)$ is oself-set for $\big(D_i(t) \cap C_i(t)\big)$(i = 1, 2, …, m) [14].

Consider the GrtSpr(t) and $Grt(t)_{S_4 f}$ programming at time t.

1. The process of simultaneous assignment of the expressions $\widetilde{p(t)}$=($p_1(t)|\mu_{\widetilde{p(t)}}(p_1(t))$, $p_2(t)|\mu_{\widetilde{p(t)}}(p_2(t))$, ..., $p_{n+1}(t)|\mu_{\widetilde{p(t)}}(p_{n+1}(t))$) to the variables $\widetilde{x(t)}$=($x_1(t)|\mu_{\widetilde{x(t)}}(x_1(t))$, $x_2(t)|\mu_{\tilde{x}(t)}(x_2(t))$, ..., $x_{n+1}(t)|\mu_{\widetilde{x(t)}}(x_{n+1}(t))$) is implemented through

$$\begin{array}{cccccccc} x_1(t) := & g_1 & x_2(t) :=\dots & g_n & x_{n+1}(t) := & \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} & \text{GrSprt(t).} \\ p_1(t) & r_1 & p_2(t)\ \dots & r_n & p_{n+1}(t) & \end{array}$$

2. The process of simultaneous check the set of conditions $\widetilde{u(t)}$=(u$_1$(t)|$\mu_{\widetilde{u(t)}}$(u$_1$(t)), u$_2$(t)|$\mu_{\tilde{u}(t)}$(u$_2$(t)), …, u$_{n+1}$(t)|$\mu_{\widetilde{u(t)}}$(u$_{n+1}$(t))) for the set of expressions $\widetilde{B(t)}$=(B$_1$(t)|$\mu_{\widetilde{B(t)}}$(B$_1$(t)), B$_2$(t)|$\mu_{\tilde{B}(t)}$(B$_2$(t)), …, B$_{n+1}$(t)|$\mu_{\widetilde{B(t)}}$(B$_{n+1}$(t))) is implemented through

$$\begin{matrix} IF\{B_1(t)\,A_1(t)\}\ then & g_1 & IF\{B_2(t)\,A_2(t)\}\ then\ldots & g_n & IF\{B_{n+1}(t)\,A_{n+1}(t)\}\ then \\ v_{01} & v_1 & v_{02} & \ldots\ v_n & v_{0(n+1)} \\ w_1(t) & r_1 & w_2(t) & \ldots\ r_n & w_{n+1}(t) \end{matrix}\quad \mathrm{GrSprt(t)},$$

where w_i(t) (i = 1, …, n + 1) can be anything.

3.Similarly for loop operators and others.

$Prt(t)_{S_4Cf}$ – software operators will differ only in that the aggregates $\widetilde{x(t)}$,$\widetilde{p(t)}$, $\widetilde{B(t)}$,$\widetilde{w(t)}$ will be formed from corresponding processes GrSprt(t) for the above-mentioned programming operators through form (1.1) [2-6] or forms (1.1.1) – (1.4) [2-6] for more complex operators, (2.1*) [2-6] and analogs of forms (1.1.1) - (1.4) by type (2.1*) [2-6].

Consider GrSrt(t)- program operators SCprt

$$\left\{\begin{matrix} q\ \mathrm{self}(\overset{\{\}}{\underset{\{\}}{g_1(t)}}\overset{\{\}}{\underset{\{\}}{g_2(t)}}\mathrm{GrSprt}\,\overset{a(t)}{\underset{a(t)}{g_1(t)}}\overset{a(t)}{\underset{a(t)}{g_2(t)}}|||_D\overset{a(t)}{\underset{a(t)}{g_1(t)}}\overset{a(t)}{\underset{a(t)}{g_2(t)}}\mathrm{Grprt}) \\ \mathrm{self}(\overset{\{\}}{\underset{\{\}}{g_1(t)}}\overset{\{\}}{\underset{\{\}}{g_2(t)}}\mathrm{GrSprt}\,\overset{a(t)}{\underset{a(t)}{g_1(t)}}\overset{a(t)}{\underset{a(t)}{g_2(t)}}|||_w))_q \end{matrix}\ Sprt_q\ \underset{\underset{t_0}{D}}{\begin{matrix} \mathrm{self}(\overset{\{\}}{\underset{\{\}}{g_1(t)}}\overset{\{\}}{\underset{\{\}}{g_2(t)}}\mathrm{GrSprt}\,\overset{a(t)}{\underset{a(t)}{g_1(t)}}\overset{a(t)}{\underset{a(t)}{g_2(t)}}|||_{Will})_q \\ \mathrm{self}(\overset{\{\}}{\underset{\{\}}{g_1(t)}}\overset{\{\}}{\underset{\{\}}{g_2(t)}}\mathrm{GrSprt}\,\overset{a(t)}{\underset{a(t)}{g_1(t)}}\overset{a(t)}{\underset{a(t)}{g_2(t)}}|||_D\overset{a(t)}{\underset{a(t)}{g_1(t)}}\overset{a(t)}{\underset{a(t)}{g_2(t)}}\mathrm{Grprt}) \end{matrix}}\ ,\ Sprt\ \begin{matrix} \{\mathrm{self}(|||_{Will}\overset{a(t)}{\underset{a(t)}{g_1(t)}}\overset{a(t)}{\underset{a(t)}{g_2(t)}}\mathrm{GrprtSCprt})^{d_r}\} \\ \mathrm{self}(|||_{d_r}\overset{a(t)}{\underset{a(t)}{g_1(t)}}\overset{a(t)}{\underset{a(t)}{g_2(t)}}\mathrm{GrprtSCprt})^{d_r} \end{matrix}\right\}$$

—program structure example, where the assemblage point d_r is the cursor, it is quite complex GCself—program.

Remark. Energy with type of containment $g_1(t)$, $g_2(t)$ of a living organism other than humans:

GrC(r, $a(t)$, $g_1(t)$, $g_2(t)$) = SCprt

$$\left\{\begin{matrix} q\ \mathrm{self}(\overset{\{\}}{\underset{\{\}}{g_1(t)}}\overset{\{\}}{\underset{\{\}}{g_2(t)}}\mathrm{GrSprt}\,\overset{a(t)}{\underset{a(t)}{g_1(t)}}\overset{a(t)}{\underset{a(t)}{g_2(t)}}|||_D\overset{a(t)}{\underset{a(t)}{g_1(t)}}\overset{a(t)}{\underset{a(t)}{g_2(t)}}\mathrm{Grprt}) \\ \mathrm{self}(\overset{\{\}}{\underset{\{\}}{g_1(t)}}\overset{\{\}}{\underset{\{\}}{g_2(t)}}\mathrm{GrSprt}\,\overset{a(t)}{\underset{a(t)}{g_1(t)}}\overset{a(t)}{\underset{a(t)}{g_2(t)}}|||_w))_q \end{matrix}\ Sprt_q\ \underset{\underset{t_0}{D}}{\begin{matrix} \mathrm{self}(\overset{\{\}}{\underset{\{\}}{g_1(t)}}\overset{\{\}}{\underset{\{\}}{g_2(t)}}\mathrm{GrSprt}\,\overset{a(t)}{\underset{a(t)}{g_1(t)}}\overset{a(t)}{\underset{a(t)}{g_2(t)}}|||_{Will})_q \\ \mathrm{self}(\overset{\{\}}{\underset{\{\}}{g_1(t)}}\overset{\{\}}{\underset{\{\}}{g_2(t)}}\mathrm{GrSprt}\,\overset{a(t)}{\underset{a(t)}{g_1(t)}}\overset{a(t)}{\underset{a(t)}{g_2(t)}}|||_D\overset{a(t)}{\underset{a(t)}{g_1(t)}}\overset{a(t)}{\underset{a(t)}{g_2(t)}}\mathrm{Grprt}) \end{matrix}}\ ,\ Sprt\ \begin{matrix} \{\mathrm{self}(|||_{Will}\overset{a(t)}{\underset{a(t)}{g_1(t)}}\overset{a(t)}{\underset{a(t)}{g_2(t)}}\mathrm{Grprt})^{d_r}\} \\ \mathrm{self}(\mathrm{self}(|||_{d_r}\overset{a(t)}{\underset{a(t)}{g_1(t)}}\overset{a(t)}{\underset{a(t)}{g_2(t)}}\mathrm{Grprt}))^{d_r} \end{matrix}\right\}\ (**_{\mathrm{B.1}}).$$

$\mathrm{self}(\overset{\{\}}{\underset{\{\}}{g(t)}}\mathrm{SCprt}\overset{a(t)}{\underset{a(t)}{g(t)}}|||_D\overset{a(t)}{\underset{a(t)}{g(t)}}\mathrm{SCprt})$ -internal energy with type of containment $g_1(t)$, $g_2(t)$ of a living organism of double energy structure, q- a gap in the energy cocoon of a living organism, r$_i$-the position of the assemblage point d$_r$ on the energy cocoon of a living organism, $\mathrm{self}(\underset{\{\}}{\overset{\{\}}{g(t)}}\mathrm{SCprt}\underset{a(t)}{\overset{a(t)}{g(t)}}|||_w))_q$- energy prominences from the gap in the cocoon of a living organism, $\mathrm{self}(\underset{\{\}}{\overset{\{\}}{g_1(t)}}\underset{\{\}}{\overset{\{\}}{g_2(t)}}\mathrm{GrSprt}\,\underset{a(t)}{\overset{a(t)}{g_1(t)}}\underset{a(t)}{\overset{a(t)}{g_2(t)}}|||_{Will})_q$-external energy entering the gap in the cocoon of a living organism, $\{\mathrm{self}(|||_{Will}\underset{a(t)}{\overset{a(t)}{g_1(t)}}\underset{a(t)}{\overset{a(t)}{g_2(t)}}\mathrm{Grprt})^{d_r}\}$- a bundle of fibers of external energy self-capacities from outside the cocoon, collected at the point of assembly of the cocoon of a living organism, $\mathrm{self}(\mathrm{self}(|||_{d_r}\underset{a(t)}{\overset{a(t)}{g_1(t)}}\underset{a(t)}{\overset{a(t)}{g_2(t)}}\mathrm{Grprt}))^{d_r}$- a bundle of fibers of external energy self-capacities from inside the cocoon, collected at the point of assembly of the cocoon of a living organism in the same position r of the assemblage point d_r. d_r is the subject of identifying the energy fibers of the subtle energy of the Universe in position r both outside and inside the cocoon.

$$\mathrm{Wwpg}(r, a(E_q)) = \mathrm{SCprt} \underset{\substack{D\\ t_0}}{\left\{ \begin{array}{c} {}^{q}\mathrm{self}(\underset{\{\}}{\overset{\{\}}{g_1(t)}}\underset{\{\}}{\overset{\{\}}{g_2(t)}}\mathrm{GrSprt}\,\underset{a(t)}{\overset{a(t)}{g_1(t)}}\underset{a(t)}{\overset{a(t)}{g_2(t)}}|||_D\underset{a(t)}{\overset{a(t)}{g_1(t)}}\underset{a(t)}{\overset{a(t)}{g_2(t)}}\mathrm{Grprt}) \\ \mathrm{self}(\underset{\{\}}{\overset{\{\}}{g_1(t)}}\underset{\{\}}{\overset{\{\}}{g_2(t)}}\mathrm{GrSprt}\,\underset{a(t)}{\overset{a(t)}{g_1(t)}}\underset{a(t)}{\overset{a(t)}{g_2(t)}}|||_w))_q \end{array} Sprt_q \begin{array}{c} \mathrm{self}(\underset{\{\}}{\overset{\{\}}{g_1(t)}}\underset{\{\}}{\overset{\{\}}{g_2(t)}}\mathrm{GrSprt}\,\underset{a(t)}{\overset{a(t)}{g_1(t)}}\underset{a(t)}{\overset{a(t)}{g_2(t)}}|||_{Will})_q \\ \mathrm{self}(\underset{\{\}}{\overset{\{\}}{g_1(t)}}\underset{\{\}}{\overset{\{\}}{g_2(t)}}\mathrm{GrSprt}\,\underset{a(t)}{\overset{a(t)}{g_1(t)}}\underset{a(t)}{\overset{a(t)}{g_2(t)}}|||_D\underset{a(t)}{\overset{a(t)}{g_1(t)}}\underset{a(t)}{\overset{a(t)}{g_2(t)}}\mathrm{Grprt}) \end{array} , \; Sprt \begin{array}{c} \{\mathrm{self}(|||_{Will}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt})^{d_{r_i}}\} \\ \mathrm{self}(\overset{n}{\underset{i=1}{V}}\mathrm{self}(|||_{d_{r_i}}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt}))^{d_{r_i}} \end{array} \right\}} \quad (***_{B.1})$$

corresponds to “double”, $\overset{n}{\underset{i=1}{V}}$ is the logical addition with n objects, n ≤ 600, $\mathrm{self}(\overset{n}{\underset{i=1}{V}}\mathrm{self}(|||_{d_{r_i}}\underset{a(t)}{\overset{a(t)}{g(t)}}\mathrm{SCprt}))^{d_{r_i}}$ is the actualized potential energy of assemblage point positions.

$(**_{B.1})$, $(***_{B.1})$ can be interpreted as GrSprt- program operators.

Appendix.

Supplement for string theory: May be to try represent elementary particles in the form of continual self-elements of the type:

$$\mathrm{GrSprt}\begin{array}{ccccccc} \uparrow I\downarrow_{-1}^{1} & g_1 & \downarrow I\uparrow_{-\infty}^{\infty} & \cdots & g_n & \downarrow I\uparrow_{-1}^{1}) \\ v_{01} & v_1 & v_{02} & \cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2 & \cdots & r_n & x_{n+1} \end{array} \quad \text{etc.}$$

Supplement for GrSprt-logic: We consider GrSprt-logic: consider the functional fg(Q), which gives a numerical value for the truth of the dynamic statement Q from the interval [0,1], where 0 corresponds to "no," and one corresponds to the logical value "yes." Then for joint dynamic statements A, B: fg(A+B)=fg(A)+fg(B)-fg(A*B)+fgS(D), D- Grself- (dynamic statement) from A*B, fgS(x)- the value of Grself-(dynamic truth) for Grself-(dynamic statement) x; for dependent dynamic statements: fg(A*B)=fg(A)*fg(B/A)=fg(B)*fg(A/B), where fg(B/A)-conditional dynamic truth of the dynamic statement B at dynamic statement A, fg(A/B)- dependent dynamic truth of the dynamic statement A at the dynamic statement B. Adding the dynamic truth values of inconsistent dynamic propositions: fg(A+B)=fg(A)+fg(B). The formula of complete dynamic truth: fg(A)=$\sum_{k=1}^{n+1} fg\left(B_k\right) * fg(A/B_k)$, B_1, B_2, .., B_{n+1}-full group of hypotheses-(dynamic statements): $\sum_{k=1}^{n+1} fg\left(B_k\right)$=1(“yes”).

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

GrSprt- statement for set of dynamic statements A ={A_1, A_2, …, A_n}: GrSprt $\begin{matrix} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{matrix}$. GrSprt $\begin{matrix} f(A_1) & g_1 & f(A_2)\cdots & g_n & f(A_{n+1}) \\ v_{01} & v_1 & v_{02}\ \cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ \cdots & r_n & x_{n+1} \end{matrix}$ - GrSprt- truth for these statements. It is possible to consider the self-(statement) GrS_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 GrSprt$\begin{matrix} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{matrix}$. The same for self-truth $GrS_3\{\,f(A_1),f(A_2),\ldots,f(A_{n+1})\,\}$.

One can introduce the concepts of GrSprt-group: GrSprt $\begin{matrix} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{matrix}$, A is the usual group, GrSprt

$\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)}, \\ x_1 & r_1 & x_2\ldots & r_n & x_{n+1} \end{array}$ where A_i is usual group, i=1,2, …,n+1, x- usual groups, self- group: GrS_ifA, i=1,2,3, A is usual group.

Definition B.1.5.1. A dynamic structure with a second degree of freedom will be called complete, i.e., "capable" of reversing itself concerning any of its elements clearly, but not necessarily in known operators; it can form (create) new special dynamic operators (in particular, special dynamic functions). In particular, PrCCrt $\begin{array}{ccccc} A_1 & g_1 & A_2\cdots & g_n & A_{n+1} \\ v_{01} & v_1 & v_{02}\cdots & v_n & v_{0(n+1)} \\ A_1 & r_1 & A_2\ldots & r_n & A_{n+1} \end{array}$is such structure.

Similarly, for working with models, each is structured by its dynamic structure; for example, use GrSprt-groups, GrSprt-rings, GrSprt-fields, GrSprt-spaces, GrSelf-groups, GrSelf-rings, GrSelf-fields, and GrSelf-spaces. Like any task, this is also a dynamic structure of the appropriate capacity. Since the degree of freedom is double, it is clear that the form of the GrSelf-equation contains dynamic solutions or dynamic structures the inversion of the GrSelf-equation concerning unknowns, i.e., tthe dynamic structure of the GrSelf-equation is complete.

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F.3 GrfSprt – elements, self-type GrfSprt - structures

Introduction.

This section generalizes the previous one to fuzzy actions with fuzzy objects, in particular, with fuzzy sets.

We consider the expression

$$\begin{array}{ccccccccccccc} C_1 & p_1 & C_2 \dots & p_m & C_m & & A_1 & g_1 & A_2 \dots & g_n & A_n & \\ \substack{v_{12} \\ \mu_{12}} & h_1 & \substack{v_{22} \\ \mu_{22}} \dots & h_m & \substack{v_{m2} \\ \mu_{m2}} & \text{GrfSprt} & \substack{v_{11} \\ \mu_{11}} & u_1 & \substack{v_{21} \\ \mu_{21}} \dots & u_n & \substack{v_{n1} \\ \mu_{n1}} & (*_{\text{F.3.1}}), \\ D_1 & f_1 & D_2 \dots & f_m & D_m & & B_1 & r_1 & B_2 \dots & r_n & B_n & \end{array}$$

where fuzzy A_1 fits into fuzzy B_1 with type of containment v_{11} and measure of fuzziness μ_{11}, fuzzy A_2 fits into fuzzy B_2 with type of containment v_{21} and measure of fuzziness μ_{21}, …, fuzzy A_n fits into fuzzy B_n with type of containment g_{n1} and measure of fuzziness μ_{n1}, fuzzy D_1 is forced out of fuzzy C_1 with type of expelling v_{12} and measure of fuzziness μ_{12}, fuzzy D_2 is forced out of fuzzy C_2 with type of expelling v_{22} and measure of fuzziness μ_{22}, …, fuzzy D_m is forced out of fuzzy C_m with type of expelling v_{m2} and measure of fuzziness μ_{m2}, simultaneously. Here are interactions between A_i and A_{i+1} by fuzzy g_i, between B_i and B_{i+1} by r_i, i = 1, 2, …, n, between C_j and C_{j+1} by fuzzy p_j, between D_j and D_{j+1} by fuzzy f_j, j = 1, 2, …, m.

The result of this process will be described by the expression

$$\begin{array}{ccccccccccccc} C_1 & p_1 & C_2 \dots & p_m & C_m & & A_1 & g_1 & A_2 \dots & g_n & A_n & \\ \substack{v_{12} \\ \mu_{12}} & h_1 & \substack{v_{22} \\ \mu_{22}} \dots & h_m & \substack{v_{m2} \\ \mu_{m2}} & \text{GrfSrt} & \substack{v_{11} \\ \mu_{11}} & u_1 & \substack{v_{21} \\ \mu_{21}} \dots & u_n & \substack{v_{n1} \\ \mu_{n1}} & (*_{\text{F.3.2}}) \\ D_1 & f_1 & D_2 \dots & f_m & D_m & & B_1 & r_1 & B_2 \dots & r_n & B_n & \end{array}$$

If A_1, B_1, A_2, B_2, …, A_n, B_n, D_1, C_1, D_2, C_2, …, D_m, C_m are taken as fuzzy sets, then we will call $(*_{\text{F.3.1}})$ a parallel fuzzy fuzzy dynamic fuzzy set. The need $(*_{\text{F.3.1}})$ arose to describe processes in networks. Threshold element PrffSprt –

$$\begin{array}{cccccccccccc} B_1 & r_1 & B_2 \cdots & r_m & B_n & & \{ax\}_1 & g_1 & \{ax\}_2 \cdots & g_n & \{ax\}_n \\ \substack{v_{12} \\ \mu_{12}} & h_1 & \substack{v_{22} \\ \mu_{22}} \cdots & \substack{v_{m2} \\ \mu_{m2}} & & h_{0(m+1)}\mathrm{GrfSprt} & \substack{v_{11} \\ \mu_{11}} & u_1 & \substack{v_{21} \\ \mu_{21}} \cdots & u_n & \substack{v_{n1} \\ \mu_{n1}} \\ \{qy\}_1 & f_1 & \{qy\}_2 \cdots & f_m & \{qy\}_n & & B_1 & r_1 & B_2 \cdots & r_n & B_n \end{array}$$

, B_1, B_2, …, B_n - artificial neurons of type GrfSprt (designation - mnGrfSprt) , $\tilde{x}$ =($x_1|\mu_{\tilde{x}}(x_1)$, $x_2|\mu_{\tilde{x}}(x_2)|,\ldots,x_n|\mu_{\tilde{x}}(x_n)|$) are the fuzzy values of the initial signals, a=($a_1,a_2,\ldots,a_n$) are the weights of GrfSprt-synapses and $\tilde{y}$=($y_1|\mu_{\tilde{y}}(y_1)$, $y_2|\mu_{\tilde{y}}(y_2)|,\ldots,$ $y_n|\mu_{\tilde{y}}(y_n)|$) are the fuzzy values of the output signals $\{qy\}$ with weights q=($q_1,q_2,\ldots,q_n$). It can be considered a simpler version of the Parallel fuzzy dynamic fuzzy set

$$\mathrm{GrfSprt}\begin{array}{ccccc} A_1 & g_1 & A_2 \cdots & g_n & A_n \\ \substack{v_{11} \\ \mu_{11}} & v_1 & \substack{v_{21} \\ \mu_{21}} \cdots & v_n & \substack{v_{n1} \\ \mu_{n1}} \\ B_1 & r_1 & B_2 \cdots & r_n & B_n \end{array} (**_{\mathrm{F.3.1}}),$$

where fuzzy A_1 fits into fuzzy B_1 with type of containment v_{11} and measure of fuzziness μ_{11}, fuzzy A_2 fits into fuzzy B_2 with type of containment v_{21} and measure of fuzziness μ_{21}, …, fuzzy A_n fits into fuzzy B_n with type of containment v_{n1} and measure of fuzziness μ_{n1}, simultaneously. Here are interactions between A_i and A_{i+1} by fuzzy g_i, between B_i and B_{i+1} by r_i, i = 1, 2, …, n,. The result of this process will be described by the expression

$$\mathrm{GrfSrt}\begin{array}{ccccc} A_1 & g_1 & A_2 \cdots & g_n & A_n \\ \substack{v_{11} \\ \mu_{11}} & v_1 & \substack{v_{21} \\ \mu_{21}} \cdots & v_n & \substack{v_{n1} \\ \mu_{n1}} \\ B_1 & r_1 & B_2 \cdots & r_n & B_n \end{array} (**_{\mathrm{F.3.2}})$$

or

$$\begin{array}{ccccc} C_1 & p_1 & C_2 \cdots & p_m & C_m \\ \substack{v_{12} \\ \mu_{12}} & h_1 & \substack{v_{22} \\ \mu_{22}} \cdots & h_m & \substack{v_{m2} \\ \mu_{m2}} \\ D_1 & f_1 & D_2 \cdots & f_m & D_m \end{array} \mathrm{GrfSprt}\ (***_{\mathrm{F.3.1}}),$$

where fuzzy D_1 is forced out of fuzzy C_1 with type of expelling v_{12} and measure of fuzziness μ_{12}, fuzzy D_2 is forced out of fuzzy C_2 with type of expelling v_{22} and measure of fuzziness μ_{22}, …, fuzzy D_m is forced out of fuzzy C_m with type of expelling v_{m2} and measure of fuzziness μ_{m2}, simultaneously. Here are interactions between between C_j and C_{j+1} by fuzzy p_j, between D_j and D_{j+1} by fuzzy f_j, j = 1, 2, …, m. The result of this process will be described by the expression

$$\begin{array}{ccccc} C_1 & p_1 & C_2 \ldots & p_m & C_m \\ \begin{smallmatrix} v_{12} \\ \mu_{12} \end{smallmatrix} & h_1 & \begin{smallmatrix} v_{22} \\ \mu_{22} \end{smallmatrix} \ldots & h_m & \begin{smallmatrix} v_{m2} \\ \mu_{m2} \end{smallmatrix} \\ D_1 & f_1 & D_2 \ldots & f_m & D_m \end{array} \text{GrfSrt } (***_{F.3.2})$$

We consider the measure:

$$(Q)^{**}(Q)= \frac{\mu(A_1)*\mu(A_2)*\ldots*\mu(A_n)*\mu_{11}*\mu_{21}*\ldots*\mu_{n1}*\breve{v}_1*\breve{v}_2*\ldots*\breve{v}_n*\prod_{i=1}^{n}\mu(v_{i1})}{\mu(D_1)*\mu(D_2)*\ldots*\mu(D_m)*\mu_{12}*\mu_{22}*\ldots*\mu_{n2}*\breve{h}_1*\breve{h}_2*\ldots*\breve{h}_n*\prod_{i=1}^{n}\mu(v_{i2})},$$

$$Q = \begin{array}{ccccc} C_1 & p_1 & C_2 \ldots & p_m & C_n \\ \begin{smallmatrix} v_{12} \\ \mu_{12} \end{smallmatrix} & h_1 & \begin{smallmatrix} v_{22} \\ \mu_{22} \end{smallmatrix} \ldots & h_m & \begin{smallmatrix} v_{n2} \\ \mu_{n2} \end{smallmatrix} \\ D_1 & f_1 & D_2 \ldots & f_m & D_n \end{array} \text{GrfSprt} \begin{array}{ccccc} A_1 & g_1 & A_2 \ldots & g_n & A_n \\ \begin{smallmatrix} v_{11} \\ \mu_{11} \end{smallmatrix} & v_1 & \begin{smallmatrix} v_{21} \\ \mu_{21} \end{smallmatrix} \ldots & v_n & \begin{smallmatrix} v_{n1} \\ \mu_{n1} \end{smallmatrix} \\ C_1 & r_1 & B_2 \ldots & r_n & C_n \end{array}, \text{ where}$$

$m(A_i)$,$m(D_i)$,–usual fuzzy measures of fuzzy sets A_i, D_i, $\breve{v}_i = \mu(v_i)$, $\breve{h}_{0i} = \mu(h_{0i})$, $\breve{h}_i = \mu(h_i)$–measures of corresponding actions with own types, (i = 1, 2, …, n).

.

Remark F.3.0. One can consider some generalization for $(*_{F.3.1})$, $(*_{F.3.2})$:

$$\begin{array}{ccccc} q_1(C_1) & p_1 & q_2(C_2)\ldots & p_m & q_m(C_m) \\ \begin{smallmatrix} v_{12} \\ \mu_{12} \end{smallmatrix} & h_1 & \begin{smallmatrix} v_{22} \\ \mu_{22} \end{smallmatrix} \ldots & h_m & \begin{smallmatrix} v_{n2} \\ \mu_{n2} \end{smallmatrix} \\ D_1 & f_1 & D_2 \ldots & f_m & D_m \end{array} \text{GrSprt} \begin{array}{ccccc} A_1 & g_1 & A_2 \ldots & g_n & A_n \\ \begin{smallmatrix} v_{11} \\ \mu_{11} \end{smallmatrix} & v_1 & \begin{smallmatrix} v_{21} \\ \mu_{21} \end{smallmatrix} \ldots & v_n & \begin{smallmatrix} v_{n1} \\ \mu_{n1} \end{smallmatrix} \\ w_1(B_1) & r_1 & w_2(B_2)\ldots & r_n & w_n(B_n) \end{array},$$

$$, \begin{array}{ccccc} q_1(C_1) & p_1 & q_2(C_2)\ldots & p_m & q_m(C_m) \\ \begin{smallmatrix} v_{12} \\ \mu_{12} \end{smallmatrix} & h_1 & \begin{smallmatrix} v_{22} \\ \mu_{22} \end{smallmatrix} \ldots & h_m & \begin{smallmatrix} v_{n2} \\ \mu_{n2} \end{smallmatrix} \\ D_1 & f_1 & D_2 \ldots & f_m & D_m \end{array} \text{GrSrt} \begin{array}{ccccc} A_1 & g_1 & A_2 \ldots & g_n & A_n \\ \begin{smallmatrix} v_{11} \\ \mu_{11} \end{smallmatrix} & v_1 & \begin{smallmatrix} v_{21} \\ \mu_{21} \end{smallmatrix} \ldots & v_n & \begin{smallmatrix} v_{n1} \\ \mu_{n1} \end{smallmatrix} \\ w_1(B_1) & r_1 & w_2(B_2)\ldots & r_n & w_n(B_n) \end{array}, \text{ where}$$

fuzzy A_1 fits into fuzzy B_1 through w_1 with type of containment v_{11} and measure of fuzziness μ_{11}, fuzzy A_2 fits into fuzzy B_2 through w_2 with type of containment v_{21} and measure of fuzziness μ_{21}, …, fuzzy A_n fits into fuzzy B_n through w_n with type of containment v_{n1} and measure of fuzziness μ_{n1}, fuzzy D_1 is forced out of fuzzy C_1 through q_1 with type of expelling v_{12} and measure of fuzziness μ_{12}, fuzzy D_2 is forced out of fuzzy C_2 through q_2 with type of expelling v_{22} and measure of fuzziness μ_{22}, …, fuzzy D_m is forced out of fuzzy C_m through q_m with type of expelling v_{m2} and measure of fuzziness μ_{m2}, simultaneously. Here are interactions between A_i and A_{i+1} by fuzzy g_i, between B_i and B_{i+1} by r_i, i = 1, 2, …, n, between

C_j and C_{j+1} by fuzzy p_j, between D_j and D_{j+1} by fuzzy f_j, j = 1, 2, …, m. A_i, B_i, D_j, C_j (i = 1, 2, …, n; j = 1, 2, …, m) can be taken as fuzzy sets.

Similarly, for ($**_{F.3.1}$): GrfSprt $\begin{array}{ccccc} A_1 & g_1 & A_2 \; \cdots & g_n & A_n \\ v_{11} & & v_{21} & & v_{n1} \\ \mu_{11} & v_1 & \mu_{21} \; \cdots & v_n & \mu_{n1} \\ w_1(B_1) & r_1 & w_2(B_2) \cdots & r_n & w_n(B_n) \end{array}$, for ($***_{F.3.1}$):

$\begin{array}{ccccc} q_1(C_1) & p_1 & q_2(C_2) \cdots & p_m & q_m(C_m) \\ v_{12} & & v_{22} & & v_{n2} \\ \mu_{12} & h_1 & \mu_{22} \; \cdots & h_m & \mu_{n2} \\ D_1 & f_1 & D_2 \; \cdots & f_m & D_m \end{array}$ GrfSprt. The result of this process will be

described by the expression $\begin{array}{ccccc} q_1(C_1) & p_1 & q_2(C_2) \cdots & p_m & q_m(C_m) \\ v_{12} & & v_{22} & & v_{n2} \\ \mu_{12} & h_1 & \mu_{22} \; \cdots & h_m & \mu_{n2} \\ D_1 & f_1 & D_2 \; \cdots & f_m & D_m \end{array}$ GrfSrt.

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.

Remark F.3.01. It is considered expression

$$\begin{array}{ccccccccccccc} C_1 & p_1 & C_2 & \cdots & p_m & C_{m+1} & & A_1 & g_1 & A_2 & \cdots & g_n & A_{n+1} \\ & & & \{Q\} & & & \text{GrSprt} & & & & \{W\} & & \\ D_1 & f_1 & D_2 & \cdots & f_l & D_{l+1} & & B_1 & r_1 & B_2 & \cdots & r_k & B_{k+1} \end{array}$$

similarly, where $\{W\} = \begin{pmatrix} v_{11} & & v_{1k} \\ \mu_{11} & \cdots & \mu_{1k} \\ \cdots & \cdots & \cdots \\ v_{n1} & & v_{nk} \\ \mu_{1k} & \cdots & \mu_{nk} \end{pmatrix}$ is the matrix of fuzzy interactions v_{ij} with measure of fuzziness μ_{ij}, (in particular, fuzzy containments) between fuzzy A_i and fuzzy B_j , i = 1, 2, …, n, j = 1, 2, …, k, $\{Q\} = \begin{pmatrix} h_{11} & & h_{1l} \\ \mu^1_{11} & \cdots & \mu^1_{1l} \\ \cdots & \cdots & \cdots \\ h_{m1} & & h_{ml} \\ \mu^1_{m1} & \cdots & \mu^1_{ml} \end{pmatrix}$ is the matrix of fuzzy interactions h_{se} with measure of fuzziness μ_{se} (in particular, containments) between fuzzy C_s and fuzzy D_e , s = 1, 2, …, m, e = 1, 2, …, l. For example, proton is $\begin{matrix} \{\} & & \overline{p}(t) & & & \{\} & \\ \{\} & \mathrm{SCprt(t)} & g(t) & = & \{\} & \{\} & \mathrm{GrfSprt} \\ \{\} & & \overline{p}(t) & \{\} & \{\} & \{\} & \end{matrix} \begin{matrix} u(t) \quad g_1(t) \quad u(t) \\ g_{21}(t) \quad g_{31}(t) \\ \mu_{21}(t) \quad \mu_{31}(t) \\ d(t) \end{matrix}$,

neutron as $\begin{matrix} \{\} & & \overline{n}(t) & \{\} & \{\} & \{\} & \\ \{\} & \mathrm{SCprt(t)} & g(t) & = & \{\} & \{\} & \mathrm{GrfSprt} \\ \{\} & & \overline{n}(t) & & \{\} & & \end{matrix} \begin{matrix} u(t) \\ g_{11}(t) \quad g_{13}(t) \\ \mu_{11}(t) \quad \mu_{13}(t) \\ d(t) \quad g_4(t) \quad d(t) \end{matrix}$, quarks d(t) = $\begin{matrix} \{\} & & \overline{r}(t)) \\ \{\} & \mathrm{SCprt(t)} & g(t) \\ \{\} & & \overline{r}(t) \end{matrix}$, u(t) = $\begin{matrix} \{\} & & \overline{d}(t) \\ \{\} & \mathrm{SCprt(t)} & g(t) \\ \{\} & & \overline{d}(t) \end{matrix}$ interact with each other by gluon fields $g_j(t) = \begin{matrix} \overline{h_j}(t) & & \overline{v_j}(t) \\ w_j(t) & \mathrm{SCprt(t)} & w(t) \\ \overline{h_j}(t) & & \overline{v_j}(t) \end{matrix}$, j = 1, 2, 3, 4, which are manifestations of general gluon field in the areas between certain quarks, graviton as

$$\begin{matrix} & & \begin{matrix} \overline{h}(t) & & \overline{v}(t) \\ w(t) & \mathrm{SCprt(t)} & w(t) \\ \overline{h}(t) & & \overline{v}(t) \end{matrix} \\ & w(t) & \mathrm{SCprt(t)} \\ & & \begin{matrix} \overline{h}(t) & & \overline{v}(t) \\ w(t) & \mathrm{SCprt(t)} & w(t) \\ \overline{h}(t) & & \overline{v}(t) \end{matrix} \end{matrix}$$

$$\begin{matrix} \begin{matrix} \overline{h}(t) & & \overline{v}(t) \\ w(t) & \mathrm{SCprt(t)} & w(t) \\ \overline{h}(t) & & \overline{v}(t) \end{matrix} & & \\ & w(t) & \text{etc.} \\ \begin{matrix} \overline{h}(t) & & \overline{v}(t) \\ w(t) & \mathrm{SCprt(t)} & w(t) \\ \overline{h}(t) & & \overline{v}(t) \end{matrix} & & \end{matrix}$$

F.3.1 GrfSprt – elements, self-type GrfSprt- structures.

Definition F.3.1.1. The fuzzy set of elements $\tilde{g}=(g_1|\mu_{\tilde{g}}(g_1), g_2|\mu_{\tilde{g}}(g_2), \ldots, g_n|\mu_{\tilde{g}}(g_n))$ at one point x = $(x_1,x_2,\ldots,x_n)$ of space X we shall call GrfSprt – element, and such a point x in space X is called parallel fuzzy ffgcapacity of the GrfSprt – element.

We shall denote $\mathrm{GrfSprt}\begin{array}{ccccc} g_1 & w_1 & g_2 \cdots & w_n & g_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} \cdots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 \cdots & r_n & x_n \end{array}.$

Definition F.3.1.2. $\mathrm{GrfSprt}\begin{array}{ccccc} g_1 & w_1 & g_2 \cdots & w_n & g_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} \cdots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 \cdots & r_n & x_n \end{array}$ - a parallel fuzzy fuzzy dynamic fuzzy set $\tilde{g}$ at x.

Definition F.3.1.3. An ordered fuzzy set of elements at one point in the space is called an ordered GrfSprt–element.

It's possible to $\mathrm{GrfSprt}\begin{array}{ccccc} g_1 & w_1 & g_2 \cdots & w_n & g_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} \cdots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 \cdots & r_n & x_n \end{array}$ correspond to the fuzzy set $\tilde{g}$, and the ordered GrfSprt - element - a fuzzy vector, a fuzzy matrix, a fuzzy tensor, a fuzzy directed segment in the case when the totality of elements is understood as a fuzzy set of elements in a segment.

It's allowed to sum GrfSprt – elements: $\mathrm{GrfSprt}\begin{array}{ccccc} g_1 & w_1 & g_2 \cdots & w_n & g_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} \cdots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 \cdots & r_n & x_n \end{array} +$

$$\mathrm{GrfSprt}\begin{array}{ccccc} b_1 & w_1 & b_2 \cdots & w_n & b_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} \cdots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 \cdots & r_n & x_n \end{array} = \mathrm{GrfSprt}\begin{array}{ccccc} g_1 \cup b_1 & w_1 & g_2 \cup b_2 \cdots & w_n & g_n \cup b_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} \cdots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 \cdots & r_n & x_n \end{array}.$$

It's allowed to multiply GrfSprt – elements: $\mathrm{GrfSprt}\begin{array}{ccccc} g_1 & w_1 & g_2 \cdots & w_n & g_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} \cdots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 \cdots & r_n & x_n \end{array} +$

$$\mathrm{GrfSprt}\begin{array}{ccccc} b_1 & w_1 & b_2 \cdots & w_n & b_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} \cdots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 \cdots & r_n & x_n \end{array} = \mathrm{GrfSprt}\begin{array}{ccccc} g_1 \cap b_1 & w_1 & g_2 \cap b_2 \cdots & w_n & g_n \cap b_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} \cdots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 \cdots & r_n & x_n \end{array}.$$

The operator GrfSprt $\begin{array}{ccccccc} g_1 \cup b_1 & w_1 & g_2 \cup b_2 & \ldots & w_n & g_n \cup b_n \\ v_{11} & v_1 & v_{21} & \ldots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2 & \ldots & r_n & x_n \end{array}$. is not equal the fuzzy set of $g_i \cup b_i$, (i = 1, 2, …, n), rather, it is Parallel fuzzy dynamic — contraction of the fuzzy set of $g_i \cup b_i$, (i = 1, 2, …, n), to the point x. Similarly, for GrfSprt $\begin{array}{cccccc} g_1 \cap b_1 & w_1 & g_2 \cap b_2 & \ldots & w_n & g_n \cap b_n \\ v_{11} & v_1 & v_{21} & \ldots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2 & \ldots & r_n & x_n \end{array}$. This is more suitable for using fuzzy sets for energy space, for any fuzzy objects. The operator GrfSprt is adapted for ordinary energies, using their property to overlap.

Parallel fuzzy ffgcapacity in itself.

Definition F.3.1.4. The ffgcapacity GrfSprt $\begin{array}{cccccc} g_1 & w_1 & g_2 & \ldots & w_n & g_n \\ v_{11} & v_1 & v_{21} & \ldots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ A_1 & r_1 & A_2 & \ldots & r_n & A_n \end{array}$ is called the parallel fuzzy ffgcapacity A = $(A_1, A_2, \ldots, A_n)$ for $\tilde{g}=(g_1|\mu_{\tilde{g}}(g_1), g_2|\mu_{\tilde{g}}(g_2), \ldots, g_n|\mu_{\tilde{g}}(g_n))$.

Definition F.3.1.4.1. The parallel fuzzy ffgcapacity A in itself of the first type is the parallel fuzzy ffgcapacity fuzzy containing itself as an element. Denote $GrfS_1fA$. $GrfS_1fA$ = GrfSprt $\begin{array}{cccccc} A_1 & w_1 & A_2 & \ldots & w_n & A_n \\ v_{11} & v_1 & v_{21} & \ldots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ A_1 & r_1 & A_2 & \ldots & r_n & A_n \end{array}$.

Definition F.3.1.5. The parallel fuzzy ffgcapacity A in itself of the second type is the parallel fuzzy ffgcapacity that fuzzy contains fuzzy elements from which it can be generated. Denote $GrfS_2fA$.

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

Definition F.3.1.6. Partial parallel fuzzy ffgcapacity A in itself of the third type is the parallel fuzzy ffgcapacity A in itself, which partially contains itself or fuzzy contains fuzzy elements from which it can be fuzzy generated in part or both simultaneously. Let us denote GrfS_3fA.

Let us introduce the following notations: A*B=GrfSprt$\begin{matrix} A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1 & r_1 & B_2\dots & r_n & B_n \end{matrix}$,

A^2 = GrfSelf A =GrfSprt$\begin{matrix} A_1 & w_1 & A_2\dots & w_n & A_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ A_1 & r_1 & A_2\dots & r_n & A_n \end{matrix}$, A^3 = GrfSelf^{2}A, …, A^{n+1} = GrfSelf^{n}A, ….There is no commutativity here: A*B ≠ B*A. We can consider operator functions: $e^A = 1 + \frac{A}{1!} + \frac{A^2}{2!} + \frac{A^3}{3!} + \dots$, $(A+B)^n = \sum_{k=0}^{n}\binom{n}{k} A^k B^{n-k}$, $(1+A)^n = 1 + \frac{Ax}{1!} + \frac{n(n-1)A^2}{2!} + \dots$, etc.

You can consider a more “hard” option: A*B= PGrfSprt$\begin{matrix} A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1 & r_1 & B_2\dots & r_n & B_n \end{matrix}$, where PGrfSprt$\begin{matrix} A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1 & r_1 & B_2\dots & r_n & B_n \end{matrix}$ – operator, containing A in every element of B, A^2 = PGrfSelf A = $P\begin{matrix} A_1 & w_1 & A_2\dots & w_n & A_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ A_1 & r_1 & A_2\dots & r_n & A_n \end{matrix}$, A^3 = PGrfSelf^{2}A, …, A^{n+1} = PGrfSelf^{n}A, ….There is no commutativity here: A*B ≠ B*A. We can consider operator functions: $e^A = 1 + \frac{A}{1!} + \frac{A^2}{2!} + \frac{A^3}{3!} + \dots$, $(A+B)^n = \sum_{k=0}^{n}\binom{n}{k} A^k B^{n-k}$, $(1+A)^n = 1 + \frac{Ax}{1!} + \frac{n(n-1)A^2}{2!} + \dots$, etc.

All parallel capacities in parallel self-space are parallel capacities in themselves by definition. Parallel capacities in themselves can appear as GrfSprt -capacities and ordinary capacities. In these cases, the usual measures and methods of topology are used.

Connection of GrfSprt – elements with parallel fuzzy ffgcapacities in themselves.

For example, GrSprt $\begin{matrix} R_1 & g_1 & R_2 & \dots & g_n & R_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} & \dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ g\{R\}_1 & r_1 & g\{R\}_2\dots & & r_n & g\{R\}_n \end{matrix}$ is the parallel fuzzy ffgcapacity in itself of the second type if $g\{R\}$ is a parallel program capable of fuzzy generating $\{R\}$.

Consider a third type of parallel fuzzy ffgcapacity in itself. For example, based on $\mathrm{GrfSprt}\begin{array}{ccccc} g_1 & w_1 & g_2 \cdots & w_n & g_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} \cdots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 \cdots & r_n & x_n \end{array}$, where $\tilde{g}=(g_1|\mu_{\tilde{g}}(g_1), g_2|\mu_{\tilde{g}}(g_2), \ldots, g_n|\mu_{\tilde{g}}(g_n))$, i.e. n - elements at one point x = $(x_1,x_2,\ldots,x_n)$, we can consider the ffgcapacity $GrfS_3f$ in itself with m elements from $\tilde{g}$, m<n, which is formed according to the form (1.1) [2-6], that is, the structure $GrfS_3f$contains only m elements, or in forms (1.1.1) - (1.1.5) [2-6], summarizing it. Fuzzy ffgcapacities in themselves of the third type can be formed for any other structure, not necessarily $GrfS_3f$only by necessarily reducing the number of elements in the structure, in particular, using form (1.2) [7, 15-17]. Structures more complex than $GrfS_3f$can be introduced. For example, through a form (1.3) [7, 15-17], where A is fuzzy compressed (fuzzy fits) in C in the fuzzy compression fuzzy structure B in C (i.e., in the fuzzy structure $GrfS_3f$ or through the forms (1.3.1) - (1.4) [7, 15-17] and corresponding generalizations of (1.4) [7, 15-17] on (1.3.1) - (1.3.4) [7, 15-17] etc.

(1.3.1) - (1.3.4) schematically interpret the fuzzy formation of fuzzy capacity in itself through a pseudo 3-connected form with a 2-connected form. The ideology of GrfSprt and $GrfS_3f$can be used for programming.

Remark F.3.1.1. Fuzzy self, in particular, according to a fuzzy form- fuzzy analogue of the form of type (1.1): (2.1*) [7, 15-17].

By analogy the same for the fuzzy form of type (1.1.1) – (1.4) [7, 15-17].

Math GrfSelf.

Let's consider GrfSprt arithmetic first:

1. Simultaneous parallel addition of sets elements $\tilde{g}_i=(g_{i_1}|\mu_{\tilde{g}_i}(g_{i_1}), g_{i_2}|\mu_{\tilde{g}_i}(g_{i_2}), \ldots, g_{i_{m_j}}|\mu_{\tilde{g}_i}(g_{i_{m_j}}))$, i = 1,2,…,n, j =1,2,…,k is carried out using

$$\mathrm{GrfSprt}\begin{array}{ccccc} \tilde{g}_1 + & w_1 & \tilde{g}_2 + \cdots & w_n & \tilde{g}_n + \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} \cdots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 \cdots & r_n & x_n \end{array}.$$

2. Similarly, for simultaneous parallel multiplication:

$$\mathrm{GrfSprt}\begin{array}{ccccc} \tilde{g}_1 * & w_1 & \tilde{g}_2 *\ldots & w_n & \tilde{g}_n * \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\ldots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 \ldots & r_n & x_n \end{array}$$

.the notation of the fuzzy set B_l, l =1,2,…,n, with elements $b_{li_1i_2\ldots i_{m_j}} =$

$Sprt_{x_l}^{\left\{ g_{l_{1_{i_1}}}*,\ g_{l_{2_{i_2}}}*,\ldots,\ g_{l_{m_{j_{i_{m_j}}}}} \right\}})_{R_l}$ for any $\left\{l_{i_1}, l_{i_2}, \ldots, l_{i_{m_j}}\right\}$ without repetitions, $x_l =$ $Sprt_w^{\{K_l\}}$,K_l-set of any $\left\{k_{l_{i_1}}*, k_{l_{i_2}}*, \ldots, k_{l_{i_{m_j}}}*\right\}$ without repeating them, l = 1,2,…,n, $k_{l_{i_j}}$-any digit, i =1,2,…, m_j, R_l= $Sprt_w^{\left\{l_{i_1}+, l_{i_2}+, \ldots, l_{i_{m_j}}\right\}}$, R_l is the index of the lower discharge (we choose an index on the scale of discharges):

Table F.3.1. 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 GrfSprt $\begin{array}{ccccc} B_1 + & w_1 & B_2 + \ldots & w_n & B \quad + \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} \ldots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 \ldots & r_n & x_n \end{array}$ 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 GrfSprt-multiplication:

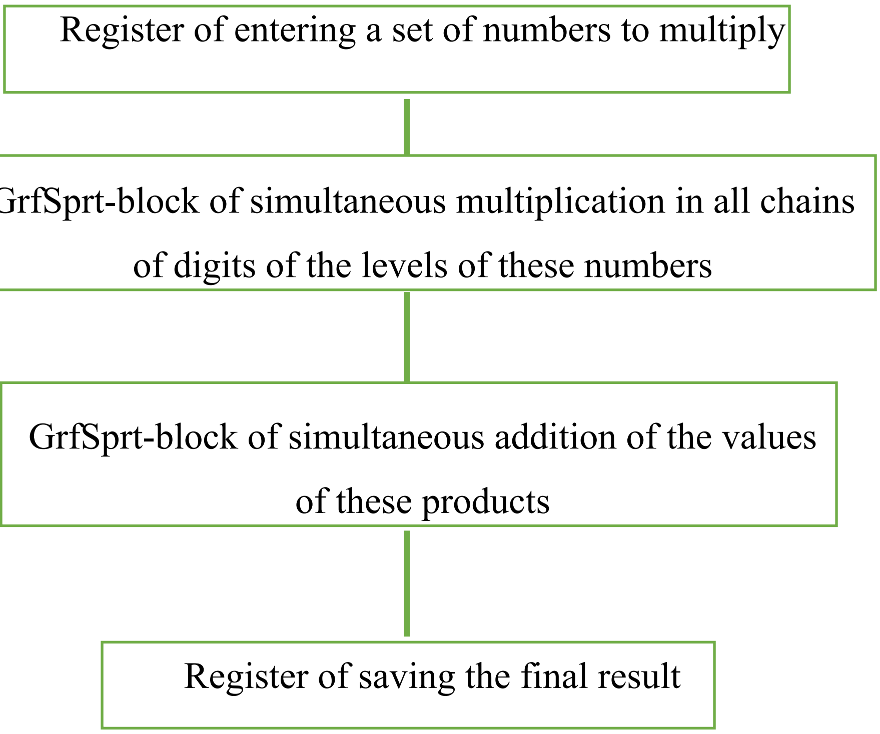

Fig. F.3.1. The straightforward functional scheme of the assumed arithmetic-logical device for GrfSprt-multiplication.

Remark. The algorithm for simultaneously adding 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:

$$\text{GrfSprt}\begin{array}{cccccc} \{g_1Q_1\} & w_1 & \{g_2Q_2\}\dots & & w_n & \{g_nQ_n\} \\ \begin{smallmatrix} v_{11} \\ \mu_{11} \end{smallmatrix} & v_1 & \begin{smallmatrix} v_{21} \\ \mu_{21} \end{smallmatrix} & \dots & v_n & \begin{smallmatrix} v_{n1} \\ \mu_{n1} \end{smallmatrix} \\ x_1 & r_1 & x_2 & \dots & r_n & x_n \end{array}$$

, where $\tilde{Q}=(Q_1|\mu_{\tilde{Q}}(Q_1), Q_2|\mu_{\tilde{Q}}(Q_2), \dots, Q_n|\mu_{\tilde{Q}}(Q_n))$. Q_i -an operation, i = 1, …, n.

4. Similarly, for the simultaneous execution of various operators:

$$\text{GrfSprt}\begin{array}{cccccc} \{F_1g_1\} & w_1 & \{F_2g_2\}\dots & & w_n & \{F_ng_n\} \\ \begin{smallmatrix} v_{11} \\ \mu_{11} \end{smallmatrix} & v_1 & \begin{smallmatrix} v_{21} \\ \mu_{21} \end{smallmatrix} & \dots & v_n & \begin{smallmatrix} v_{n1} \\ \mu_{n1} \end{smallmatrix} \\ x_1 & r_1 & x_2 & \dots & r_n & x_n \end{array}$$

, where $\tilde{F}=(F_1|\mu_{\tilde{F}}(F_1), F_2|\mu_{\tilde{F}}(F_2), \dots, F_n|\mu_{\tilde{F}}(F_n))$. F_i is an operator, i = 1, …, n.

5. The arithmetic itself for capacities in themselves will be similar: addition - $GrfS_1f\{g+\}$, (or $GrfS_3f\{g+\}$) for the third type), multiplication $GrfS_1f\{g*\}$, ($GrfS_3f\{g*\}$).
6. Similarly with different operations: $GrfS_1f\{gQ\}$, ($GrfS_3f\{gQ\}$), and with different operators: $GrfS_1f\{Fg\}$, ($GrfS_3f\{Fg\}$).
7. $\text{GrfSrt}\begin{array}{ccccc} A_1 & g_1 & A_2\dots & g_n & A_n \\ \begin{smallmatrix} v_{11} \\ \mu_{11} \end{smallmatrix} & v_1 & \begin{smallmatrix} v_{21} \\ \mu_{21} \end{smallmatrix}\dots & v_n & \begin{smallmatrix} v_{n1} \\ \mu_{n1} \end{smallmatrix} \\ B_1 & r_1 & B_2\dots & r_n & B_n \end{array}$ – the result of the fuzzy containment operator. For fuzzy sets A_i, B_i, (i = 1, 2, …, n), we have

$$\text{GrfSrt}\begin{array}{ccccc} A_1 & g_1 & A_2\dots & g_n & A_n \\ \begin{smallmatrix} v_{11} \\ \mu_{11} \end{smallmatrix} & v_1 & \begin{smallmatrix} v_{21} \\ \mu_{21} \end{smallmatrix}\dots & v_n & \begin{smallmatrix} v_{n1} \\ \mu_{n1} \end{smallmatrix} \\ B_1 & r_1 & B_2\dots & r_n & B_n \end{array} =$$

$$\left\{\sum_{i=1}^{n}(A_i|g_i)\cup(B_i|r_i)-(A_i|g_i)\cap(B_i|r_i)\ ,\sum_{i=1}^{n}D_i\right\}=$$

$$\left\{\begin{array}{c}\sum_{i=1}^{n} D_i\\ \sum_{i=1}^{n}(A_i\,|\,g_i)\cup(B_i\,|\,r_i)-(A_i\,|\,g_i)\cap(B_i\,|\,r_i)\end{array}\right\}$$, where D$_i$ is Grself-(fuzzy set) for $(A_i\,|\,g_i)\cap(B_i\,|\,r_i)$ with v_{i1} (i = 1, 2, …, n). There is the same for structures if they are considered as fuzzy sets. Similarly, for fuzzy sets C$_i$,

D$_i$: $\begin{array}{ccccc} C_1 & p_1 & C_2 \ldots & p_m & C_m\\ \begin{array}{c}v_{12}\\ \mu_{12}\end{array} & h_1 & \begin{array}{c}v_{22}\\ \mu_{22}\end{array}\ldots & h_m & \begin{array}{c}v_{m2}\\ \mu_{m2}\end{array}\\ D_1 & f_1 & D_2\ldots & f_m & D_m\end{array}$ GrfSrt=

$$\left\{\begin{array}{c}\sum_{i=1}^{m} Q_i + \begin{array}{ccccc}\{\,\} & \{\,\} & & \{\,\} & \\ v_{12} & v_{22} & \ldots & v_{m2} & \\ \mu_{12} & \mu_{22} & & \mu_{m2} & \text{GrSrt}\\ (D_1|f_1)-(D_1|f_1)\cap(C_1|p_1) & (D_2|f_2)-(D_2|f_2)\cap(C_2|p_2) & \ldots & (D_m|f_m)-(D_m|f_m)\cap(C_m|p_m) & \end{array}\\ \sum_{i=1}^{m}\big((C_i|p_i)-(D_i|f_i)\cap(C_i|p_i)\big)-((D_i|f_i)-(D_i|f_i)\cap(C_i|p_i))\end{array}\right\}$$

, where Q$_i$ is Groself-(set) for $\left((D_i\,|\,f_i)\cap(C_i\,|\,p_i)\right)$ (i = 1, 2, …, m) [14].

8. GrfSprt-derivative of f(x_1,,x_2,...,x_n) = $\left(\begin{array}{c}f_1(x_1,x_2,\ldots,x_n)\\ f_2(x_1,x_2,\ldots,x_n)\\ \ldots\\ f_k(x_1,x_2,\ldots,x_n)\end{array}\right)$ is

$$\text{GrfSprt}\quad\begin{array}{ccccccc}\frac{\partial}{\partial x_{1_i}} & g_1 & \frac{\partial}{\partial x_{2_i}} & \ldots & g_n & \frac{\partial}{\partial x_{k_i}}\\ \begin{array}{c}v_{11}\\ \mu_{11}\end{array} & v_1 & \begin{array}{c}v_{21}\\ \mu_{21}\end{array} & \ldots & v_n & \begin{array}{c}v_{n1}\\ \mu_{n1}\end{array}\\ f_1(x_1,x_2,\ldots,x_n) & r_1 & f_2(x_1,x_2,\ldots,x_n)\ldots & & r_n & f_k(x_1,x_2,\ldots,x_n)\end{array}$$

, where x=(x_{1_i}, x_{2_i},... x_{k_i})- any fuzzy set from $\tilde{x}$=(x$_1$|μ$_{\tilde{x}}$(x$_1$), x$_2$|μ$_{\tilde{x}}$(x$_2$), …, x$_n$|μ$_{\tilde{x}}$(x$_n$)). The same is done for GrfSprt- $\frac{\partial^k f(x)}{\partial x_{1_i}\partial x_{2_i}\ldots\partial x_{k_i}}$. GrfSprt-integral off ($x_1$,,$x_2$,...,$x_n$) is

$$\text{GrfSprt}\quad\begin{array}{cccccc}\int()dx_{1_i} & g_1 & \int()dx_{2_i} & \ldots & g_n & \int()dx_{k_i}\\ \begin{array}{c}v_{11}\\ \mu_{11}\end{array} & v_1 & \begin{array}{c}v_{21}\\ \mu_{21}\end{array} & \ldots & v_n & \begin{array}{c}v_{n1}\\ \mu_{n1}\end{array}\\ f_1(x_1,x_2,\ldots,x_n) & r_1 & f_2(x_1,x_2,\ldots,x_n)\ldots & & r_n & f_k(x_1,x_2,\ldots,x_n)\end{array}$$

, where (x_{1_i}, x_{2_i},... x_{k_i})- any fuzzy set from $\tilde{x}$=(x$_1$|μ$_{\tilde{x}}$(x$_1$), x$_2$|μ$_{\tilde{x}}$(x$_2$), …, x$_n$|μ$_{\tilde{x}}$(x$_n$)). The same is done for GrfSprt-∫…∫ $f(x)dx_{1_i}dx_{2_i}\ldots dx_{k_i}$-k-multiple integral. GrfSprt-lim off $\tilde{x}$=(x$_1$|μ$_{\tilde{x}}$(x$_1$), x$_2$|μ$_{\tilde{x}}$(x$_2$), …, x$_n$|μ$_{\tilde{x}}$(x$_n$)) is

$$\text{GrfSprt}\begin{array}{ccccccc} \lim\limits_{x_{1_i}\to a_{1_i}} & g_1 & \lim\limits_{x_{2_i}\to a_{2_i}} & \dots & g_n & \lim\limits_{x_{k_i}\to a_{k_i}} \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} & \dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ f_1(x_1,x_2,\dots,x_n) & r_1 & f_2(x_1,x_2,\dots,x_n)\dots & & r_n & f_k(x_1,x_2,\dots,x_n) \end{array}$$

The same is done for GrfSprt- $\lim\limits_{\substack{x_{1_i}\to a_{1_i}\\ \cdot\quad\cdot\quad\cdot \\ x_{k_i}\to a_{k_i}}} \mathrm{f}(x_1,,x_2,\dots,x_n)$. $GrfS_3f\{\lim\limits_{x\to a}\}$ =

$$\text{GrfSprt}\begin{array}{ccccccc} \lim\limits_{x_{1_i}\to a_{1_i}} & g_1 & \lim\limits_{x_{2_i}\to a_{2_i}} & \dots & g_n & \lim\limits_{x_{k_i}\to a_{k_i}} \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} & \dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ \lim\limits_{x_{1_i}\to a_{1_i}} & r_1 & \lim\limits_{x_{2_i}\to a_{2_i}} & \dots & r_n & \lim\limits_{x_{k_i}\to a_{k_i}} \end{array}$$

9. In the case of GrfSelf-derivatives, inclusions of multiple derivatives are obtained. The same is true for GrfSelf-integrals: we get inclusions of multiple integrals.
10. Let's denote GrfSelf-(GrfSelf-Q) through GrfSelf^2-Q , ffS(n,Q)= GrfSelf-(GrfSelf-(...(GrfSelf-Q))) = GrfSelf^n-Q for n-multiple GrfSelf.

Operator Grfitself.

Definition F.3.1.7. An operator that transforms $\text{GrfSpr}\begin{array}{cccccc} g_1 & w_1 & g_2 & \dots & w_n & g_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} & \dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 & \dots & r_n & x_n \end{array}$

into any $\mathrm{Gr}fS_if\{\tilde{b}\}, i = 2,3$; where $\{\tilde{b}\} \subset \{\tilde{g}\}$ is the operator Grfitself.

Example. The operator fuzzy contains the fuzzy set in Grfitself.

Lim- Grfitself.

1. Lim GrfSprt

   For example, the double limit: $\lim\limits_{\substack{\mathrm{xa1}\\ \mathrm{ya2}}} G(x,y)$ corresponds to

   $$\text{GrfSprt}\begin{array}{ccc} G(x,y) & g_1 & G(x,y) \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} \\ \mathrm{xa1} & r_1 & \mathrm{ya2} \end{array}$$, where $G(x,y)$ is fuzzy.

   Similarly, for lim GrfSprt with n variables.

In the case of lim- Grfitself, for example, for m variables, it suffices to use the form (1.1) of lim GrfSprt 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).

About GrfSprt and $GrfS_3f$ *programming.*

The ideology of GrfSprt and $GrfS_3f$ can be used for programming. Here are some of the GrfSprt programming operators.

1. Simultaneous fuzzy assignment of the expressions $\tilde{p}=(p_1|\mu_{\tilde{p}}(p_1), p_2|\mu_{\tilde{p}}(p_2), \ldots, p_n|\mu_{\tilde{p}}(p_n))$ to the variables $\tilde{x}=(x_1|\mu_{\tilde{x}}(x_1), x_2|\mu_{\tilde{x}}(x_2), \ldots, x_n|\mu_{\tilde{x}}(x_n))$. This is implemented via GrfSprt $\begin{array}{ccccccc} x_1 := & w_1 & x_2 := & \ldots & w_n & x_n := \\ v_{11} & & v_{21} & & & v_{n1} \\ & v_1 & & \ldots & v_n & \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ p_1 & r_1 & p_2 & \ldots & r_n & p_n \end{array}$.
2. Simultaneous fuzzy checking the set of conditions $\tilde{g}=(g_1|\mu_{\tilde{g}}(g_1), g_2|\mu_{\tilde{g}}(g_2), \ldots, g_n|\mu_{\tilde{g}}(g_n))$ for the set of expressions $\tilde{B}=(B_1|\mu_{\tilde{B}}(B_1), B_2|\mu_{\tilde{B}}(B_2), \ldots, B_n|\mu_{\tilde{B}}(B_n))$.

   Implemented via

   GrfSprt $\begin{array}{ccccccc} IF\{B_1g_1\}\ then & u_1 & IF\{B_2g_2\}\ then & \ldots & u_n & IF\{B_ng_n\}\ then \\ v_{11} & & v_{21} & & & v_{n1} \\ & v_1 & & \ldots & v_n & \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ w_1 & r_1 & w_2 & \ldots & r_n & w_n \end{array}$,

   where w_i (i = 1, …, n) can be anything.
3. Similarly for loop operators and others.

$GrfS_3f$– software operators will differ only in that the aggregates $\{\tilde{g}\},\{\tilde{p}\},\{\tilde{B}\},\{\tilde{x}\}$ will be formed from the corresponding GrfSprt-program operators in form (1.1) [7, 15-17] and for more complex operators in the forms (1.1.1) –(1.4), (2.1*) [7, 15-17] and analogs of forms (1.1.1) - (1.4) by type (2.1*) [7, 15-17].

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 monographs.

Using elements of the mathematics of GrfSrt we introduce the concept of GrfSrt – the change in physical quantity B: GrfSprt $\begin{array}{ccccc} \Delta_1 B & g_1 & \Delta_2 B \ldots & g_n & \Delta_n B \\ \substack{v_{11}\\ \mu_{11}} & v_1 & \substack{v_{21}\\ \mu_{21}} \ldots & v_n & \substack{v_{n1}\\ \mu_{n1}} \\ x_1 & r_1 & x_2 \ldots & r_n & x_n \end{array}$.

Then the mean GrfSrt - velocity will be $v_{cpGrfSrt}(t, \Delta t)$ =

GrfSprt $\begin{array}{ccccc} \frac{\Delta_1 B}{\Delta t} & g_1 & \frac{\Delta_2 B}{\Delta t} \ldots & g_n & \frac{\Delta_n B}{\Delta t} \\ \substack{v_{11}\\ \mu_{11}} & v_1 & \substack{v_{21}\\ \mu_{21}} \ldots & v_n & \substack{v_{n1}\\ \mu_{n1}} \\ x_1 & r_1 & x_2 \ldots & r_n & x_n \end{array}$ and GrfSrt-velocity at time t:$v_{Grfsrt} =$

$\lim\limits_{\Delta t \to 0} v_{cpGrfsrt}(t, \Delta t)$. GrfSrt – acceleration $a_{Grfsrt} = \frac{dv_{Grfsrt}}{dt}$. The nuclei of atoms can be considered as GrfSprt elements.

Remark F.3.1.2. GrfSprt – 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 GrfSelf. 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 ffself-energy of the object. In particular,

GrfSrt$\begin{array}{ccccc} B_1 & g_1 & B_2 \ldots & g_n & B_n \\ \substack{v_{11}\\ \mu_{11}} & v_1 & \substack{v_{21}\\ \mu_{21}} \ldots & v_n & \substack{v_{n1}\\ \mu_{n1}} \\ B_1 & r_1 & B_2 \ldots & r_n & B_n \end{array}$will mean $GrfS_1 f$B. For example, GrfS$prt_{DNA}^{\substack{DNA\\ v\\ \mu}}$

allows you to reach the level of DNA self-energy

,GrfSrt$\begin{array}{ccccc} B_1 & g_1 & B_2 \ldots & g_n & B_n \\ \substack{v_{11}\\ \mu_{11}} & v_1 & \substack{v_{21}\\ \mu_{21}} \ldots & v_n & \substack{v_{n1}\\ \mu_{n1}} \\ B_1 & r_1 & B_2 \ldots & r_n & B_n \end{array}$ allows you to reach the level of Grfself-energy

B = $(B_1, B_2, \ldots, B_n)$. The law of self-energy conservation operates already at the level of self-energy. Also, in addition to fffgcapacities in themselves, you can consider the types of fuzzy containment of oneself in oneself: the first type of the fuzzy containment of oneself in oneself: the second type of the fuzzy containment of oneself in oneself: potentially, for example, in the form of fuzzy programming oneself, the third type is partial fuzzy containment of oneself in themselves—for example, GrfSelf-operator, GrfSelf-action, whirlwind. A fuzzy container fuzzy containing itself can be formed by Grfself-containment, i.e., Grfcontainment in oneself. Let us clarify the concept of the term fuzzy ffgcapacity in itself: it is a fuzzy fgcapacity fuzzy containing itself potentially. Consider GrfSelf-Q, where Q can be anything fuzzy, including Q=GrfSelf; in particular, it can be any fuzzy action. Therefore, GrfSelf-Q is when fuzzy Q is made by Prfitself; it makes itself. There is a partial GrfSelf-Q for any fuzzy Q with partial GrfSelf-fulfillment. Let's consider several examples for fuzzy capacities in themselves: ordinary lightning, electric arc discharge, and ball lightning.

GrfSprt is also great for working with structures, for example:

1) GrfSprt $\begin{array}{cccccc} fstrA_1 & g_1 & fstrA_2 & \ldots & g_n & fstrA_n \\ \begin{matrix} v_{11} \\ \mu_{11} \end{matrix} & v_1 & \begin{matrix} v_{21} \\ \mu_{21} \end{matrix} & \ldots & v_n & \begin{matrix} v_{n1} \\ \mu_{n1} \end{matrix} \\ B_1 & r_1 & B_2 & \ldots & r_n & B_n \end{array}$ - the fuzzy structure A_i that fits into fuzzy B_i with measure of fuzziness μ_{i1}, where fuzzy B_i (i = 1, …, n) can be any fuzzy ffgcapacity , another fuzzy structure etc.

2) GrfSprt $\begin{array}{cccccc} fstr_{Q_1} & g_1 & fstr_{Q_2} & \ldots & g_n & fstr_{Q_n} \\ \begin{matrix} v_{11} \\ \mu_{11} \end{matrix} & v_1 & \begin{matrix} v_{21} \\ \mu_{21} \end{matrix} & \ldots & v_n & \begin{matrix} v_{n1} \\ \mu_{n1} \end{matrix} \\ B_1 & r_1 & B_2 & \ldots & r_n & B_n \end{array}$ is embedding fuzzy structure from Q_i into B_i. Similarly for displacement: 1)

$\begin{array}{cccccc} C_1 & p_1 & C_2 & \ldots & p_m & C_m \\ \begin{matrix} v_{11} \\ \mu_{11} \end{matrix} & h_1 & \begin{matrix} v_{21} \\ \mu_{21} \end{matrix} & \ldots & h_m & \begin{matrix} v_{n1} \\ \mu_{n1} \end{matrix} \\ fstrD_1 & f_1 & fstrD_2 & \ldots & f_m & fstrD_m \end{array}$ GrfSrt - displacement of fuzzy structure $fstrD_j$ from C_j with measure of fuzziness μ_{j1}, (j = 1, …, m), 2)

$\begin{array}{cccccc} C_1 & p_1 & C_2 & \ldots & p_m & C_m \\ \begin{matrix} v_{11} \\ \mu_{11} \end{matrix} & h_1 & \begin{matrix} v_{21} \\ \mu_{21} \end{matrix} & \ldots & h_m & \begin{matrix} v_{n1} \\ \mu_{n1} \end{matrix} \\ fstr_{Q_1} & f_1 & fstr_{Q_2} & \ldots & f_m & fstr_{Q_m} \end{array}$ GrSprt -displacement of the fuzzy structure Q_i from C_i, (i = 1, …, m). To work with structures, you can introduce a special operator GrfCprt: GrfCprt$\begin{array}{ccccc} A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1 & r_1 & B_2\dots & r_n & B_n \end{array}$ fuzzy structures fuzzy B$_i$ with the fuzzy structure A$_i$, (i = 1, …, n), GrfCCprt $\begin{array}{cccc} fstr_{Q_1} & fstr_{Q_2} & & \dots fstr_{Q_n} \\ \overset{v_{11}}{\mu_{11}} & \overset{v_{21}}{\mu_{21}} & \dots & \overset{v_{n1}}{\mu_{n1}} \\ B_1 & B_2 & \dots & B_n \end{array}$ fuzzy structures fuzzy B$_i$ with the fuzzy structure from fuzzy Q$_i$, (i = 1, …, n),

$\begin{array}{ccccc} C_1 & p_1 & C_2\dots & p_m & C_m \\ \overset{v_{11}}{\mu_{11}} & h_1 & \overset{v_{21}}{\mu_{21}}\dots & h_m & \overset{v_{n1}}{\mu_{n1}} \\ D_1 & f_1 & D_2\dots & f_m & D_m \end{array}$ GrfCprt destructors fuzzy C$_i$ by the fuzzy structure of D_i, $\begin{array}{ccccc} C_1 & p_1 & C_2\dots & p_m & C_m \\ \overset{v_{11}}{\mu_{11}} & h_1 & \overset{v_{21}}{\mu_{21}}\dots & h_m & \overset{v_{n1}}{\mu_{n1}} \\ Q_1 & f_1 & Q_2\dots & f_m & Q_m \end{array}$ GrfCCprt destructors fuzzy C$_i$ from the fuzzy structure that structures Q_i, (i = 1, …, m).

Definition F.3.1.8. A structure with a second degree of freedom will be called complete, i.e., "capable" of reversing itself 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, GrfCprt$\begin{array}{ccccc} A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ A_1 & r_1 & A_2\dots & r_n & A_n \end{array}$, GrfCrt $\begin{array}{ccccc} A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ A_1 & r_1 & A_2\dots & r_n & A_n \end{array}$ are such structures.

Similarly, for working with models, each is structured by its structure; for example, use GrfSprt-groups, GrfSprt-rings, GrfSprt-fields, GrfSprt-spaces, GrfSelf-groups, GrfSelf-rings, GrfSelf-fields, and GrfSelf-spaces. Like any task, this is also a structure of the appropriate ffgcapacity .

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

Remark F.3.1.3. The concept of elements of physics GrfSprt is introduced for energy space. The ideology of GrfSprt elements allows us to go to the border of the world familiar to us, which allows us to act more effectively.

F.3.2 *Fuzzy dynamic GrfSprt – elements.*

We considered stationary GrfSprt – elements earlier. Here we consider fuzzy dynamic GrfSprt – elements.

Definition F.3.2.1. The process of fuzzy fitting a fuzzy set of elements $\widetilde{g(t)}$=(g_1(t)| $\mu_{\widetilde{g(t)}}$(g_1(t)), g_2(t)|$\mu_{\tilde{g}(t)}$(g_2(t)), …, g_n(t)|$\mu_{\widetilde{g(t)}}$(g_n(t))) into one point x= $(x_1,x_2,\ldots,x_n)$ of the space X at time t will be called a dynamic GrfSprt – element. We will denote

$$\text{GrfSprt(t)}\begin{array}{cccccc} g_1(t) & w_1 & g_2(t)\ldots & & w_n & g_n(t)\\ v_{11} & v_1 & v_{21} & \ldots & v_n & v_{n1}\\ \mu_{11} & & \mu_{21} & & & \mu_{n1}\\ x_1 & r_1 & x_2 & \ldots & r_n & x_n \end{array}.$$

Definition F.3.2.2. Fuzzy fitting an ordered fuzzy set of elements into one point in space is called a dynamic ordered GrfSprt–element.

It is allowed to sum dynamic GrfSprt – elements:

$$\text{GrfSprt (t)}\begin{array}{cccccc} g_1(t) & w_1 & g_2(t)\ldots & & w_n & g_n(t)\\ v_{11} & v_1 & v_{21} & \ldots & v_n & v_{n1}\\ \mu_{11} & & \mu_{21} & & & \mu_{n1}\\ x_1 & r_1 & x_2 & \ldots & r_n & x_n \end{array} +$$

$$\text{GrfSprt(t)}\begin{array}{cccccc} b_1(t) & w_1 & b_2(t)\ldots & & w_n & b_n(t)\\ v_{11} & v_1 & v_{21} & \ldots & v_n & v_{n1}\\ \mu_{11} & & \mu_{21} & & & \mu_{n1}\\ x_1 & r_1 & x_2 & \ldots & r_n & x_n \end{array} =$$

$$\text{GrfSprt}(t)\begin{array}{cccccc} g_1(t)\cup b_1(t) & w_1 & g_2(t)\cup b_2(t)\ldots & & w_n & g_n(t)\cup b_n(t)\\ v_{11} & v_1 & v_{21} & \ldots & v_n & v_{n1}\\ \mu_{11} & & \mu_{21} & & & \mu_{n1}\\ x_1 & r_1 & x_2 & \ldots & r_n & x_n \end{array}.$$

It’s allowed to multiply GrfSprt – elements:

$$\text{GrfSprt}\,(t)\begin{array}{cccccc} g_1(t) & w_1 & g_2(t) & \ldots & w_n & g_n(t) \\ \begin{matrix} v_{11} \\ \mu_{11} \end{matrix} & v_1 & \begin{matrix} v_{21} \\ \mu_{21} \end{matrix} & \ldots & v_n & \begin{matrix} v_{n1} \\ \mu_{n1} \end{matrix} \\ x_1 & r_1 & x_2 & \ldots & r_n & x_n \end{array} *$$

$$\text{GrfSprt}(t)\begin{array}{cccccc} b_1(t) & w_1 & b_2(t) & \ldots & w_n & b_n(t) \\ \begin{matrix} v_{11} \\ \mu_{11} \end{matrix} & v_1 & \begin{matrix} v_{21} \\ \mu_{21} \end{matrix} & \ldots & v_n & \begin{matrix} v_{n1} \\ \mu_{n1} \end{matrix} \\ x_1 & r_1 & x_2 & \ldots & r_n & x_n \end{array} =$$

$$\text{GrfSprt}(t)\begin{array}{cccccc} g_1(t)\cap b_1(t) & w_1 & g_2(t)\cap b_2(t) & \ldots & w_n & g_n(t)\cap b_n(t) \\ \begin{matrix} v_{11} \\ \mu_{11} \end{matrix} & v_1 & \begin{matrix} v_{21} \\ \mu_{21} \end{matrix} & \ldots & v_n & \begin{matrix} v_{n1} \\ \mu_{n1} \end{matrix} \\ x_1 & r_1 & x_2 & \ldots & r_n & x_n \end{array}.$$

Parallel fuzzy dynamic fuzzy containment of oneself.

Definition F.3.2.3. Parallel fuzzy dynamic fSCprt- ffgcapacity

$$\text{GrfSprt}\,(t)\begin{array}{cccccc} R_1(t) & w_1 & R_2(t) & \ldots & w_n & R_n(t) \\ \begin{matrix} v_{11} \\ \mu_{11} \end{matrix} & v_1 & \begin{matrix} v_{21} \\ \mu_{21} \end{matrix} & \ldots & v_n & \begin{matrix} v_{n1} \\ \mu_{n1} \end{matrix} \\ Q_1(t) & r_1 & Q_2(t) & \ldots & r_n & Q_n(t) \end{array} \text{ is the process of fuzzy}$$

embedding fuzzy $R_i(t)$ into fuzzy $Q_i(t)$, (i = 1, …, n), simultaneously.

Definition F.3.2.4. Parallel dynamic fuzzy ffgcapacity $\widetilde{Q(t)}=(Q_1(t)|\mu_{\widetilde{Q(t)}}(Q_1(t)), Q_2(t)|\mu_{\tilde{Q}(t)}(Q_2(t)), \ldots, Q_n(t)|\mu_{\widetilde{Q(t)}}(Q_n(t)))$ fuzzy containing itself as an element of the first type is the process of parallel fuzzy containing fuzzy $\widetilde{Q(t)}$ in $\widetilde{Q(t)}$

$$\text{GrfSprt}\,(t)\begin{array}{cccccc} Q_1(t) & w_1 & Q_2(t) & \ldots & w_n & Q_n(t) \\ \begin{matrix} v_{11} \\ \mu_{11} \end{matrix} & v_1 & \begin{matrix} v_{21} \\ \mu_{21} \end{matrix} & \ldots & v_n & \begin{matrix} v_{n1} \\ \mu_{n1} \end{matrix} \\ Q_1(t) & r_1 & Q_2(t) & \ldots & r_n & Q_n(t) \end{array} \text{ Denote } GrfS_1f(t)\widetilde{Q(t)}.$$

Definition F.3.2.5. Parallel fuzzy dynamic fuzzy ffgcapacity C(t) in itself of the second type is the process of parallel fuzzy containing fuzzy elements from which it can be parallel fuzzy generated. Let's denote $GrfS_2f(t)C(t)$.

Definition F.3.2.6. Parallel dynamic partial fuzzy ffgcapacity B(t) in itself of the third type is a process of partial parallel fuzzy containment of fuzzy B(t) in itself or parallel fuzzy embedding fuzzy elements from which it can be parallel fuzzy generated partially or both at the same time. Denote $GrfS_3f(t)B(t)$.

All parallel dynamic fuzzy ffgcapacities in a parallel fuzzy dynamic fuzzy self-space are, by definition, parallel dynamic fuzzy ffgcapacities in themselves. Parallel dynamic fuzzy fgcapacity itself can manifest itself as parallel fuzzy dynamic GrfSprt- capacity and ordinary parallel fuzzy dynamic fuzzy fgcapacity . In these cases, the usual fuzzy measures and methods of topology are used.

Connection of fuzzy dynamic GrfSprt – elements with parallel fuzzy dynamic fuzzy containment of oneself.
Consider third type of parallel fuzzy dynamic partial fuzzy containment of oneself.

For example, based on GrfSprt (t)
$$\begin{array}{ccccc} Q_1(t) & w_1 & Q_2(t)\dots & w_n & Q_n(t) \\ v_{11} & & v_{21} & & v_{n1} \\ & v_1 & \dots & v_n & \\ \mu_{11} & & \mu_{21} & & \mu_{n1} \\ x_1 & r_1 & x_2\ \dots & r_n & x_n \end{array}$$
, where $\widetilde{Q(t)}$ =($Q_1(t)|\mu_{\widetilde{Q(t)}}(Q_1(t))$, $Q_2(t)|\mu_{\tilde{Q}(t)}(Q_2(t))$, …, $Q_n(t)|\mu_{\widetilde{Q(t)}}(Q_n(t))$), i.e. n – elements at one point x = $(x_1,x_2,\dots,x_n)$, we can consider the parallel fuzzy dynamic fuzzy capacity in itself $GrfS_3f(t)$ with m elements from $\widetilde{Q(t)}$, m<n, which is process formed according to the form (1.1) [7, 15-17], that is, only m elements from $\widetilde{Q(t)}$ are in the structure GrfSprt (t)
$$\begin{array}{ccccc} Q_1(t) & w_1 & Q_2(t)\dots & w_n & Q_n(t) \\ v_{11} & & v_{21} & & v_{n1} \\ & v_1 & \dots & v_n & \\ \mu_{11} & & \mu_{21} & & \mu_{n1} \\ x_1 & r_1 & x_2\ \dots & r_n & x_n \end{array}$$
.

Parallel fuzzy dynamic fuzzy containment of oneself of the third type can be formed for any other structure, not necessarily GrfSprt, only through the obligatory reduction in the number of elements in the structure. In particular, using the forms (1.1.1) - (1.4), (2.1*) [7, 15-17] and analogs of forms (1.1.1) - (1.4) by type (2.1*) [7, 15-17].
It is possible to introduce structures more complex than $PrffS_3f(t)$.
Parallel fuzzy dynamic fuzzy math itself.

1. The process of simultaneous parallel addition of fuzzy sets elements $\{\widetilde{g_i(t)}\}$ = $\left(g_{i_1}(t)|\mu_{\widetilde{g_i(t)}}(g_{i_1}(t)), g_{i_2}(t)|\mu_{\widetilde{g_i(t)}}(g_{i_2}(t)), \dots, g_{i_{m_j}}(t)|\mu_{\widetilde{g_i(t)}}(g_{i_{m_j}}(t))\right)$, i = 1,2,…,n, j =1,2,…,k are realized by

$$\text{GrfSprt(t)}\begin{array}{cccccc} \{\widetilde{g_1(t)}\}+ & w_1 & \{\widetilde{g_2(t)}\}+\dots & & w_n & \{\widetilde{g_n(t)}\}+ \\ v_{11} & v_1 & v_{21} & \dots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2 & \dots & r_n & x_n \end{array}.$$

2. By analogy, for simultaneous multiplication:

$$\text{GrfSprt(t)}\begin{array}{cccccc} \{\widetilde{g_1(t)}\}* & w_1 & \{\widetilde{g_2(t)}\}*\dots & & w_n & \{\widetilde{g_n(t)}\}* \\ v_{11} & v_1 & v_{21} & \dots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2 & \dots & r_n & x_n \end{array}.$$

2. Similarly for simultaneous execution of various operations:

$$\text{GrfSprt(t)}\begin{array}{cccccc} g_1(t)Q_1(t) & w_1 & g_2(t)Q_2(t)\dots & & w_n & g_n(t)Q_n(t) \\ v_{11} & v_1 & v_{21} & \dots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2 & \dots & r_n & x_n \end{array}.,\text{ where } \widetilde{Q(t)}$$

=(Q₁(t)|$\mu_{\widetilde{Q(t)}}$(Q₁(t)), Q₂(t)|$\mu_{\tilde{Q}(t)}$(Q₂(t)), …, Qₙ(t)|$\mu_{\widetilde{Q(t)}}$(Qₙ(t))), Qᵢ(t)-an operation, i = 1, …, n, $\widetilde{g(t)}$=(g₁(t)|$\mu_{\widetilde{g(t)}}$(g₁(t)), g₂(t)|$\mu_{\widetilde{g(t)}}$(g₂(t)), …, gₙ(t)|$\mu_{\widetilde{g(t)}}$(gₙ(t))).

3. Similarly, for the simultaneous execution of various operators:

$$\text{GrfSprt(t)}\begin{array}{cccccc} F_1(t)g_1(t) & w_1 & F_2(t)g_2(t)\dots & & w_n & F_n(t)g_n(t) \\ v_{11} & v_1 & v_{21} & \dots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2 & \dots & r_n & x_n \end{array},\text{ where } \widetilde{F(t)}$$

=(F₁(t)|$\mu_{\widetilde{F(t)}}$(F₁(t)), F₂(t)|$\mu_{\tilde{F}(t)}$(F₂(t)), …, Fₙ(t)|$\mu_{\widetilde{F(t)}}$(Fₙ(t))), Fᵢ(t) is an operator, i = 1, …, n.

4. Parallel fuzzy dynamic arithmetic itself for fuzzy containments of oneself will be similar: Parallel fuzzy dynamic addition - $GrfS_1f(t)\{\widetilde{g(t)}+\}$, (or $GrfS_3f(t)\{\widetilde{g(t)}+\}$ for the third type), Parallel fuzzy dynamic multiplication $GrfS_1f(t)\{\widetilde{g(t)}*\}$, $(GrfS_3f(t)\{\widetilde{g(t)}*\})$.

5. Similarly with different operations: $GrfS_1 f(t)\left\{\widetilde{g(t)}\ \widetilde{Q(t)}\right\}$, ($GrfS_3 f(t)\left\{\widetilde{g(t)}\ \widetilde{Q(t)}\right\}$) and with different operators: $GrfS_1 f(t)\left\{\widetilde{F(t)}\widetilde{g(t)}\right\}$, ($GrfS_3 f(t)\left\{\widetilde{F(t)}\widetilde{g(t)}\right\}$).

6. GrfSprt (t) $\begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\ldots & g_n & A_n(t) \\ \begin{array}{c} v_{11} \\ \mu_{11} \end{array} & v_1 & \begin{array}{c} v_{21} \\ \mu_{21} \end{array} \ldots & v_n & \begin{array}{c} v_{n1} \\ \mu_{n1} \end{array} \\ B_1(t) & r_1 & B_2(t)\ldots & r_n & B_n(t) \end{array}$ gives the result

$$\text{GrfSrt}\,(t) \begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\ldots & g_n & A_n(t) \\ \begin{array}{c} v_{11} \\ \mu_{11} \end{array} & v_1 & \begin{array}{c} v_{21} \\ \mu_{21} \end{array} \ldots & v_n & \begin{array}{c} v_{n1} \\ \mu_{n1} \end{array} \\ B_1(t) & r_1 & B_2(t)\ldots & r_n & B_n(t) \end{array} =$$

$$\left\{\sum_{i=1}^{n} (A_i(t)\ |g_i) \cup (B_i(t)\ |r_i) - (A_i(t)\ |g_i) \cap (B_i(t)\ |r_i)\ , \sum_{i=1}^{n} D_i(t)\right\},$$

for fuzzy sets $A_i(t)$, $B_i(t)$,where $D_i(t)$ is fuzzy Grself-set for $(A_i(t)\ |g_i) \cap (B_i(t)\ |r_i)$ with v_{i1}, (i = 1, 2, …, n). The same is true for structures if they are treated as fuzzy sets,

7. $\begin{array}{ccccc} C_1(t) & p_1 & C_2(t)\ldots & p_m & C_m(t) \\ \begin{array}{c} v_{12} \\ \mu_{12} \end{array} & h_1 & \begin{array}{c} v_{22} \\ \mu_{22} \end{array} \ldots & h_m & \begin{array}{c} v_{m2} \\ \mu_{m2} \end{array} \\ D_1(t) & f_1 & D_2(t)\ldots & f_m & D_m(t) \end{array}$ GrfSrt(t) =

$$\left\{ \begin{array}{c} \sum_{i=1}^{m} Q_i(t) + \begin{array}{cccc} \{\,\} & \{\,\} & & \{\,\} \\ v_{12} & v_{22} & \ldots & v_{m2} \\ \mu_{12} & \mu_{22} & & \mu_{m2} \\ R_1(t) & R_2(t) & \ldots & R_m(t) \end{array} \text{GrfSrt} \\ \sum_{i=1}^{m}\Big((C_i(t)\,|\,p_i) - (D_i(t)\,|\,f_i) \cap (C_i(t)\,|\,p_i)\Big) - ((D_i(t)\,|\,f_i) - (D_i(t)\,|\,f_i) \cap (C_i(t)\,|\,p_i)) \end{array} \right\}$$

for fuzzy sets $C_i(t)$, $D_i(t)$, where $Q_i(t)$ is fuzzy Groself-set for $(D_i(t)\,|\,f_i) \cap (C_i(t)\,|\,p_i)$, $R_i(t) = (D_i(t)\,|\,f_i) - (D_i(t)\,|\,f_i) \cap (C_i(t)\,|\,p_i)$ (i = 1, 2, …, m) [14].

8. Similarly, for fuzzy dynamic GrfSprt-derivatives, fuzzy dynamic GrfSprt-integrals, fuzzy dynamic GrfSprt-lim, parallel fuzzy dynamic fuzzy self-derivatives, parallel fuzzy dynamic fuzzy self-integrals

9. Denote parallel fuzzy dynamic fuzzy Grself-(parallel fuzzy dynamic fuzzy Grself-Q(t)) through parallel fuzzy dynamic fuzzy Grself^2-Q(t) , pffSC(t)(n,Q(t))= parallel fuzzy dynamic fuzzy Grself-(parallel fuzzy

dynamic fuzzy Grself-(…((parallel fuzzy dynamic fuzzy Grself)-Q(t)))) = (parallel fuzzy dynamic fuzzy Grself^n)-Q(t) for n-multiple parallel fuzzy dynamic fuzzy Grself.

Remark F.3.2.1. Then the notation

$$\begin{array}{ccccc} C_1(t) & p_1 & C_2(t)\dots & p_m & C_m(t) \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\dots & h_m & \overset{v_{m2}}{\mu_{m2}} \\ D_1(t) & f_1 & D_2(t)\dots & f_m & D_m(t) \end{array} \text{GrfSprt(t)} \begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\dots & g_n & A_n(t) \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1(t) & r_1 & B_2(t)\dots & r_n & B_n(t) \end{array},$$

where fuzzy A_1(t) fits into fuzzy B_1(t) with type of containment v_{11} and measure of fuzziness μ_{11}, fuzzy A_2(t) fits into fuzzy B_2(t) with type of containment v_{21} and measure of fuzziness μ_{21}, …, fuzzy A_n(t) fits into fuzzy B_n(t) with type of containment v_{n1} and measure of fuzziness μ_{n1}, fuzzy D_1(t) is forced out of fuzzy C_1(t) with type of expelling v_{12} and measure of fuzziness μ_{12}, fuzzy D_2(t) is forced out of fuzzy C_2(t) with type of expelling v_{22} measure of fuzziness μ_{22}, …, fuzzy D_m(t) is forced out of fuzzy C_m(t) with type of expelling v_{m2} measure of fuzziness μ_{m2} simultaneously. It is fuzzy dynamic GrfSprt-containment of fuzzy A_i(t) in fuzzy B_i(t) and fuzzy dynamic GrfSprt-displacement of fuzzy D_j(t) from fuzzy C_j(t) simultaneously, (i = 1, 2, …, n, j = 1, 2, …, m). The result of this process will be described by the expression

$$\begin{array}{ccccc} C_1(t) & p_1 & C_2(t)\dots & p_m & C_m(t) \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\dots & h_m & \overset{v_{m2}}{\mu_{m2}} \\ D_1(t) & f_1 & D_2(t)\dots & f_m & D_m(t) \end{array} \text{GrfSrt(t)} \begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\dots & g_n & A_n(t) \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1(t) & r_1 & B_2(t)\dots & r_n & B_n(t) \end{array}.$$

GrfSrt(t) $\begin{array}{ccccc} B_1(t) & g_1 & B_2(t)\dots & g_n & B_n(t) \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1(t) & r_1 & B_2(t)\dots & r_n & B_n(t) \end{array}$ will mean GrfS$_1$f(t)B(t).

$\begin{array}{ccccc} C_1(t) & p_1 & C_2(t)\dots & p_m & C_m(t) \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\dots & h_m & \overset{v_{m2}}{\mu_{m2}} \\ C_1(t) & f_1 & C_2(t)\dots & f_m & C_m(t) \end{array}$ GrfSprt(t) denotes the parallel fuzzy dynamic expelling fuzzy $\widetilde{C(t)}$=(C_1(t)|$\mu_{\widetilde{C(t)}}$(C_1(t)), C_2(t)|$\mu_{\widetilde{C(t)}}$(C_2(t)), …, C_n(t)|$\mu_{\widetilde{C(t)}}$(C_n(t))) oneself out of oneself,

$$\begin{array}{cccccc} A_1(t) & g_1 & A_2(t)\dots & & g_n & A_n(t) \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} & \dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ A_1(t) & r_1 & A_2(t)\dots & & r_n & A_n(t) \end{array} \text{GrfSprt(t)} \begin{array}{cccccc} A_1(t) & g_1 & A_2(t)\dots & & g_n & A_n(t) \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} & \dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ A_1(t) & r_1 & A_2(t)\dots & & r_n & A_n(t) \end{array} —$$

simultaneous parallel fuzzy dynamic containment fuzzy $\widetilde{A(t)}$=($A_1(t)|\mu_{\widetilde{A(t)}}(A_1(t))$, $A_2(t)|\mu_{\tilde{A}(t)}(A_2(t)), \dots, A_n(t)|\mu_{\widetilde{A(t)}}(A_n(t))$) of oneself in oneself and parallel fuzzy dynamic expelling fuzzy $\widetilde{A(t)}$ oneself out of oneself.

$$\begin{array}{cccccc} A_1(t) & g_1 & A_2(t)\dots & & g_n & A_n(t) \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} & \dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ A_1(t) & r_1 & A_2(t)\dots & & r_n & A_n(t) \end{array} \text{GrfSprt(t)}$$

will be called parallel fuzzy dynamic anti- ffgcapacity from oneself. For example, “white hole” in physics is such simple anti- ffgcapacity.

We may consider the following axiom: any ffgcapacity is the ffgcapacity of oneself. This is for each energy ffgcapacity .

About fuzzy dynamic GrfSprt and GrfS$_3$f(t) programming.

The ideology of fuzzy dynamic GrfSprt and GrfS$_3$f(t) can be used for programming:

1. The process of simultaneous assignment of the expressions $\widetilde{p(t)}$=($p_1(t)|\mu_{\widetilde{p(t)}}(p_1(t))$, $p_2(t)|\mu_{\widetilde{p(t)}}(p_2(t)), \dots, p_n(t)|\mu_{\widetilde{p(t)}}(p_n(t))$) to the variables $\widetilde{x(t)}$=($x_1(t)|\mu_{\widetilde{x(t)}}(x_1(t))$, $x_2(t)|\mu_{\tilde{x}(t)}(x_2(t)), \dots, x_n(t)|\mu_{\widetilde{x(t)}}(x_n(t))$) is implemented through GrfSprt(t)

$$\begin{array}{cccccc} x_1(t) := & g_1 & x_2(t) :=\dots & & g_n & x_n(t) := \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}} & \dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ p_1(t) & r_1 & p_2(t) & \dots & r_n & p_n(t) \end{array} .$$

2. The process of simultaneous check the set of conditions $\widetilde{u(t)}$=($u_1(t)|\mu_{\widetilde{u(t)}}(u_1(t))$, $u_2(t)|\mu_{\widetilde{u(t)}}(u_2(t)), \dots, u_n(t)|\mu_{\widetilde{u(t)}}(u_n(t))$) for a set of expressions $\widetilde{B(t)}$=($B_1(t)|\mu_{\widetilde{B(t)}}(B_1(t))$, $B_2(t)|\mu_{\tilde{B}(t)}(B_2(t)), \dots, B_n(t)|\mu_{\widetilde{B(t)}}(B_n(t))$) is implemented through GrfSprt(t)

$$\begin{array}{cccccc} IF\{B_1(t)u_1(t)\}\ then & g_1 & IF\{B_2(t)u_2(t)\}\ then\ldots & & g_n & IF\{B_n(t)u_n(t)\}\ then \\ \begin{matrix} v_{11} \\ \mu_{11} \end{matrix} & v_1 & \begin{matrix} v_{21} \\ \mu_{21} \end{matrix} & \ldots & v_n & \begin{matrix} v_{n1} \\ \mu_{n1} \end{matrix} \\ w_1(t) & r_1 & w_2(t) & \ldots & r_n & w_n(t) \end{array} \text{, here}$$

w(t) = $(w_1(t), w_2(t), \ldots, w_n(t))$. can be any.

3.Similarly for loop operators and others.

$GrfS_3f(t)$– software operators will differ only in that the aggregates $\{\widetilde{u(t)}\}, \{\widetilde{p(t)}\}, \{\widetilde{B(t)}\}, \{\widetilde{x(t)}\}$ will be formed from corresponding processes GrfSprt(t) for the above-mentioned programming operators through form (1.1) [7, 15-17] or forms (1.1.1) - (.1.4), (2.1*) [7, 15-17] and analogs of forms (1.1.1) – (1.4) by type (2.1*) [7, 15-17] for more complex operators.

Remark F.3.2.2. It is the parallel fuzzy containment of oneself in oneself that can “give birth” to the parallel fuzzy capacities in itself – that is what parallel self-organization is.

Remark F.3.2.3.

$$\text{GrfSrt(t)} \begin{array}{ccccc} \mathrm{H}(t) & g_1 & \mathrm{H}(t)\ \ldots & g_n & \mathrm{H}(t) \\ \begin{matrix} v_{11} \\ \mu_{11} \end{matrix} & v_1 & \begin{matrix} v_{21} \\ \mu_{21} \end{matrix}\ \ldots & v_n & \begin{matrix} v_{n1} \\ \mu_{n1} \end{matrix} \\ \mathrm{H}(t) & r_1 & \mathrm{H}(t)\ \ldots & r_n & \mathrm{H}(t) \end{array}.$$

can increase parallel fuzzy self- level of $\widetilde{B(t)}$=(B_1(t)|$\mu_{\widetilde{B(t)}}$(B_1(t)), B_2(t)|$\mu_{\tilde{B}(t)}$(B_2(t)), …, B_n(t)|$\mu_{\widetilde{B(t)}}$(B_n(t))), H(t) = GrfSrt(t) $\begin{array}{ccccc} B_1(t) & g_1 & B_2(t)\ldots & g_n & B_n(t) \\ \begin{matrix} v_{11} \\ \mu_{11} \end{matrix} & v_1 & \begin{matrix} v_{21} \\ \mu_{21} \end{matrix}\ \ldots & v_n & \begin{matrix} v_{n1} \\ \mu_{n1} \end{matrix} \\ B_1(t) & r_1 & B_2(t)\ldots & r_n & B_n(t) \end{array}$.

Remark F.3.2.4. For example, the operator Grfitself is $GrfS_1f(t)$.

Remark F.3.2.5. May be considered the following derivatives:

$$\frac{d\text{GrfSprt(t)}\begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\ldots & g_n & A_n(t) \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\cdots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1(t) & r_1 & B_2(t)\ldots & r_n & B_n(t) \end{array}}{dt}, \frac{d\begin{array}{ccccc} C_1(t) & p_1 & C_2(t)\ldots & p_m & C_m(t) \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\cdots & h_m & \overset{v_{m2}}{\mu_{m2}} \\ D_1(t) & f_1 & D_2(t)\ldots & f_m & D_m(t) \end{array}\text{GrfSrt(t))}}{dt},$$

$$\frac{d\begin{array}{ccccc} C_1(t) & p_1 & C_2(t)\ldots & p_m & C_m(t) \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\cdots & h_m & \overset{v_{m2}}{\mu_{m2}} \\ D_1(t) & f_1 & D_2(t)\ldots & f_m & D_m(t) \end{array}\text{GrfSrt(t)}\begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\ldots & g_n & A_n(t) \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\cdots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1(t) & r_1 & B_2(t)\ldots & r_n & B_n(t) \end{array}}{dt}, \frac{dGrf\text{S}_i\text{f(t)}}{dt}, \text{ i=1,2,3.}$$

Remark F.3.2.6. It is the parallel fuzzy containment of oneself in itself as an element that can be interpreted as parallel fuzzy dynamic fuzzy capacities in itself.

Remark F.3.2.7. Not every fuzzy ffgcapacity parallel fuzzy containing itself as an element will manifest itself as a sedentary parallel fuzzy ffgcapacity or parallel fuzzy ffgcapacity.

F.3.3 GrfSprt – elements for continual sets.

Earlier, we considered finite-dimensional discrete GrfSprt-elements and ffCself-capacities in itself as an element. Here we believe some continual GrfSprt-elements and continual parallel ffCself-capacities in themselves as an element.

Definition F.3.3.1. The fuzzy dynamic fuzzy set of continual elements $\tilde{u}=(u_1|\mu_{\tilde{u}}(u_1), u_2|\mu_{\tilde{u}}(u_2), \ldots, u_n|\mu_{\tilde{u}}(u_n))$ at one point x = $(x_1,x_2,\ldots,x_n)$ of space X will be called continual GrfSprt – element, and such a point in space will be called parallel ffgcapacity of the continual GrfSprt – element. We will denote

$$\text{GrfSprt}\begin{array}{ccccc} u_1 & w_1 & u_2\ldots & w_n & u_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\cdots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2\ldots & r_n & x_n \end{array}.$$

Definition F.3.3.2. An ordered fuzzy dynamic fuzzy set of continual elements at one point in space is called an ordered continual GrfSprt–element.

It’s allowed to sum continual GrfSprt – elements:

$$:\text{GrfSprt}\begin{array}{ccccc} u_1 & w_1 & u_2\ldots & w_n & u_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\cdots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2\ldots & r_n & x_n \end{array} + \text{GrfSprt}\begin{array}{ccccc} b_1 & w_1 & b_2\ldots & w_n & b_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\cdots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2\ldots & r_n & x_n \end{array} =$$

$$\text{GrfSprt}\begin{array}{cccccc} u_1\cup b_1 & w_1 & u_2\cup b_2\dots & & w_n & u_n\cup b_n \\ v_{11} & v_1 & v_{21} & \dots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2 & \dots & r_n & x_n \end{array}$$

, where some or any elements may be ordered continual elements. It’s allowed to multiply continual GrfSprt – elements:

$$\text{GrfSprt}\begin{array}{cccccc} u_1 & w_1 & u_2\dots & & w_n & u_n \\ v_{11} & v_1 & v_{21} & \dots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2\dots & & r_n & x_n \end{array} * \text{GrfSprt}\begin{array}{cccccc} b_1 & w_1 & b_2\dots & & w_n & b_n \\ v_{11} & v_1 & v_{21} & \dots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2\dots & & r_n & x_n \end{array} =$$

$$\text{GrfSprt}\begin{array}{cccccc} u_1\cap b_1 & w_1 & u_2\cap b_2\dots & & w_n & u_n\cap b_n \\ v_{11} & v_1 & v_{21} & \dots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2 & \dots & r_n & x_n \end{array}.$$

Definition F.3.3.3. The continual GrfSelf-capacity A in itself as an element of the first type is the continual ffgcapacity parallel fuzzy containing itself as an element.

Denote $GrfS_1fA$. $GrfS_1fA = \text{GrfSrt}\begin{array}{cccccc} A_1 & w_1 & A_2\dots & & w_n & A_n \\ v_{11} & v_1 & v_{21} & \dots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ A_1 & r_1 & A_2\dots & & r_n & A_n \end{array}$.

Definition F.3.3.4. The ordered continual GrfSelf-capacity A in itself as an element of the first type is the ordered continual ffgcapacity parallel containing itself as an element. Denote $\overrightarrow{GrfS_1fA}$.

For example, $\text{GrfSprt}\begin{array}{cccccc} \sin\infty & w_1 & \text{tg}(-\infty)\dots & & w_n & \sin(-\infty) \\ v_{11} & v_1 & v_{21} & \dots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2 & \dots & r_n & x_n \end{array} =$

$$\text{GrfSprt}\begin{array}{cccccc} \uparrow\text{I}\downarrow_{-1}^{1} & w_1 & \downarrow\text{I}\uparrow_{-\infty}^{\infty}\dots & & w_n & \downarrow\text{I}\uparrow_{-1}^{1} \\ v_{11} & v_1 & v_{21} & \dots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2 & \dots & r_n & x_n \end{array}$$

, don’t confuse with values of these functions.

Definition F.3.3.5. The continual GrfSelf-capacity A in itself, as an element of the second type, is the capacity parallel fuzzy containing fuzzy continual elements from which it can be parallel fuzzy generated. Let's denote $GrfS_2fA$.

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

Definition F.3.3.6. Partial continual GrfSelf-capacity in itself as an element of the third type is called continual GrfSelf-capacity in itself as an element that partially parallel fuzzy contains itself or parallel fuzzy contains elements from which it can be parallel fuzzy generated in part or both simultaneously. Denote $GrfS_3f$.

All continual capacities in GrfSelf-space are continual GrfSelf-capacities in itself as an element by definition. The continual GrfSelf-capacities in itself as an element may appear as continual GrfSrt- capacities and usual continual fuzzy capacities. In these cases, there are used typical fuzzy measure and topology methods.

The connection of continual GrfSprt – elements with continual GrfSelf-capacities in themselves as an element.

Consider a third type of continual GrfSelf- ffgcapacity in itself as an element. For example, based on GrfSprt$\begin{array}{ccccc} u_1 & w_1 & u_2\dots & w_n & u_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2\dots & r_n & x_n \end{array}$, where $\tilde{u}=(u_1|\mu_{\tilde{u}}(u_1), u_2|\mu_{\tilde{u}}(u_2), \dots, u_n|\mu_{\tilde{u}}(u_n))$, i.e. n - continual elements at one point x = $(x_1,x_2,\dots,x_n)$, The continual GrfSelf- ffgcapacity in itself as an element with m continual elements from $\tilde{g}$, at m<n, can be considered as $GrfS_3f$, which is formed by the form (1.1) [7, 15-17], i.e., only m continual elements are located in the structure GrfSprt$\begin{array}{ccccc} u_1 & w_1 & u_2\dots & w_n & u_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2\dots & r_n & x_n \end{array}$. Continual Grfself-capacities in itself as an element of the third type can be formed for any other structure, not necessarily GrfSprt, only by obligatory reducing the number of continual elements in the structure. In particular, using the forms (1.1.1) - (1.4), (2.1*) [7, 15-17] and analogs of forms (1.1.1) - (1.4) by type (2.1*) [7, 15-17]. Structures more complex than $GrfS_3f$can be introduced.

Mathematics Grfitself for continual elements.

1.Simultaneous parallel addition of the fuzzy sets continual elements$\tilde{g}$=(g_1|$\mu_{\tilde{g}}$(g_1), g_2|$\mu_{\tilde{g}}$(g_2), …, g_n|$\mu_{\tilde{g}}$(g_n)), i = 1,2,...,n, j = 1,2,...,k, is implemented using

$$\mathrm{GrfSprt}\begin{array}{ccccc} g_1\cup & w_1 & g_2\cup\ldots & w_n & g_n\cup\\ v_{11} & & v_{21} & & v_{n1}\\ \mu_{11} & v_1 & \mu_{21}\ \ldots & v_n & \mu_{n1}\\ x_1 & r_1 & x_2\ \ldots & r_n & x_n\end{array}.$$

2. By analogy, for simultaneous multiplication:

$$\mathrm{GrfSprt}\begin{array}{ccccc} g_1\cap & w_1 & g_2\cap\ldots & w_n & g_n\cap\\ v_{11} & & v_{21} & & v_{n1}\\ \mu_{11} & v_1 & \mu_{21}\ \ldots & v_n & \mu_{n1}\\ x_1 & r_1 & x_2\ \ldots & r_n & x_n\end{array}.$$

3. Similarly for simultaneous execution of various operations: GrfSprt

$$\begin{array}{ccccc} g_1Q_1 & w_1 & g_2Q_2\ldots & w_n & g_nQ_n\\ v_{11} & & v_{21} & & v_{n1}\\ \mu_{11} & v_1 & \mu_{21}\ \ldots & v_n & \mu_{n1}\\ x_1 & r_1 & x_2\ \ldots & r_n & x_n\end{array}$$

, where $\tilde{Q}$=(Q_1|$\mu_{\tilde{Q}}$(Q_1), Q_2|$\mu_{\tilde{Q}}$(Q_2), …, Q_n|$\mu_{\tilde{Q}}$(Q_n)). Q_i -an operation, i = 1, …, n.

4. Similarly, for the simultaneous execution of various operators: GrfSprt

$$\begin{array}{ccccc} F_1g_1 & w_1 & F_2g_2\ldots & w_n & F_ng_n\\ v_{11} & & v_{21} & & v_{n1}\\ \mu_{11} & v_1 & \mu_{21}\ \ldots & v_n & \mu_{n1}\\ x_1 & r_1 & x_2\ \ldots & r_n & x_n\end{array}$$

, where $\tilde{F}$=(F_1|$\mu_{\tilde{F}}$(F_1), F_2|$\mu_{\tilde{F}}$(F_2), …, F_n|$\mu_{\tilde{F}}$(F_n)). F_i is an operator, i = 1, …, n.

5. The arithmetic itself for parallel continual fuzzy capacities in themselves will be similar: addition - $GrfS_1f\{g+\}$, (or $GrfS_3f\{g+\}$) for the third type), multiplication $GrfS_1f\{g*\}$, ($GrfS_3f\{g*\}$).

6. Similarly with different operations: $GrfS_1f\{gQ\}$, ($rfS_3f\{gQ\}$), and with different operators: $GrfS_1f\{Fg\}$, ($GrfS_3f\{Fg\}$).

7. $$\mathrm{GrfSrt}\begin{array}{ccccc} A_1 & g_1 & A_2\ldots & g_n & A_n\\ v_{11} & & v_{21} & & v_{n1}\\ \mu_{11} & v_1 & \mu_{21}\ldots & v_n & \mu_{n1}\\ B_1 & r_1 & B_2\ldots & r_n & B_n\end{array}\quad -$$

the result of the parallel fuzzy containment operator. For continual fuzzy sets A_i, B_i, (i = 1, 2, …, n), we have

$$\mathrm{GrfSrt}\begin{array}{ccccc} A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1 & r_1 & B_2\dots & r_n & B_n \end{array} =$$

$$\left\{\sum_{i=1}^{n} (A_i|g_i)\cup(B_i|r_i)-(A_i|g_i)\cap(B_i|r_i)\ ,\sum_{i=1}^{n} D_i\right\} =$$

$$\left\{\begin{array}{c} \sum_{i=1}^{n} D_i \\ \sum_{i=1}^{n} (A_i|g_i)\cup(B_i|r_i)-(A_i|g_i)\cap(B_i|r_i) \end{array}\right\}$$, where D$_i$ is Grself-(continual fuzzy set) for $(A_i|g_i)\cap(B_i|r_i)$ with v_{i1} (i = 1, 2, …, n). There is the same for structures if they are considered as continual fuzzy sets, for fuzzy sets C$_i$, D$_i$: $\begin{array}{ccccc} C_1 & p_1 & C_2\dots & p_m & C_m \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\dots & h_m & \overset{v_{m2}}{\mu_{m2}} \\ D_1 & f_1 & D_2\dots & f_m & D_m \end{array}\mathrm{GrfSrt}=$

$$\left\{\begin{array}{ccccc} & \{\,\} & \{\,\} & & \{\,\} \\ & v_{12} & v_{22} & \dots & v_{m2} \\ \sum_{i=1}^{m} Q_i + & \mu_{12} & \mu_{22} & & \mu_{m2} \\ & (D_1|f_1)-(D_1|f_1)\cap(C_1|p_1) & (D_2|f_2)-(D_2|f_2)\cap(C_2|p_2) & \dots & (D_m|f_m)-(D_m|f_m)\cap(C_m|p_m) \\ \multicolumn{5}{c}{\sum_{i=1}^{m}\Big((C_i|p_i)-(D_i|f_i)\cap(C_i|p_i)\Big)-((D_i|f_i)-(D_i|f_i)\cap(C_i|p_i))} \end{array}\mathrm{GrSrt}\right\}$$

, where Q$_i$ is Groself-(set) for $\Big((D_i|f_i)\cap(C_i|p_i)\Big)$ (i = 1, 2, …, m) [14].

Remark F.3.3.1. $\begin{array}{ccccc} C_1 & p_1 & C_2\dots & p_m & C_m \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\dots & h_m & \overset{v_{m2}}{\mu_{m2}} \\ D_1 & f_1 & D_2\dots & f_m & D_m \end{array}\mathrm{GrfSprt}$, where continual fuzzy D$_1$ is forced out of continual fuzzy C$_1$ with type of expelling v_{12} and measure of fuzziness μ_{12}, continual fuzzy D$_2$ is forced out of continual fuzzy C$_2$ with type of expelling v_{22} and measure of fuzziness μ_{22}, …, continual fuzzy D$_m$ is forced out of continual fuzzy C$_m$ with type of expelling v_{m2} and measure of fuzziness μ_{m2}.

$\begin{array}{ccccc} C_1 & p_1 & C_2\dots & p_m & C_m \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\dots & h_m & \overset{v_{m2}}{\mu_{m2}} \\ D_1 & f_1 & D_2\dots & f_m & D_m \end{array}\mathrm{GrfSprt}\begin{array}{ccccc} A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1 & r_1 & B_2\dots & r_n & B_n \end{array}$, where continual fuzzy A$_1$ fits into continual fuzzy B$_1$ with type of containment v_{11} and measure of fuzziness μ_{11}, continual fuzzy A$_2$ fits into continual fuzzy B$_2$

with type of containment v_{21} and measure of fuzziness μ_{21}, …, continual fuzzy A_n fits into continual fuzzy B_n with type of containment v_{n1} and measure of fuzziness μ_{n1}, continual fuzzy D_1 is forced out of continual fuzzy C_1 with type of expelling v_{12} and measure of fuzziness μ_{12}, continual fuzzy D_2 is forced out of continual fuzzy C_2 with type of expelling v_{22} and measure of fuzziness μ_{22}, …, continual fuzzy D_m is forced out of continual fuzzy C_m with type of expelling v_{m2} and measure of fuzziness μ_{m2} simultaneously. Here are interactions between A_i and A_{i+1} by fuzzy g_i, between B_i and B_{i+1} by r_i, i = 1, 2, …, n, between C_j and C_{j+1} by fuzzy p_j, between D_j and D_{j+1} by fuzzy f_j, j = 1, 2, …, m.

We can consider the concept of a continual GrfSprt - element as GrfSprt

$$\begin{array}{ccccc} A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1 & r_1 & B_2\dots & r_n & B_n \end{array},$$

where continual fuzzy A_1 fits into continual fuzzy B_1 with type of containment v_{11} and measure of fuzziness μ_{11}, continual fuzzy A_2 fits into continual fuzzy B_2 with type of containment v_{21} and measure of fuzziness μ_{21}, …, continual fuzzy A_n fits into continual fuzzy B_n with type of containment v_{n1} and measure of fuzziness μ_{n1}. Here are interactions between A_i and A_{i+1} by fuzzy g_i, between B_i and B_{i+1} by r_i, i = 1, 2, …, n. Then

$$\mathrm{GrfSprt}\begin{array}{ccccc} B_1 & g_1 & B_2\dots & g_n & B_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1 & r_1 & B_2\dots & r_n & B_n \end{array}$$

will mean GrfS$_1$f B.

These elements are used for GrfSprt-coding, GrfSprt translation, coding GrfSelf, and translation GrfSelf 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. Fuzzy differential fuzzy 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 - GrfSelb-space. Then we introduce the scalar product for functions or vectors and get the Hilbert space. We call this space GrfSelh-space. In particular, one can try to describe some processes with these elements by differential equations and use methods from [4]. You can also try to optimize and research some processes with these elements using the techniques from [5]. Let's introduce operators for transforming ffgcapacity to GrfSelf- ffgcapacity in itself as an element: $PrfQ_1SC(A)$ transforms fuzzy A to $PrffS_1CA$, $PrfQ_0SC(B)$ transforms fuzzy B to

$$\begin{array}{ccccc} B_1 & g_1 & B_2 \dots & g_n & B_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1 & r_1 & B_2 \dots & r_n & B_n \end{array}$$ GrfSprt . Can be considered Q(

$$\begin{array}{ccccc} A_1 & g_1 & A_2 \dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1 & r_1 & B_2 \dots & r_n & B_n \end{array} \text{GrfSprt} \begin{array}{ccccc} A_1 & g_1 & A_2 \dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1 & r_1 & B_2 \dots & r_n & B_n \end{array}$$), Q-any operator.

F.3.4 Fuzzy dynamic continual GrfSprt – elements.

Definition F.3.4.1. The process of fuzzy containing the fuzzy set of continual elements $\widetilde{g(t)}=(g_1(t)|\mu_{\widetilde{g(t)}}(g_1(t)), g_2(t)|\mu_{\tilde{g}(t)}(g_2(t)), \dots, g_n(t)|\mu_{\widetilde{g(t)}}(g_n(t)))$ into one point $x= (x_1,x_2,\dots,x_n)$ of the space X at time will be called the dynamic continual GrfSprt – element. We will denote GrfSprt(t) $\begin{array}{ccccc} g_1(t) & w_1 & g_2(t)\dots & w_n & g_n(t) \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\dots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 \dots & r_n & x_n \end{array}$.

Definition F.3.4.2. The process of containing an ordered fuzzy set of continual elements at one point in space is called fuzzy dynamic continual ordered GrfSprt – element.

It is allowed to sum fuzzy dynamic continual GrfSprt – elements:

$$\text{GrfSprt}\,(\text{t}) \begin{array}{ccccc} g_1(t) & w_1 & g_2(t)\ldots & w_n & g_n(t) \\ v_{11} & & v_{21} & & v_{n1} \\ & v_1 & & \ldots\; v_n & \\ \mu_{11} & & \mu_{21} & & \mu_{n1} \\ x_1 & r_1 & x_2\;\ldots & r_n & x_n \end{array} +$$

$$\text{GrfSprt}(\text{t}) \begin{array}{ccccc} b_1(t) & w_1 & b_2(t)\ldots & w_n & b_n(t) \\ v_{11} & & v_{21} & & v_{n1} \\ & v_1 & & \ldots\; v_n & \\ \mu_{11} & & \mu_{21} & & \mu_{n1} \\ x_1 & r_1 & x_2\;\ldots & r_n & x_n \end{array} =$$

$$\text{GrfSprt}(t) \begin{array}{ccccc} g_1(t) \cup b_1(t) & w_1 & g_2(t) \cup b_2(t)\ldots & w_n & g_n(t) \cup b_n(t) \\ v_{11} & & v_{21} & & v_{n1} \\ & v_1 & & \ldots\; v_n & \\ \mu_{11} & & \mu_{21} & & \mu_{n1} \\ x_1 & r_1 & x_2 & \ldots\; r_n & x_n \end{array}$$

.

It’s allowed to multiply dynamic continual GrfSprt – elements:

$$\text{GrfSprt}\,(\text{t}) \begin{array}{ccccc} g_1(t) & w_1 & g_2(t)\ldots & w_n & g_n(t) \\ v_{11} & & v_{21} & & v_{n1} \\ & v_1 & & \ldots\; v_n & \\ \mu_{11} & & \mu_{21} & & \mu_{n1} \\ x_1 & r_1 & x_2\;\ldots & r_n & x_n \end{array} *$$

$$\text{GrfSprt}(\text{t}) \begin{array}{ccccc} b_1(t) & w_1 & b_2(t)\ldots & w_n & b_n(t) \\ v_{11} & & v_{21} & & v_{n1} \\ & v_1 & & \ldots\; v_n & \\ \mu_{11} & & \mu_{21} & & \mu_{n1} \\ x_1 & r_1 & x_2\;\ldots & r_n & x_n \end{array} =$$

$$\text{GrfSprt}(t) \begin{array}{ccccc} g_1(t) \cap b_1(t) & w_1 & g_2(t) \cap b_2(t)\ldots & w_n & g_n(t) \cap b_n(t) \\ v_{11} & & v_{21} & & v_{n1} \\ & v_1 & & \ldots\; v_n & \\ \mu_{11} & & \mu_{21} & & \mu_{n1} \\ x_1 & r_1 & x_2 & \ldots\; r_n & x_n \end{array} .$$

.Parallel fuzzy dynamic fuzzy continual containment of oneself in oneself as an element.

Definition F.3.4.3. The fuzzy dynamic continual GrfSprt- ffgcapacity

$$\text{GrfSprt}\,(\text{t}) \begin{array}{ccccc} R_1(t) & w_1 & R_2(t)\ldots & w_n & R_n(t) \\ v_{11} & & v_{21} & & v_{n1} \\ & v_1 & & \ldots\; v_n & \\ \mu_{11} & & \mu_{21} & & \mu_{n1} \\ Q_1(t) & r_1 & Q_2(t)\ldots & r_n & Q_n(t) \end{array}$$ is the process of fuzzy embedding fuzzy continual $R_i(t)$ into fuzzy continual $Q_i(t)$, (i = 1, …, n).

Definition F.3.4.4. Parallel dynamic fuzzy continual ffgcapacity $\widetilde{Q(t)}$=($Q_1(t)$| $\mu_{\widetilde{Q(t)}}(Q_1(t))$, $Q_2(t)|\mu_{\tilde{Q}(t)}(Q_2(t))$, …, $Q_n(t)|\mu_{\widetilde{Q(t)}}(Q_n(t))$) fuzzy containing itself as an element of the first type is the process of parallel fuzzy containing fuzzy $\widetilde{Q(t)}$ in

$$\widetilde{Q(t)}\quad \mathrm{GrfSprt}\,(t)\begin{array}{cccccc} Q_1(t) & w_1 & Q_2(t) & \ldots & w_n & Q_n(t)\\ v_{11} & & v_{21} & & & v_{n1}\\ \mu_{11} & v_1 & \mu_{21} & \ldots & v_n & \mu_{n1}\\ Q_1(t) & r_1 & Q_2(t) & \ldots & r_n & Q_n(t) \end{array}$$

. Denote $GrfS_1f(t)\widetilde{Q(t)}$.

Definition F.3.4.5. The fuzzy dynamic parallel containment fuzzy continual C(t) of oneself of the second type parallel fuzzy contains the fuzzy continual elements from which it can be parallel fuzzy generated. Denote $GrfS_2f(t)C(t)$.

Definition F.3.4.6. The partial parallel fuzzy dynamic containment fuzzy continual B(t) of oneself of the third type is the process of partial parallel fuzzy embedding fuzzy continual B(t) into oneself or parallel fuzzy embedding fuzzy continual elements from which it can be parallel fuzzy generated in part or both simultaneously. Denote $GrfS_3f(t)B(t)$.

The connection of dynamic continual GrfSprt – elements with parallel fuzzy dynamic fuzzy continual containment of oneself in oneself as an element.

Let us consider the partial parallel fuzzy dynamic fuzzy continual containment of oneself in oneself as an element of the third type. For example, based on

$$\mathrm{GrfSprt}\,(t)\begin{array}{cccccc} Q_1(t) & w_1 & Q_2(t) & \ldots & w_n & Q_n(t)\\ v_{11} & & v_{21} & & & v_{n1}\\ \mu_{11} & v_1 & \mu_{21} & \ldots & v_n & \mu_{n1}\\ x_1 & r_1 & x_2 & \ldots & r_n & x_n \end{array}$$

, where $\widetilde{Q(t)}=(Q_1(t)|\mu_{\widetilde{Q(t)}}(Q_1(t)), Q_2(t)|\mu_{\tilde{Q}(t)}(Q_2(t)), \ldots, Q_n(t)|\mu_{\widetilde{Q(t)}}(Q_n(t)))$, i.e. n – continual elements at one point $x = (x_1, x_2, \ldots, x_n)$, we can consider the parallel fuzzy dynamic fuzzy continual capacity in itself $GrfS_3f(t)$ with m elements from $\widetilde{Q(t)}$, m<n, which is process formed according to the form (1.1), that is, only m elements from $\widetilde{Q(t)}$ are in the structure

$$\mathrm{GrfSprt}\,(t)\begin{array}{cccccc} Q_1(t) & w_1 & Q_2(t) & \ldots & w_n & Q_n(t)\\ v_{11} & & v_{21} & & & v_{n1}\\ \mu_{11} & v_1 & \mu_{21} & \ldots & v_n & \mu_{n1}\\ x_1 & r_1 & x_2 & \ldots & r_n & x_n \end{array}.$$

Parallel fuzzy dynamic fuzzy continual containments of oneself in oneself as an element of the third type can be formed for any other structure, not necessarily GrfSprt, only by necessarily reducing the number of fuzzy continual elements in the structure. In particular, with the help of forms (1.1.1) - (1.4), (2.1*) [7, 15-17] and analogs of forms (1.1.1) - (1.4) by type (2.1*) [7, 15-17].

It is possible to introduce structures more complex than $GrfS_3f(t)$.

Parallel fuzzy dynamic fuzzy continual mathematics self.

1. The process of simultaneous parallel addition of fuzzy sets continual elements $\{\widetilde{g_i(t)}\} = \left(g_{i_1}(t)|\mu_{\widetilde{g_i(t)}}(g_{i_1}(t)),\, g_{i_2}(t)|\mu_{\widetilde{g_i(t)}}(g_{i_2}(t)),\, \ldots,\, g_{i_{m_j}}(t)|\mu_{\widetilde{g_i(t)}}(g_{i_{m_j}}(t)) \right)$, i = 1,2,…,n, j =1,2,…,k are realized by GrfSprt(t)
$$\begin{array}{cccccc} \{\widetilde{g_1(t)}\} \cup & w_1 & \{\widetilde{g_2(t)}\} \cup \ldots & & w_n & \{\widetilde{g_n(t)}\} \cup \\ v_{11} & v_1 & v_{21} & \ldots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2 & \ldots & r_n & x_n \end{array} .$$
2. By analogy, for simultaneous multiplication:
$$\text{GrfSprt(t)} \begin{array}{cccccc} \{\widetilde{g_1(t)}\} \cap & w_1 & \{\widetilde{g_2(t)}\} \cap \ldots & & w_n & \{\widetilde{g_n(t)}\} \cap \\ v_{11} & v_1 & v_{21} & \ldots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2 & \ldots & r_n & x_n \end{array} .$$
3. Similarly for simultaneous execution of various operations:
$$\text{GrfSprt(t)} \begin{array}{cccccc} g_1(t)Q_1(t) & w_1 & g_2(t)Q_2(t)\ldots & & w_n & g_n(t)Q_n(t) \\ v_{11} & v_1 & v_{21} & \ldots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2 & \ldots & r_n & x_n \end{array} \text{, where}$$
$\widetilde{Q(t)}$=(Q_1(t)|$\mu_{\widetilde{Q(t)}}$(Q_1(t)), Q_2(t)|$\mu_{\tilde{Q}(t)}$(Q_2(t)), …, Q_n(t)|$\mu_{\widetilde{Q(t)}}$(Q_n(t))), Q_i(t)-an operation, i = 1, …, n, $\widetilde{g(t)}$=(g_1(t)|$\mu_{\widetilde{g(t)}}$(g_1(t)), g_2(t)|$\mu_{\widetilde{g(t)}}$(g_2(t)), …, g_n(t)|$\mu_{\widetilde{g(t)}}$ (g_n(t))).
4. Similarly, for the simultaneous execution of various operators:
$$\text{GrfSprt(t)} \begin{array}{cccccc} F_1(t)g_1(t) & w_1 & F_2(t)g_2(t)\ldots & & w_n & F_n(t)g_n(t) \\ v_{11} & v_1 & v_{21} & \ldots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2 & \ldots & r_n & x_n \end{array} \text{, where } \widetilde{F(t)}$$
=(F_1(t)|$\mu_{\widetilde{F(t)}}$(F_1(t)), F_2(t)|$\mu_{\tilde{F}(t)}$(F_2(t)), …, F_n(t)|$\mu_{\widetilde{F(t)}}$(F_n(t))), F_i(t) is an operator, i = 1, …, n.
5. Parallel fuzzy dynamic arithmetic itself for continual containments of oneself will be similar: Parallel fuzzy dynamic addition -

$GrfS_1f(t)\{\widetilde{g(t)}\ \cup\}$, (or $GrfS_3f(t)\{\widetilde{g(t)}\ \cup\}$ for the third type), Parallel fuzzy dynamic multiplication $GrfS_1f(t)\{\widetilde{g(t)}\ \cap\}$, ($grfS_3f(t)\{\widetilde{g(t)}\ \cap\}$).

6. Similarly with different operations: $GrfS_1f(t)\{\widetilde{g(t)}\ \widetilde{Q(t)}\}$, ($GrfS_3f(t)\{\widetilde{g(t)}\ \widetilde{Q(t)}\}$) and with different operators: $GrfS_1f(t)\{\widetilde{F(t)}\widetilde{g(t)}\}$, ($GrfS_3f(t)\{\widetilde{F(t)}\widetilde{g(t)}\}$).

7. $$\text{GrfSprt}\,(t)\begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\ldots & g_n & A_n(t) \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\ \ldots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1(t) & r_1 & B_2(t)\ldots & r_n & B_n(t) \end{array}$$ gives the result

$$\text{GrfSrt}\,(t)\begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\ldots & g_n & A_n(t) \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\ \ldots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1(t) & r_1 & B_2(t)\ldots & r_n & B_n(t) \end{array} =$$

$$\left\{\sum_{i=1}^{n}(A_i(t)\,|g_i)\cup(B_i(t)\,|r_i)-(A_i(t)\,|g_i)\cap(B_i(t)\,|r_i)\ ,\sum_{i=1}^{n}D_i(t)\right\},$$

for fuzzy continual sets $A_i(t)$, $B_i(t)$,where $D_i(t)$ is fuzzy Grself-set for $(A_i(t)\,|g_i)\cap(B_i(t)\,|r_i)$ with v_{i1}, (i = 1, 2, …, n). The same is true for structures if they are treated as fuzzy continual sets,

8. $$\begin{array}{ccccc} C_1(t) & p_1 & C_2(t)\ldots & p_m & C_m(t) \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\ \ldots & h_m & \overset{v_{m2}}{\mu_{m2}} \\ D_1(t) & f_1 & D_2(t)\ldots & f_m & D_m(t) \end{array}\ \text{GrfSrt(t)} =$$

$$\left\{\begin{array}{c} \sum_{i=1}^{m}Q_i(t)+\begin{array}{cccc} \{\} & \{\} & & \{\} \\ v_{12} & v_{22} & \ldots & v_{m2} \\ \mu_{12} & \mu_{22} & & \mu_{m2} \end{array}\ \text{GrfSrt} \\ R_1(t)\quad R_2(t)\quad\ldots\quad R_m(t) \\ \sum_{i=1}^{m}\Big((C_i(t)\,|\,p_i)-(D_i(t)\,|\,f_i)\cap(C_i(t)\,|\,p_i)\Big)-((D_i(t)\,|\,f_i)-(D_i(t)\,|\,f_i)\cap(C_i(t)\,|\,p_i)) \end{array}\right\}$$

for fuzzy continual sets $C_i(t)$, $D_i(t)$, where $Q_i(t)$ is fuzzy Groself-set for $(D_i(t)\,|\,f_i)\cap(C_i(t)\,|\,p_i)$, $R_i(t)=(D_i(t)\,|\,f_i)-(D_i(t)\,|\,f_i)\cap(C_i(t)\,|\,p_i)$ (i = 1, 2, …, m) [14].

Similarly, for dynamic continual GrfSprt-derivatives, dynamic continual GrfSprt-integrals, dynamic continual GrfSprt-lim, fuzzy dynamic continual PrfCself-derivatives, fuzzy dynamic continual PrfCself-integrals

8. Denote fuzzy dynamic continual Grfself-(fuzzy dynamic continual Grfself -Q(t)) through fuzzy dynamic continual Grfself ^{2}-Q(t), PrfS(t)(n,Q(t))= fuzzy dynamic continual Grfself -(fuzzy dynamic continual Grfself -(…(fuzzy dynamic continual Grfself -Q(t)))) = fuzzy dynamic continual Grfself ^{n}-Q(t) for n-multiple fuzzy dynamic continual Grfself.

Remark F.3.4.1. The parallel fuzzy dynamic continual GrfSprt-displacement will be denote by $\begin{array}{ccccc} C_1(t) & p_1 & C_2(t)\ldots & p_m & C_m(t) \\ v_{12} & h_1 & v_{22} & h_m & v_{m2} \\ \mu_{12} & & \mu_{22} \ldots & & \mu_{m2} \\ D_1(t) & f_1 & D_2(t)\ldots & f_m & D_m(t) \end{array}$ GrfSprt(t) , where fuzzy continual D$_1$(t) is forced out of fuzzy continual C$_1$(t) with type of expelling v_{12} and measure of fuzziness μ_{12}, fuzzy continual D$_2$(t) is forced out of fuzzy continual C$_2$(t) with type of expelling v_{22} measure of fuzziness μ_{22}, …, fuzzy continual D$_m$(t) is forced out of fuzzy continual C$_m$(t) with type of expelling v_{m2} measure of fuzziness μ_{m2} simultaneously, the result of this process will be described by the expression $\begin{array}{ccccc} C_1(t) & p_1 & C_2(t)\ldots & p_m & C_m(t) \\ v_{12} & h_1 & v_{22} & h_m & v_{m2} \\ \mu_{12} & & \mu_{22} \ldots & & \mu_{m2} \\ D_1(t) & f_1 & D_2(t)\ldots & f_m & D_m(t) \end{array}$ GrfSprt(t). Then the notation

$$\begin{array}{ccccc} C_1(t) & p_1 & C_2(t)\ldots & p_m & C_m(t) \\ v_{12} & h_1 & v_{22} & h_m & v_{m2} \\ \mu_{12} & & \mu_{22} \ldots & & \mu_{m2} \\ D_1(t) & f_1 & D_2(t)\ldots & f_m & D_m(t) \end{array} \text{GrfSprt(t)} \begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\ldots & g_n & A_n(t) \\ v_{11} & v_1 & v_{21} & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} \ldots & & \mu_{n1} \\ B_1(t) & r_1 & B_2(t)\ldots & r_n & B_n(t) \end{array},$$

where fuzzy continual A$_1$(t) fits into fuzzy continual B$_1$(t) with type of containment v_{11} and measure of fuzziness μ_{11}, fuzzy continual A$_2$(t) fits into fuzzy continual B$_2$(t) with type of containment v_{21} and measure of fuzziness μ_{21}, …, fuzzy continual A$_n$(t) fits into fuzzy continual B$_n$(t) with type of containment v_{n1} and measure of fuzziness μ_{n1}, fuzzy continual D$_1$(t) is forced out of fuzzy continual C$_1$(t) with type of expelling v_{12} and measure of fuzziness μ_{12}, fuzzy continual D$_2$(t) is forced out of fuzzy continual C$_2$(t) with type of expelling v_{22} measure of fuzziness μ_{22}, …, fuzzy continual D$_m$(t) is forced out of fuzzy continual C$_m$(t) with type of expelling v_{m2} measure of fuzziness μ_{m2} simultaneously. It is fuzzy dynamic continual GrfSprt-containment of fuzzy continual $A_i(t)$ in fuzzy continual $B_i(t)$ and fuzzy dynamic continual GrfSprt-displacement of fuzzy continual $D_j(t)$ from fuzzy continual $C_j(t)$ simultaneously, (i = 1, 2, …, n, j = 1, 2, …, m). The result of this process will be described by the expression

$$\begin{array}{ccccc} C_1(t) & p_1 & C_2(t)\ldots & p_m & C_m(t) \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\ \ldots & h_m & \overset{v_{m2}}{\mu_{m2}} \\ D_1(t) & f_1 & D_2(t)\ldots & f_m & D_m(t) \end{array} \text{GrfSrt(t)} \begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\ldots & g_n & A_n(t) \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\ \ldots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1(t) & r_1 & B_2(t)\ldots & r_n & B_n(t) \end{array}.$$

$$\text{GrfSrt (t)} \begin{array}{ccccc} B_1(t) & g_1 & B_2(t)\ldots & g_n & B_n(t) \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\ \ldots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1(t) & r_1 & B_2(t)\ldots & r_n & B_n(t) \end{array}$$ will mean $\text{GrfS}_1\text{f(t)B(t)}$.

$$\begin{array}{ccccc} C_1(t) & p_1 & C_2(t)\ldots & p_m & C_m(t) \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\ \ldots & h_m & \overset{v_{m2}}{\mu_{m2}} \\ C_1(t) & f_1 & C_2(t)\ldots & f_m & C_m(t) \end{array} \text{GrfSprt(t)}$$ denotes the parallel fuzzy dynamic expelling fuzzy continual $\widetilde{C(t)}=(C_1(t)|\mu_{\widetilde{C(t)}}(C_1(t)), C_2(t)|\mu_{\tilde{C}(t)}(C_2(t)), \ldots, C_n(t)|\mu_{\widetilde{C(t)}}(C_n(t)))$ oneself out of oneself,

$$\begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\ldots & g_n & A_n(t) \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\ \ldots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ A_1(t) & r_1 & A_2(t)\ldots & r_n & A_n(t) \end{array} \text{GrfSprt(t)} \begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\ldots & g_n & A_n(t) \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\ \ldots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ A_1(t) & r_1 & A_2(t)\ldots & r_n & A_n(t) \end{array} —$$

simultaneous parallel fuzzy dynamic containment fuzzy continual $\widetilde{A(t)}=(A_1(t)|\mu_{\widetilde{A(t)}}(A_1(t)), A_2(t)|\mu_{\tilde{A}(t)}(A_2(t)), \ldots, A_n(t)|\mu_{\widetilde{A(t)}}(A_n(t)))$ of oneself in oneself and parallel fuzzy dynamic expelling fuzzy continual A(t) oneself out of oneself.

$$\begin{array}{ccccc} A_1(t) & g_1 & A_2(t)\ldots & g_n & A_n(t) \\ \overset{v_{11}}{\mu_{11}} & v_1 & \overset{v_{21}}{\mu_{21}}\ \ldots & v_n & \overset{v_{n1}}{\mu_{n1}} \\ A_1(t) & r_1 & A_2(t)\ldots & r_n & A_n(t) \end{array} \text{GrfSprt(t)}$$ will be called parallel fuzzy dynamic anti-(fuzzy continual ffgcapacity) from oneself.

Remark F.3.4.2. GrfSprt(t) $\begin{matrix} A_1(t) & g_1 & A_2(t)\ldots & g_n & A_n(t) \\ \begin{matrix} v_{11} \\ \mu_{11} \end{matrix} & v_1 & \begin{matrix} v_{21} \\ \mu_{21} \end{matrix} \ldots & v_n & \begin{matrix} v_{n1} \\ \mu_{n1} \end{matrix} \\ A_1(t) & r_1 & A_2(t)\ldots & r_n & A_n(t) \end{matrix}$ can be interpreted as a multilayer shell of a self-object from the first layer, which is specified by $A_1(t)$ to the nth, which is specified by $A_n(t)$. Based on this, the atomic model can be interpreted as

GrfSprt(t) $\begin{matrix} \cup \{p,n\} \\ \begin{matrix} v_{01} \\ \mu_{01} \end{matrix} \\ \textit{position of atomic nucleus} \end{matrix} \quad \begin{matrix} A_1(t) & g_1 & A_2(t)\ldots & g_n & A_n(t) \\ \begin{matrix} v_{11} \\ \mu_{11} \end{matrix} & v_1 & \begin{matrix} v_{21} \\ \mu_{21} \end{matrix} \ldots & v_n & \begin{matrix} v_{n1} \\ \mu_{n1} \end{matrix} \\ A_1(t) & r_1 & A_2(t)\ldots & r_n & A_n(t) \end{matrix}$,

$\{p,n\}$ - protons, neutrons, $A_i(t)$ correspond to orbitals, i = 1, ..., n.

GrfSprt(t) $\begin{matrix} \textit{physical body of a living organism} \\ \begin{matrix} v_{01} \\ \mu_{01} \end{matrix} \\ \textit{position of physical body} \end{matrix} \quad \begin{matrix} U_1(t) & g_1 & U_2(t)\ldots & g_n & U_n(t) \\ \begin{matrix} v_{11} \\ \mu_{11} \end{matrix} & v_1 & \begin{matrix} v_{21} \\ \mu_{21} \end{matrix} \ldots & v_n & \begin{matrix} v_{n1} \\ \mu_{n1} \end{matrix} \\ U_1(t) & r_1 & U_2(t)\ldots & r_n & U_n(t) \end{matrix}$ - model of a living organism with the multilayer shell of a living organism from the first layer, which is specified by $U_1(t)$ to the nth, which is specified by $U_n(t)$. In humans:

GrfSprt(t) $\begin{matrix} \textit{energy fibers that create a physical body of a living organism} \\ \begin{matrix} v_{01} \\ \mu_{01} \end{matrix} \\ \textit{energy fibers that create a physical body of a living organism} \end{matrix} \quad \begin{matrix} U_1(t) & g_1 & U_2(t)\ldots & g_n & U_n(t) \\ \begin{matrix} v_{11} \\ \mu_{11} \end{matrix} & v_1 & \begin{matrix} v_{21} \\ \mu_{21} \end{matrix} \ldots & v_n & \begin{matrix} v_{n1} \\ \mu_{n1} \end{matrix} \\ U_1(t) & r_1 & U_2(t)\ldots & r_n & U_n(t) \end{matrix}$. You can also try to consider the operator

GrfSprt $\begin{matrix} A_1(t) & g_1 & A_i^a(t)\ldots & g_n & A_n(t) \\ \begin{matrix} v_{11} \\ \mu_{11} \end{matrix} & v_1 & \begin{matrix} v_{21} \\ \mu_{21} \end{matrix} \ldots & v_n & \begin{matrix} v_{n1} \\ \mu_{n1} \end{matrix} \\ r_1(t) & r_1 & r_i^a(t)\ldots & r_n & r_n(t) \end{matrix}$, which represents the interpretation of the position of the assemblage point on the cocoon of a living organism, r_j is its potential position, $A_j(t)$ is a potential set of subtle energies in this position (i = 1, ..., i-1, i+1, ..., n), $r_i^a(t)$ is its active position, $A_i^a(t)$ is an active set of subtle energies in this position, i = 1, ..., n.

Connection of fuzzy dynamic continual GrfSprt – elements with target weights with parallel fuzzy dynamic fuzzy continual containment of oneself with target weights. Consider a third type of parallel partial fuzzy dynamic fuzzy continual containment of oneself with target weights g(t). For example, based on

GrfSprt(t) $\begin{array}{cccccc} g_1(t)w_1(t) & w_1 & g_2(t)w_2(t)... & w_n & g_n(t)w_n(t) \\ v_{11} & v_1 & v_{21} & ... & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2 & ... & r_n & x_n \end{array}$,where $\widetilde{g(t)}$=(g_1(t)|$\mu_{\widetilde{g(t)}}$(g_1(t)), g_2(t)|$\mu_{\widetilde{g(t)}}$(g_2(t)), ..., g_n(t)|$\mu_{\widetilde{g(t)}}$(g_n(t))).

i.e. n - fuzzy continual elements with target weights{w(t)} at one point x = (x_1,x_2,...,x_n), we can consider the fuzzy dynamic continual containment Grf$S_3 f(t)\widetilde{g(t)}$w(t) of oneself with target weights with m fuzzy continual elements with target weights{w(t)} from $\widetilde{g(t)}$, m<n, which is the process of formation according to the form (1.1) [], i.e., only m fuzzy continual elements with target weights{w(t)} from $\widetilde{g(t)}$are located in the structure Grf$S_3 f(t)\widetilde{g(t)}$w(t). Parallel fuzzy dynamic fuzzy containments of oneself with target weights of the third type can be formed for any other structure, not necessarily GrfSprt, only by reducing the number of continual elements with target weights in the structure. In particular, using the forms (1.1.1) - (1.4), (2.1*) [7, 15-17] and analogs of forms (1.1.1) - (1.4) by type (2.1*) [7, 15-17]. Structures more complex than Grf$S_3 f(t)\widetilde{g(t)}$w(t) can be introduced.

Definition F.3.4.7. The parallel fuzzy dynamic embedding of fuzzy continual A(t) into itself with target weights {w(t)} of the first type is the process of parallel fuzzy embedding A(t) into A(t) with target weights. Denote $GrfS_1 f(t)A(t)$w(t).

Definition 30. The parallel fuzzy dynamic containment of fuzzy continual C(t) itself into itself with target weights{w(t)} of the second type is the process of parallel fuzzy containment of the fuzzy continual elements from which it can be parallel fuzzy generated. Let's denote $GrfS_2 f\,(t)\,C\,(t)$ w (t) .

Definition F.3.4.8. Partial parallel fuzzy dynamic containment of fuzzy continual B(t) itself into itself with target weights {w(t)} of the third type is the process of partial parallel fuzzy containment of fuzzy continual B(t) into itself or fuzzy continual elements from which it can be parallel fuzzy generated partially, or both at the same time. Denote $GrfS_3 f\,(t)\,B\,(t)$ w (t) .

F.3.5 *The usage of GrfSprt-elements for networks.*

A. Galushkin's comprehensive monograph [6] covers all aspects of networks, but traditional approaches go through classical mathematics, mainly through the usual correspondence operators. Here we consider a different approach - through a new mathematical process with parallel fuzzy containment operators, which, although they can be interpreted as the result of some correspondence operators, are not themselves correspondence operators. Parallel fuzzy containment operators are more convenient for networks. Also, the main emphasis was placed on using processors operating using triodes, which are generally not used in Sprt-networks. GrfSprt-networks (SmnGrfSprt) are a GrfSprt-structure that can be built for the required weights. GrfSprt-OS (GrfSprt operating system) uses GrfSprt-coding and GrfSprt-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. GrfSprt-coding (or GrfSelf-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. GrfSprt-translation is carried out by inversion. In this case, GrfSelf-coding and GrfSelf-translation will be more stable. The target weights $g_i(t)$ in

	activation with $g_1(t)$	g_1	*activation with* $g_2(t)$...		g_n	*activation with* $g_n(t)$
GrfSprt(t)	v_{11} μ_{11}	u_1	v_{21} μ_{21}	...	u_n	v_{n1} μ_{n1}
	SmnGrfSprt	r_1	SmnGrfSprt	...	r_n	SmnGrfSprt

are chosen for necessary tasks. We will not touch on the issues of applications, or network optimization. They are described in detail by Galushkin [6]. 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 GrfSprt (designation - mnGrfSprt) for simple information processing. More complex executing programs are used for mnGrfSprt nodes. GrfSprt-threshold element

$$-\mathrm{sgn}(\mathrm{GrfSprt}(t)\ \begin{array}{cccccc} g_1(t)w_1(t) & w_1 & g_2(t)w_2(t)\ldots & & w_n & g_n(t)w_n(t) \\ v_{11} & v_1 & v_{21} & \ldots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ x_1 & r_1 & x_2 & \ldots & r_n & x_n \end{array}\ ),\ x=(x_1,x_2,\ldots,x_n)\ -$$

mnGrfSprt, $\widetilde{W}(t)=(w_1(t)|\mu_{\widetilde{w(t)}}(w_1(t)),\ w_2(t)|\mu_{\widetilde{w(t)}}(w_2(t)),\ldots,w_n(t)|\mu_{\widetilde{w(t)}}(w_n(t)))$.

– source signals values, $\{g(t)\} = (g_1(t),g_2(t),\ldots,g_n(t))$ – GrfSprt-synapses weights. The first level of mnGrfSprt consists of simple mnGrfSprt. The second level of mnGrfSprt consists of GrrffS = GrfSprt(t)

$$\begin{array}{cccccc} \mathrm{mnGrfSprt} & w_1 & \mathrm{mnGrfSprt}\ldots & & w_n & \mathrm{mnGrfSprt} \\ v_{11} & v_1 & v_{21} & \ldots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ D_1 & r_1 & D_2 & \ldots & r_n & D_n \end{array}\ \text{– GrfSprt-node of mnGrfSprt}$$

in range $D = (D_1, D_2,\ldots, D_n)$, D- ffgcapacity for mnGrfSprt node. The third level of mnGrfSprt consists of GrfSprt(t) $\begin{array}{cccccc} \mathrm{GrrffS} & w_1 & \mathrm{GrrffS}\ldots & & w_n & \mathrm{GrrffS} \\ v_{11} & v_1 & v_{21} & \ldots & v_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} \\ D_1 & r_1 & D_2 & \ldots & r_n & D_n \end{array}$ -GrfSprt^2-node of mnGrfSprt in range D, thus D becomes ffgcapacity of itself in itself as an element for mnGrfSprt. For our networks, it is sufficient to use GrfSprt^2- nodes of mnGrfSprt, but self-level is higher in living organisms, particularly GrfSprt^n-, $n \geq 3$. The target structure or the corresponding program enters the target unit using alternating current. 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 F.3.5.0. A neural network can be thought of as a learnable parallel fuzzy dynamic operator.

Remark F.3.5.1. 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. mnGrfSprt contains GrfSprt(t)

$$\begin{array}{ccccccc}
\mathrm{ffceprogram}_1(t) & w_1 & \mathrm{ffceprogram}_2(t)\ldots & w_n & \mathrm{ffceprogram}_n(t) \\
v_{11} & & v_{21} & & v_{n1} \\
 & v_1 & & \ldots \; v_n & \\
\mu_{11} & & \mu_{21} & & \mu_{n1} \\
\mathrm{mnGrfSprt} & r_1 & \mathrm{mnGrfSprt} & \ldots \; r_n & \mathrm{mnGrfSprt}
\end{array}$$

fgeprogram −executing program in GrfSprt- OS. GrfSprt-OS (or GrfSelf-OS) is based on GrfSprt-assembly language (or Prself-assembly language), which is based on assembly language through GrfSprt-approach in turn, if the base of elements of GrfSprt-networks is sufficient. The ffceprograms are in GrfSprt-programming environments (or GrfSelf-programming environments), but this question and GrfSprt-networks base will be considered in the following monographs. In particular, ffceprograms may contain GrfSprt- programming operators. In mnGrfSprt cores, the constant memory GrfSprt with correspondent fgeprograms depending on mnGrfSprt.

The OS (operating system) and the principles and modes of operation of the GrfSprt-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 rotors based on GrfSprt – physics and special neural networks with artificial neurons operating in normal and GrfSprt-modes. Let's denote this model through SmnGrfSprt. To do this, it’s proposed to use mnGrfSprt of different levels; for example, for the usual mode, mnGrfSprt 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 GrfSprt–mode with the desired "target weight" is realized in this section, etc., to the center. In the case of a monster during the test, SmnGrfSprt is activated with the desired "target weight." Here are realized other tasks also. To reach the Grfself-energy level, the mode $Sprt_{\mathrm{SmnGrfSprt}}^{\mathrm{SmnGrfSprt}}$ is used. In normal mode, it’s planned to carry out the movement of SmnGrfSprt 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 SmnGrfSprt 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 SmnGrfSprt. SmnGrfSprt is represented by a neural network that extends from the center of one of the main clusters of GrfSprt - artificial neurons to the shell, turning into the body itself. 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 SmnGrfSprt's actions is below the operator's cab. In GrfSprt – mode, the entire network or its sections are GrfSprt – activated to perform specific tasks, in particular, with "target weights." In the target, block used GrfSprt -coding, GrfSprt -translation for activation of all networks to "target weights" simultaneously, then –the reset of this GrfSprt-coding after activation. Unfortunately, triodes are not suitable for GrfSprt -neural networks. In the most primitive case, usual separators with corresponding resistances and cores for ffeprograms may be used instead triodes since there is no necessity to unbend the alternating current to direct. The GrfSprt-operative memory belt is disposed around a central core of SmnGrfSprt. There are GrfSprt-coding, GrfSprt-translation, and GrfSprt-realize of eprograms and the programs from the archives without extraction, GrfSprt-coding and GrfSprt-translation may be used in high-intensity, ultra-short optical pulses laser of Nobel laureates 2018-year Gerard Mourou, Donna, Strickland. GrfSprt – structure or an eprogram if one is present of needed «target weight» are taken in target block at GrfSprt – activation of the networks. $Sprt_{activation}^{\mathrm{SmnGrfSprt},f}$ derives SmnGrfSprt to the self-level boundary with target weight f.

It’s used an alternating current of above high frequency and ultra-violet light, which can work with GrfSprt – structures in GrfSprt–modes by its nature to activate the networks or some of its parts in GrfSprt–modes and locally using GrfSprt–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 GrfSprt-networks is realized to indicate “target weights.”

F.3.6 Variable hierarchical fuzzy dynamical parallel structures (models) for fuzzy dynamic, singular, hierarchical fuzzy sets.

Here we will consider variable parallel 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,

$$\begin{array}{ccccccccccc} C_1 & p_1 & C_2\dots & p_m & C_m & & A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\dots & h_m & \overset{v_{m2}}{\mu_{m2}} & \mathrm{GrfSprt(t)} & \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\dots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ D_1 & f_1 & D_2\dots & f_m & D_m & & B_1 & r_1 & B_2\dots & r_n & B_n \end{array} =$$

$$\left\{\begin{array}{l}
\left(\begin{array}{cccccc} C_1 & p_1 & C_2\dots & p_m & C_m & \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\dots & h_m & \overset{v_{m2}}{\mu_{m2}} & \mathrm{GrfSprt}, \\ D_1 & f_1 & D_2\dots & f_m & D_m & \end{array} q_2 \ge t \ge q_1\right)|\mu_1 \\
\left(\begin{array}{ccccccccccc} B_1 & p_1 & B_2\dots & p_m & B_m & & A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\dots & h_m & \overset{v_{m2}}{\mu_{m2}} & \mathrm{GrfSprt} & \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\dots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ D_1 & f_1 & D_2\dots & f_m & D_m & & B_1 & r_1 & B_2\dots & r_n & B_n \end{array}, q_3 \ge t > q_2\right)|\mu_2 \\
\left(\begin{array}{ccccccccccc} C_1 & p_1 & C_2\dots & p_m & C_m & & A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\dots & h_m & \overset{v_{m2}}{\mu_{m2}} & \mathrm{GrfSprt} & \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\dots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ D_1 & f_1 & D_2\dots & f_m & D_m & & B_1 & r_1 & B_2\dots & r_n & B_n \end{array}, q_4 \ge t > q_3\right)|\mu_3 \\
\left(\begin{array}{cccccc} & A_1 & g_1 & A_2\dots & g_n & A_n \\ \mathrm{GrfSprt} & \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\dots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ & B_1 & r_1 & B_2\dots & r_n & B_n \end{array}, q_5 \ge t > q_4\right)|\mu_4 \\
\left(\begin{array}{cccccc} \{\} & p_1 & \{\}\dots & p_m & \{\} & \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\dots & h_m & \overset{v_{m2}}{\mu_{m2}} & \mathrm{GrfSprt}, \\ D_1 & f_1 & D_2\dots & f_m & D_m & \end{array} t > q_5\right)|\mu_5 \\
\qquad\qquad\qquad\qquad\dots
\end{array}\right.$$

$(*_{F.3.3})$,

μ_i- measures of fuzziness, i = 1, ..., 5. In particular,

$$\begin{array}{ccccc} B_1 & p_1 & B_2\ldots & p_m & B_m \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\ldots & h_m & \overset{v_{m2}}{\mu_{m2}} \\ D_1 & f_1 & D_2\ldots & f_m & D_m \end{array} \text{GrfSprt} \begin{array}{ccccc} A_1 & g_1 & A_2\ldots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\ldots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1 & r_1 & B_2\ldots & r_n & B_n \end{array}$$

can be interpreted as a fuzzy game: player 1 fuzzy fits fuzzy A_i into fuzzy B_i, i = 1, 2, …, n, and the other fuzzy pushes fuzzy D_j out of fuzzy Bj, j = 1, 2, …, m at the same time.

The example of variable parallel hierarchy

$$\begin{array}{ccccc} C_1 & p_1 & C_2\ldots & p_m & C_m \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\ldots & h_m & \overset{v_{m2}}{\mu_{m2}} \\ D_1 & f_1 & D_2\ldots & f_m & D_m \end{array} \text{GrfSprt(t)}_1 \begin{array}{ccccc} A_1 & g_1 & A_2\ldots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\ldots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1 & r_1 & B_2\ldots & r_n & B_n \end{array} = \ =$$

$$\left\{\begin{array}{l}
\left(\left\{\begin{array}{c} \sum_{i=1}^{m} Q_i + \begin{array}{ccccc} \{\,\} & & \{\,\} & & \{\,\} \\ v_{12} & & v_{22} & \ldots & v_{m2} \\ \mu_{12} & & \mu_{22} & & \mu_{m2} \\ D_1 - D_1 \cap C_1 & & D_2 - D_2 \cap C_2 & \ldots & D_m - D_m \cap C_m \end{array} \text{GrfSrt} \\ \sum_{i=1}^{m} (\, C_i - D_i \cap C_i) - (D_i - D_i \cap C_i) \end{array}\right\}, \quad q_2 \ge t \ge q_1\right)|\mu_1 \\
\left(\sum_{i=1}^{n} \left(\begin{array}{c} S^{1e}_{0} fB_i * \\ {}^{B_i}_{Q_i - B_i}S^1 t^{A_i - B_i}_{B_i} \end{array}\right), q_3 \ge t > q_2\right)|\mu_2 \\
\left(\sum_{j=1}^{m} \sum_{i=1}^{n} \left(\begin{array}{c} S^{et}_{01} fB_i \\ {}^{C_j - B_i}_{C_j - B_i}S_1 t^{A - B_i}_{B_i} \\ {}^{C_j - B_i}_{D_j - C_j - B_i}S_1 t^{A - B_i}_{B_i} \end{array}\right), q_4 \ge t > q_3\right)|\mu_3 \\
\left(\left\{\begin{array}{c} \sum_{i=1}^{n} R_i \\ \sum_{i=1}^{n} A_i \cup B_i - A_i \cap B_i \end{array}\right\}, , q_5 \ge t > q_4\right)|\mu_4 \\
\left(\begin{array}{ccccc} \{\,\} & p_1 & \{\,\}\ldots & p_m & \{\,\} \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\ldots & h_m & \overset{v_{m2}}{\mu_{m2}} \\ D_1 & f_1 & D_2\ldots & f_m & D_m \\ & & & \ldots & \end{array} \text{GrfSrt}, \ t > q_5\right)|\mu_5
\end{array}\right.$$

$(*_{\text{F.3.4}})$,

Where μ_i- measures of fuzziness, i = 1, ..., 5, Q_i is oself-(fuzzy set) for $\left(D_j \cap C_j\right)$, D_j, C_j are fuzzy sets (j = 1, 2, …, m), [14], R_i is self-(fuzzy set) for $A_i \cap B_i$, A_i, B_i are fuzzy sets ,(i = 1, 2, …, n), $S^{et}_{01}fB$, ${}^{C-B}_{C-B}S_1 t^{A-B}_{B}$, ${}^{C-B}_{D-C-B}S_1 t^{A-B}_{B}$ are considered in [13], ${}^{B}_{Q-B}S^1 t^{A-B}_{B}$ is considered in [10].

In what follows, we will denote variable parallel fuzzy dynamic fuzzy structure (model) through PrffVSC, parallel fself-type variable fuzzy dynamic fuzzy structures (models) through PrffSVSC, and parallel foself-type variable fuzzy dynamic fuzzy structures (models) through PrffOSVSC.

Examples: a) discrete variable parallel fuzzy dynamic fuzzy structure

$$\begin{array}{ccccccccccc} C_1 & C_2 & \dots & C_m & a & b & g & A_1 & A_2 & \dots & A_n \\ D_1 & D_2 & \dots & D_m & c & GrfVS & w & B_1 & B_2 & \dots & B_n \\ A_1 & A_2 & \dots & A_n & d & q & r & C_1 & C_2 & \dots & C_m \\ B_1 & B_2 & \dots & B_n & & & & D_1 & D_2 & \dots & D_m \end{array}$$

Fig. F.3.2

c) continuous variable parallel fuzzy dynamic fuzzy structure

Fig.F.3.3.

Where a continuous set represents the rim of the Fig.F.3.3.

We introduce the notation m_{GrfVS_N}– the number of elements, N - the number of connections between them in the discrete variable parallel 2-hierarchical fuzzy dynamic fuzzy structure GrfVS. We introduce the notation q_{GrfVS_R}– any, R - connections in q_{GrfVS_R} in the variable parallel fuzzy dynamic 2-hierarchical structure GrfVS, in particular, q_{GrfVS_R}, R can be fuzzy sets both discrete and continuous and discrete-continuous. We consider the functional c(Q), which gives a numerical value for the structurability of Q from the interval [0,1], where 0 corresponds to "no parallel fuzzy dynamic fuzzy structure"," and 1 corresponds to the value " parallel fuzzy dynamic fuzzy structure". Then for joint fuzzy dynamic fuzzy A, B: cgf(A+B)=cgf (A)+cgf (B)-cgf (A*B)+cgfS(D), D- parallel fself-type fuzzy structures from A*B, cS(x)- the value of GrfSelf for parallel fself-type fuzzy structures x; for dependent parallel fuzzy dynamic fuzzy structures: cgf(A*B)= cgf (A)*cgf (B/A)=cgf (B)*cgf (A/B), where cgf (B/A)- conditional structurability of the parallel fuzzy dynamic fuzzy structure B at the parallel fuzzy dynamic fuzzy structure A, cgf (A/B)- conditional fuzzy dynamic fuzzy structure of the parallel fuzzy dynamic fuzzy structure A at the parallel fuzzy dynamic structure fuzzy B. Adding inconsistent parallel fuzzy dynamic fuzzy structures: cgf (A+B) =cgf (A) + cgf (B). The formula of complete parallel fuzzy dynamic fuzzy structure: cgf (A)=$\sum_{k=1}^{n} c\text{gf}\,(B_k) * c\text{gf}(A/B_k)$, B_1, B_{2},.., B_n-full group of hypotheses- fuzzy containments: $\sum_{k=1}^{n} c\text{gf}\,(B_k)$=1(“parallel fuzzy dynamic fuzzy structure”).

GrfSprt- structure of the first type for set of parallel fuzzy dynamic fuzzy structures A={A_1, A_2,…,A_n}: GrfSprt$\begin{array}{ccccc} A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\dots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2\dots & r_n & x_n \end{array}$, GrfSprt $\begin{array}{ccccc} c\text{gf}(A_1) & g_1 & c\text{gf}(A_2)\dots & g_n & c\text{gf}(A_n) \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\ \dots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2\ \dots & r_n & x_n \end{array}$ - GrfSprt- structurability for these structures. It is possible to consider the parallel fuzzy dynamic fself-type fuzzy structure $GrfS_3A$ with m parallel fuzzy dynamic fuzzy structures from A, at m<n, which is formed by the form (1.1) [], that is, only m parallel fuzzy dynamic fuzzy structures from A are located in the structure GrfSprt $\begin{array}{ccccc} A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\dots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2\dots & r_n & x_n \end{array}$.

The same for parallel fuzzy dynamic Grfself-type fuzzy structurability $GrfS_3\{$ cgf(A_1),cgf(A_2),…,cgf(A_n) .

Can be considered N-hierarchical parallel fuzzy 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 parallel fuzzy 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 fuzzy actions, fuzzy sets, and others.

Can be considered discrete hierarchical parallel fuzzy structure, continuous hierarchical parallel fuzzy structure, and discrete-continuous hierarchical parallel fuzzy structure.

The example GrfQHS=

$$GHfSprt_x\left\| \begin{array}{lccccc} & \text{N−level of hierarchical fuzzy structure}_1 & g_1 & \text{N−level of hierarchical fuzzy structure}_2\ldots & g_n & \text{N−level of hierarchical fuzzy structure}_n \\ \text{GrfSprt} & v_{11} & & v_{21} & & v_{n1} \\ & \mu_{11} & u_1 & \mu_{21} & \ldots\ u_n & \mu_{n1} \\ & X_1 & r_1 & X_2 & \ldots\ r_n & X_n \\ & & & \ldots & & \\ & \text{2−level of hierarchical fuzzy structure}_1 & g_1 & \text{2−level of hierarchical fuzzy structure}_2\ldots & g_n & \text{2−level of hierarchical fuzzy structure}_n \\ \text{GrfSprt} & v_{11} & & v_{21} & & v_{n1} \\ & \mu_{11} & u_1 & \mu_{21} & \ldots\ u_n & \mu_{n1} \\ & X_1 & r_1 & X_2 & \ldots\ r_n & X_n \\ & & & \ldots & & \\ & \text{1−level of hierarchical fuzzy structure}_1 & g_1 & \text{1−level of hierarchical fuzzy structure}_2\ldots & g_n & \text{1−level of hierarchical fuzzy structure}_n \\ \text{GrfSprt} & v_{11} & & v_{21} & & v_{n1} \\ & \mu_{11} & u_1 & \mu_{21} & \ldots\ u_n & \mu_{n1} \\ & X_1 & r_1 & X_2 & \ldots\ r_n & X_n \end{array}\right\| -$$

N-hierarchical fuzzy structure compression into point x = $(x_1, x_2, \ldots, x_n)$.

Let fGrf(N, GrfQHS)= $\text{GrfQHS}^{\text{GrfQHS}^{\text{GrfQHS}^{\cdots^{\text{GrfQHS}}}}} \Big\}$ -N levels

It can be considered GrfSelf- GrfQHS, fGrf(y, GrfQHS) for any y, fgrf(GrfQHS, GrfQHS).

Parallel Compression Hierarchy Example:

$$\text{1) GrfSprt}\begin{array}{ccccc} \text{GrfSprt}\begin{matrix}() & () & ()\\ () & () & \cdots()\\ () & () & \ldots()\\ () & () & \ldots()\end{matrix} & & \text{GrfSprt}\begin{matrix}() & () & ()\\ () & () & \cdots()\\ () & () & \ldots()\\ () & () & \ldots()\end{matrix} & \ldots & \text{GrfSprt}\begin{matrix}() & () & ()\\ () & () & \cdots()\\ () & () & \ldots()\\ () & () & \ldots()\end{matrix} \\ () & & () & & () \\ () & & ()\ldots & & () \end{array} =$$

$$\text{GrfSprt}\begin{matrix}() & () & ()\\ () & () & \cdots()\\ () & () & \ldots()\\ () & () & \ldots()\end{matrix} + B \quad \text{GrfSprt}\begin{matrix}() & () & ()\\ () & () & \cdots()\\ () & () & \ldots()\\ () & () & \ldots()\end{matrix} + B \quad \ldots \quad \text{GrfSprt}\begin{matrix}() & () & ()\\ () & () & \cdots()\\ () & () & \ldots()\\ () & () & \ldots()\end{matrix} + B$$

$$\left(\begin{array}{lccccc} & \text{GrfSprt}\begin{matrix}() & () & ()\\ () & () & \cdots()\\ () & () & \ldots()\\ () & () & \ldots()\end{matrix} & \text{GrfSprt}\begin{matrix}() & () & ()\\ () & () & \cdots()\\ () & () & \ldots()\\ () & () & \ldots()\end{matrix} & \ldots & \text{GrfSprt}\begin{matrix}() & () & ()\\ () & () & \cdots()\\ () & () & \ldots()\\ () & () & \ldots()\end{matrix} \\ \text{GrfSprt} & & & & \\ & \text{GrfSprt}\begin{matrix}() & () & ()\\ () & () & \cdots()\\ () & () & \ldots()\\ () & () & \ldots()\end{matrix} & \text{GrfSprt}\begin{matrix}() & () & ()\\ () & () & \cdots()\\ () & () & \ldots()\\ () & () & \ldots()\end{matrix} & \ldots & \text{GrfSprt}\begin{matrix}() & () & ()\\ () & () & \cdots()\\ () & () & \ldots()\\ () & () & \ldots()\end{matrix} \\ & \text{GrfSprt}\begin{matrix}() & () & ()\\ () & () & \cdots()\\ () & () & \ldots()\\ () & () & \ldots()\end{matrix} & \text{GrfSprt}\begin{matrix}() & () & ()\\ () & () & \cdots()\\ () & () & \ldots()\\ () & () & \ldots()\end{matrix} & \ldots & \text{GrfSprt}\begin{matrix}() & () & ()\\ () & () & \cdots()\\ () & () & \ldots()\\ () & () & \ldots()\end{matrix} \\ \text{GrfSprt} & v_{11} & v_{21} & & v_{n1} \\ & \mu_{11} & \mu_{21} & \ldots & \mu_{n1} \\ & B & B & \ldots & B \end{array}\right)$$

Let's consider two versions: 1) containment is interpreted through the concept of containment, and 2) fgcapacity is interpreted through the concept of fuzzy containment as a rest point of fuzzy containment. GrfSelf-containment is interpreted as a rest point of GrfSelf-containment. We consider the functional cafg(Q), which gives a numerical value for the fuzzy accommodation of Q from the interval [0,1], where 0 corresponds to " parallel fuzzy containment", and one corresponds to the value " parallel fuzzy fgcapacity . " Then for joint fuzzy dynamic fuzzy A, B: cafg (A+B)=cafg (A)+cafg (B)-cafg (A*B)+cafgS(D), D-GrfSelf-containment for A*B, cafgS(x)- the value of GrfSelf-fgcapacity for GrfSelf-containment of x; for dependent parallel fuzzy containments: cafg (A*B)=cafg (A)*cafg (B/A)=cafg (B)*cafg (A/B), where cafg (B/A)- conditional fuzzy accommodation of the parallel fuzzy containment B at the parallel fuzzy containment A, cafg (A/B)- conditional parallel fuzzy fgcapacity of the parallel fuzzy containment A at the parallel fuzzy containment B. Adding the parallel fuzzy ffgcapacity values of inconsistent parallel fuzzy containments: cafg (A+B)=cafg (A)+cafg (B). The formula of complete parallel fuzzy ffgcapacity : cafg (A)=$\sum_{k=1}^{n} ca\mathrm{fg}\,(B_k) * ca\mathrm{fg}(A/B_k)$, B_1, B_2,..,B_n-full group of hypotheses-(parallel fuzzy containments): $\sum_{k=1}^{n} ca\mathrm{fg}\,(B_k)$=1(“parallel fuzzy fgcapacity ”). GrfSprt- containment for set of parallel fuzzy containments A={A_1, A_2,…,A_n}: GrfSprt $\begin{array}{ccccc} A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\dots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2\dots & r_n & x_n \end{array}$, GrfSprt

$\begin{array}{ccccc} cafg(A_1) & g_1 & cafg(A_2)\dots & g_n & cafg(A_n) \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\;\dots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2\;\dots & r_n & x_n \end{array}$ - GrfSprt- accommodation for these parallel fuzzy containments. It is possible to consider the GrfSelf- containment $GrfS_3A$ with m fuzzy containments from A, at m<n, which is formed by the form (1.1), that is, only m parallel fuzzy containments from A are located in the parallel

containment GrfSprt(t)$\begin{array}{ccccc} A_1 & g_1 & A_2 \dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}} \dots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 \dots & r_n & x_n \end{array}$. The same for GrfSelf-accommodation - $GrfS_3${ cafg(A_1),cafg(A_2),…,cafg(A_n).

We consider the functional h(Q), which gives a numerical value for the parallel fuzzy dynamic fuzzy hierarchization of fuzzy Q from the interval [0,1], where 0 corresponds to "no parallel fuzzy dynamic fuzzy hierarchy," and 1 corresponds to the value " parallel fuzzy dynamic fuzzy hierarchy. " Then for joint parallel fuzzy dynamic hierarchies fuzzy A, B: hfg (A+B)=hfg (A)+hfg (B)-hfg (A*B)+hfgfSC(D), D- GrfSelf- hierarchy from A*B, hfgfSC (x)- the value of GrfSelf- hierarchy for GrfSelf- hierarchy x; for dependent parallel fuzzy dynamic fuzzy hierarchies: hfg (A*B) = hfg (A)*hfg (B/A) = hfg (B)*hfg (A/B), where hfg (B/A)- conditional parallel fuzzy dynamic hierarchization of the parallel fuzzy dynamic hierarchy fuzzy B at the parallel fuzzy dynamic hierarchy fuzzy A, hfg (A/B)- conditional parallel fuzzy dynamic fuzzy hierarchy of the parallel fuzzy dynamic hierarchy fuzzy A at the parallel fuzzy dynamic structure fuzzy B. Adding the parallel fuzzy dynamic fuzzy hierarchy values of inconsistent parallel fuzzy dynamic fuzzy hierarchies: hfg (A+B)=hfg (A)+hfg (B). The formula of complete parallel fuzzy dynamic fuzzy hierarchy: hfg (A)=$\sum_{k=1}^{n} h\text{fg}\,(B_k) * h\text{fg}(A/B_k)$, B_1, B_2, .., B_n-full group of hypotheses-(parallel fuzzy dynamic fuzzy hierarches): $\sum_{k=1}^{n} h\text{fg}\,(B_k)$=1(“parallel fuzzy dynamic fuzzy hierarchy”).

GrfSprt- structure for set of parallel fuzzy dynamic fuzzy hierarches A={A_1, A_2,…,A_n}: GrfSprt(t)$\begin{array}{ccccc} A_1 & g_1 & A_2 \dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}} \dots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 \dots & r_n & x_n \end{array}$, GrfSprt(t)$\begin{array}{cccccc} hfg(A_1) & g_1 & hfg(A_2) & \dots & g_n & hfg(A_n) \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}} & \dots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2 & \dots & r_n & x_n \end{array}$ - GrfSprt- hierarchization for these parallel fuzzy dynamic fuzzy hierarches. It is possible to consider the GrfSelf-hierarchy $GrfS_3A$ with m parallel fuzzy dynamic fuzzy hierarches from A, at m<n, which is formed by the form (1.1), that is, only m parallel fuzzy dynamic fuzzy hierarches from A are located in the parallel fuzzy dynamic hierarchy

$$\text{GrfSprt(t)}\begin{array}{ccccc} A_1 & g_1 & A_2\ldots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\ldots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2\ldots & r_n & x_n \end{array}$$

. The same for GrfSelf- hierarchization

$GrfS_3${ hfg(A_1),hfg(A_2),...,hfg(A_n).Can be considered

$$\text{GrfSprt(t)}\begin{array}{ccccc} \{\text{ cafg}(A_1),\text{cfg}(A_1),\text{hfg}(A_1)\} & g_1 & \{\text{cafg}(A_2),\text{cfg}(A_2),\text{hfg}(A_2)\}\ldots & g_n & \{\text{cafg}(A_n),\text{cfg}(A_n),\text{hfg}(A_n)\} \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\ldots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2\ldots & r_n & x_n \end{array}$$

Very interesting next parallel fuzzy dynamic fuzzy hierarchy type:

$$\begin{array}{ccccc} \text{hierarchy } A_1 & g_1 & \text{hierarchy } A_2\ldots & g_n & \text{hierarchy } A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\ldots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ \text{hierarchy } A_1 & r_1 & \text{hierarchy } A_2\ldots & r_n & \text{hierarchy } A_n \end{array}\text{GrfSprt(t)}$$

$$\begin{array}{ccccc} \text{hierarchy } A_1 & g_1 & \text{hierarchy } A_2\ldots & g_n & \text{hierarchy } A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\ldots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ \text{hierarchy } A_1 & r_1 & \text{hierarchy } A_2\ldots & r_n & \text{hierarchy } A_n \end{array}$$

.

You can enter special operator GrfCprt to work with fuzzy dynamic fuzzy structures:

$$\begin{array}{ccccc} A_1 & g_1 & A_2\ldots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\ldots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1 & r_1 & B_2\ldots & r_n & B_n \end{array}\text{GrfCrt}\begin{array}{ccccc} R_1 & p_1 & R_2\ldots & p_m & R_m \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\ldots & h_m & \overset{v_{m2}}{\mu_{m2}} \\ Q_1 & f_1 & Q_2\ldots & f_m & Q_m \end{array}$$

fuzzy structures fuzzy Q_j with the structure from fuzzy R_j with type of structuring v_{j2} and measure of fuzziness μ_{j2}, fuzzy unstructures fuzzy A_i by the structure fuzzy B_i with type of unstructuring v_{i1} and measure of fuzziness μ_{i1}, simultaneously, (i = 1, 2, …, n, j = 1, 2, …, m). Very interesting next parallel fuzzy dynamic fuzzy structure type:

$$\begin{array}{ccccc} A_1 & g_1 & A_2\ldots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\ldots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ A_1 & r_1 & A_2\ldots & r_n & A_n \end{array}\text{GrfCrt}\begin{array}{ccccc} A_1 & g_1 & A_2\ldots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\ldots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ A_1 & r_1 & A_2\ldots & r_n & A_n \end{array},$$

You can enter special parallel operator GrfHprt to work with fuzzy dynamic fuzzy hierarches:

$$\begin{array}{ccccc} A_1 & g_1 & A_2\ldots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\ldots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ B_1 & r_1 & B_2\ldots & r_n & B_n \end{array}\text{GrfHprt}\begin{array}{ccccc} R_1 & p_1 & R_2\ldots & p_m & R_m \\ \overset{v_{12}}{\mu_{12}} & h_1 & \overset{v_{22}}{\mu_{22}}\ldots & h_m & \overset{v_{m2}}{\mu_{m2}} \\ Q_1 & f_1 & Q_2\ldots & f_m & Q_m \end{array}$$

fuzzy hierarchizes fuzzy Q_j with the fuzzy hierarchy from fuzzy R_j with type of hierarching v_{j2} and measure of fuzziness μ_{j2}, fuzzy unhierarchizes fuzzy A_i from the fuzzy hierarchy fuzzy B_i with type of unhierarching v_{i1} and measure of fuzziness μ_{i1}, simultaneously, (i = 1, 2, …, n, j = 1, 2, …, m).

F.3.7 *Program operators GrfSprt, GrftSpr.*

Here it is supposed to use a symbiosis of parallel fuzzy actions and conventional calculations through sequential actions. This must be done through GrfSprt-Networks in one of the central departments of which a conventional computer system is located. The parallel processor is itself grfeprogram with direct parallel computing not through serial computing.

Using conventional GrfSprt -coding by a parallel computer system, through a Target-block with a GrfSprt -program operator -

$$\text{GrfSprt(t)} \quad \begin{array}{cccccc} g_1(t)w_1(t) & g_1 & g_2(t)w_2(t)\dots & & g_n & g_n(t)w_n(t) \\ v_{11} & & v_{21} & & & v_{n1} \\ \mu_{11} & u_1 & \mu_{21} & \dots & u_n & \mu_{n1} \\ activation & r_1 & activation\dots & & r_n & activation \end{array}$$

, it will be possible to obtain the execution of the parallel fuzzy actions $(g_1(t), g_2(t), \dots, g_n(t))$ with the desired target weights w(t)=($w_1(t), w_2(t), \dots, w_n(t)$). Each code for a neural network from a conventional computer we "bind" (match) to the corresponding value of current (or voltage). For GrfSprt-coding and GrfSprt-translation may be use alternating current of ultrahigh frequency or high-intensity ultra-short optical pulses laser of Nobel laureates 2018-year Gerard Mourou, Donna Strickland, or a combination of them. For the desired fuzzy action, for example, using the direct parallel fuzzy program of operator

$$\mathrm{GrfSprt(t)}\quad\begin{array}{ccccc} (\mathrm{UHF\ AC})_1(t) := Q_1(t) & g_1 & (\mathrm{UHF\ AC})_2(t) := Q_2(t)\ldots & g_n & (\mathrm{UHF\ AC})_n(t) := Q_n(t) \\ v_{11} & u_1 & v_{21} & \ldots\ u_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & \mu_{n1} \\ activation & r_1 & activation & \ldots\ r_n & activation \end{array},$$

we simultaneously enter the desired fuzzy set of codes $Q_i(t)$, i = 1, 2, …, n, using a microwave current or high-intensity ultra-short optical pulses laser in Target-block. In a conventional computer, the process of sequential calculation takes a certain time interval, in a directly parallel calculation by a neural network, the calculation is instantaneous, but it occupies a certain region of the space of calculation objects. Consider the types of direct parallel program operators:

1) GrfSprt-program operators
2) GrftSpr-program operators

Here are some of the GrfSprt-program operators:

1) Simultaneous fuzzy assignment of the fuzzy expressions $\tilde{p}=(p_1|\mu_{\tilde{p}}(p_1), p_2|\mu_{\tilde{p}}(p_2), \ldots, p_n|\mu_{\tilde{p}}(p_n))$ to the variables $\tilde{x}=(x_1|\mu_{\tilde{x}}(x_1), x_2|\mu_{\tilde{x}}(x_2), \ldots, x_n|\mu_{\tilde{x}}(x_n))$.

   This is implemented via GrfSprt $\begin{array}{ccccc} x_1 := & g_1 & x_2 := \ldots & g_n & x_n := \\ v_{11} & & v_{21} & & v_{n1} \\ \mu_{11} & u_1 & \mu_{21}\ \ldots & u_n & \mu_{n1} \\ p_1 & r_1 & p_2\ \ldots & r_n & p_n \end{array}$.

2) Simultaneous fuzzy checking the fuzzy set of conditions $\tilde{g}=(g_1|\mu_{\tilde{g}}(g_1), g_2|\mu_{\tilde{g}}(g_2), \ldots, g_n|\mu_{\tilde{g}}(g_n))$ for the fuzzy set of expressions $\tilde{B}=(B_1|\mu_{\tilde{B}}(B_1), B_2|\mu_{\tilde{B}}(B_2), \ldots, B_n|\mu_{\tilde{B}}(B_n))$. Implemented via GrfSprt

   $$\begin{array}{ccccc} IF\{B_1 g_1\}\ then & g_1 & IF\{B_2 g_2\}\ then\ldots & g_n & IF\{B_n g_n\}\ then \\ v_{11} & & v_{21} & & v_{n1} \\ \mu_{11} & u_1 & \mu_{21} & \ldots\ u_n & \mu_{n1} \\ w_1 & r_1 & w_2 & \ldots\ r_n & w_n \end{array},\ \text{where } w_i$$

   (i = 1, …, n) can be anything.

3) Similarly for loop operators and others.

GrfSprt-algorithm Examples:

1) Simultaneous addition and simultaneous parallel fuzzy multiplication of fuzzy sets elements (See point 1, 2 in **Math GrfSelf**

2) parallel fuzzy pattern recognition: GrfSprt

$$\begin{array}{cccc} IF\left\{q_1 \in image\ archive_1\right\}\ then & IF\left\{q_2 \in image\ archive_2\right\}\ then & \dots & IF\left\{q_n \in image\ archive_n\right\}\ then \\ v_{11} & v_{21} & & v_{n1} \\ \mu_{11} & \mu_{21} & \dots & \mu_{n1} \\ Name\ of\ q_1 & Name\ of\ q_2 & \dots & Name\ of\ q_n \end{array}$$

The example of GrfSprt-program is

$$\mathrm{GrfSprt}\begin{array}{cccc}
\mathrm{GrfSprt}\begin{array}{ccccc} x_1:= & g_1 & x_2:=\dots & g_n & x_n:= \\ v_{11} & & v_{21} & & v_{n1}\\ \mu_{11} & u_1 & \mu_{21}\ \dots & u_n & \mu_{n1} \\ p_1 & r_1 & p_2\ \dots & r_n & p_n\end{array} & \begin{array}{c} R\\ v_{21}\end{array} & \dots & \mathrm{GrfSprt}\begin{array}{ccccc} w_1 & g_1 & w_2\dots & g_n & w_n\\ v_{11}&&v_{21}&&v_{n1}\\ \mu_{11}&u_1&\mu_{21}\dots&u_n&\mu_{n1},\\ w_1&r_1&w_2\dots&r_n&w_n\end{array} \\
\begin{array}{c} v_{11}\\ \mu_{11}\\ r_1\end{array} & \begin{array}{c}\mu_{21}\\ r_2\end{array} & \begin{array}{c}\dots\\ \dots\end{array} & \begin{array}{c} v_{n1}\\ \mu_{n1}\\ r_n\end{array}
\end{array}$$

$$R=\mathrm{GrfSprt}\begin{array}{ccccc} IF\{B_1g_1\}\ then & g_1 & IF\{B_2g_2\}\ then\dots & g_n & IF\{B_ng_n\}\ then\\ v_{11} & & v_{21} & & v_{n1}\\ \mu_{11} & u_1 & \mu_{21} & \dots\ u_n & \mu_{n1}\\ w_1 & r_1 & w_2 & \dots\ r_n & w_n\end{array}.$$

$GrfS_3f$– software operators will differ only just because fuzzy aggregates $\{\tilde{g}\},\{\tilde{p}\},\{\tilde{B}\},\{\tilde{x}\}$ will be formed from corresponding GrfSprt-program operators in form (1.1) [7, 15-17] for more complex operators in forms (1.1.1) – (1.4) , (2.1*) [7, 15-17] and analogs of forms (1.1.1) - (1.4) by type (2.1*) [7, 15-17].

For example, $\mathrm{GrfSprt}_{g\{R\}}^{\substack{\{R\}\\ v\\ \mu}}$ is the fgcapacity in itself of the second type if $g\{R\}$ is a program capable of generating $\{R\}$.

The example of self-program of the first type is

$$\mathrm{GrfSprt}\begin{array}{cccc}
\mathrm{GrfSprt}\begin{array}{ccccc} x_1:=&g_1&x_2:=\dots&g_n&x_n:=\\ v_{11}&&v_{21}&&v_{n1}\\ \mu_{11}&u_1&\mu_{21}\dots&u_n&\mu_{n1}\\ p_1&r_1&p_2\dots&r_n&p_n\end{array} & \begin{array}{c}R\\ v_{21}\end{array} & \dots & \mathrm{GrfSprt}\begin{array}{ccccc} w_1&g_1&w_2\dots&g_n&w_n\\ v_{11}&&v_{21}&&v_{n1}\\ \mu_{11}&u_1&\mu_{21}\dots&u_n&\mu_{n1}\\ w_1&r_1&w_2\dots&r_n&w_n\end{array}\\
\mu_{11} & \mu_{21} & \dots & \begin{array}{c}v_{n1}\\ \mu_{n1}\end{array}\\
\mathrm{GrfSprt}\begin{array}{ccc} x_1:=&x_2:=&\dots\ x_n:=\\ v_{11}&v_{21}&\dots\ v_{n1}\\ \mu_{11}&\mu_{21}&\dots\ \mu_{n1}\\ p_1&p_2&\dots\ p_n\end{array} & R & \dots & \mathrm{GrfSprt}\begin{array}{ccccc} w_1&g_1&w_2\dots&g_n&w_n\\ v_{11}&&v_{21}&&v_{n1}\\ \mu_{11}&u_1&\mu_{21}\dots&u_n&\mu_{n1},\\ w_1&r_1&w_2\dots&r_n&w_n\end{array}
\end{array}.$$

$$R=\mathrm{GrfSprt}\begin{array}{ccccc} IF\{B_1g_1\}\ then & g_1 & IF\{B_2g_2\}\ then\dots & g_n & IF\{B_ng_n\}\ then\\ v_{11} & & v_{21} & & v_{n1}\\ \mu_{11} & u_1 & \mu_{21} & \dots\ u_n & \mu_{n1}\\ w_1 & r_1 & w_2 & \dots\ r_n & w_n\end{array}.$$

GrfSprt-coding: 1) fuzzy set A_i to fuzzy set B_i, 2) fuzzy set A_i to a point q_i, where the elements of the fuzzy sets A_i, B_i can be continuous, ($i = 1, 2, \dots, n$; $j = 1, 2, \dots, m$). For example, $\mathrm{GrfSprt}\begin{matrix} A_1 & g_1 & A_2\dots & g_n & A_n \\ \substack{v_{11}\\ \mu_{11}} & u_1 & \substack{v_{21}\\ \mu_{21}}\dots & u_n & \substack{v_{n1}\\ \mu_{n1}} \\ B_1 & r_1 & B_2\dots & r_n & B_n \end{matrix}$.

There are GrfSprt -coding, GrfSprt-translation, GrfSprt-realize of prffeprograms and of the programs from the archives without extraction theirs

Self-coding: 1) fuzzy set A_i to fuzzy set A_i, i.e. A_i on itself 2) fuzzy set A_i to a point q_i in forms (1.1) - (1.4), where the elements of the fuzzy sets A_i can be continuous. For example, $\mathrm{GrfSprt}\begin{matrix} A_1 & g_1 & A_2\dots & g_n & A_n \\ \substack{v_{11}\\ \mu_{11}} & u_1 & \substack{v_{21}\\ \mu_{21}}\dots & u_n & \substack{v_{n1}\\ \mu_{n1}} \\ A_1 & r_1 & A_2\dots & r_n & A_n \end{matrix}$

One of the central departments of the control system should be a computer system of the usual type of the desired level. In symbiosis with GrfSprt-Networks, it will provide a holistic operation of the control system in three modes: conventional serial through a conventional type computer system, direct parallel through GrfSprt -Networks and series-parallel. Codes from a conventional type computer system will be used via GrfSprt -connectors in GrfSprt - coding, for example:

$$\mathrm{GrfSprt(t)}\begin{matrix} (\mathrm{UHF\ AC})_1(t) := Q_1(t) & g_1 & (\mathrm{UHF\ AC})_2(t) := Q_2(t)\dots & g_n & (\mathrm{UHF\ AC})_n(t) := Q_n(t) \\ \substack{v_{11}\\ \mu_{11}} & u_1 & \substack{v_{21}\\ \mu_{21}} & \dots\ u_n & \substack{v_{n1}\\ \mu_{n1}} \\ activation & r_1 & activation & \dots\ r_n & activation \end{matrix},$$

UHF AC field activation is used.

Consider the fuzzy dynamic GrfSprt and PrffS$_3$Cf(t) programming:

1. The process of simultaneous fuzzy assignment of the fuzzy expressions $\widetilde{p(t)}$ $=(p_1(t)|\mu_{\widetilde{p(t)}}(p_1(t)), p_2(t)|\mu_{\widetilde{p(t)}}(p_2(t)), \dots, p_n(t)|\mu_{\widetilde{p(t)}}(p_n(t)))$ to the variables $\widetilde{x(t)}=(x_1(t)|$

$\mu_{\widetilde{x(t)}}(x_1(t)), x_2(t)|\mu_{\tilde{x}(t)}(x_2(t)),_{\dots,} x_n(t)|\mu_{\widetilde{x(t)}}(x_n(t)))$ is implemented through GrfSprt

$$\begin{array}{ccccccc} x_1(t) := & g_1 & x_2(t) := & \dots & g_n & x_n(t) := & \\ v_{11} & \multirow{2}{*}{u_1} & v_{21} & \dots & \multirow{2}{*}{u_n} & v_{n1} & \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} & . \\ p_1(t) & r_1 & p_2(t) & \dots & r_n & p_n(t) & \end{array}$$

2. The process of simultaneous check the fuzzy set of conditions $\widetilde{g(t)}$=$(g_1(t)|\mu_{\widetilde{g(t)}}(g_1(t)), g_2(t)|\mu_{\tilde{g}(t)}(g_2(t)),_{\dots,} g_n(t)|\mu_{\widetilde{g(t)}}(g_n(t)))$ for the fuzzy set of expressions $\widetilde{B(t)}$ =$(B_1(t)|\mu_{\widetilde{B(t)}}(B_1(t)), B_2(t)|\mu_{\tilde{B}(t)}(B_2(t)),_{\dots,} B_n(t)|\mu_{\widetilde{B(t)}}(B_n(t)))$ is implemented through

$$\text{GrfSprt} \quad \begin{array}{cccccccc} IF\{B_1(t)g_1(t)\}\ then & g_1 & IF\{B_2(t)g_2(t)\}\ then & \dots & g_n & IF\{B_n(t)g_n(t)\}\ then & \\ v_{11} & \multirow{2}{*}{u_1} & v_{21} & \dots & \multirow{2}{*}{u_n} & v_{n1} & \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} & , \\ w_1(t) & r_1 & w_2(t) & \dots & r_n & w_n(t) & \end{array}$$

where w(t) = $(w_1(t), w_2(t), \dots, w_n(t))$. can be any.

3.Similarly for loop operators and others.

$GrfS_3f(t)$– software operators will differ only in that the aggregates $\{\widetilde{g(t)}\}, \{\widetilde{p(t)}\}, \{\widetilde{B(t)}\}, \{\widetilde{x(t)}\}$ will be formed from corresponding processes GrfSprt(t) for the above-mentioned programming operators through form (1.1) [7, 15-17] or forms (1.1.1) – (1.4) [7, 15-17] for more complex operators, (2.1*) and analogs of forms (1.1.1) - (1.4) by type (2.1*) [7, 15-17].

Consider GrftSpr-program operators. The ideology of GrftSpr and $Grft_{S_{4}f}$ is parallel analogue of $\mathrm{ft}_{S_{4}f}$ [14] can be used for programming. Here are some of the GrftSpr -program operators.

1. Simultaneous fuzzy expelling assignment of the fuzzy expressions $\tilde{p}$ =$(p_1|\mu_{\tilde{p}}(p_1), p_2|\mu_{\tilde{p}}(p_2),_{\dots,} p_n|\mu_{\tilde{p}}(p_n))$ from the variables $\tilde{x}$=$(x_1|\mu_{\tilde{x}}(x_1), x_2|\mu_{\tilde{x}}(x_2),_{\dots,} x_n|\mu_{\tilde{x}}(x_n))$. It's implemented through

$$\begin{array}{ccccccc} x_1 := & g_1 & x_2 := & \dots & g_n & x_n := & \\ v_{11} & \multirow{2}{*}{u_1} & v_{21} & \dots & \multirow{2}{*}{u_n} & v_{n1} & \text{GrfSprt.} \\ \mu_{11} & & \mu_{21} & & & \mu_{n1} & \\ p_1 & r_1 & p_2 & \dots & r_n & p_n & \end{array}$$

2. Similarly for loop operators and others.

$Grft_{S_4f}$ – software operators will differ only just because aggregates $\{\tilde{g}\},\{\tilde{p}\},\{\tilde{B}\},\{\tilde{x}\}$ will be formed from corresponding GrftSpr program operators in form (1.1) [7, 15-17] for more complex operators in forms (1.1.1) – (1.4) , (2.1*) [7, 15-17] and analogs of forms (1.1.1) - (1.4) by type (2.1*) [7, 15-17].

Consider hierarchical GrftSpr-program operator

$$\begin{array}{cccccc} C_1(t) & p_1 & C_2(t)\ldots & p_m & C_m(t) & \\ v_{12} & & v_{22} & & v_{m2} & \\ & h_1 & \ldots & h_m & & \text{GrfSrt(t)} = \\ \mu_{12} & & \mu_{22} & & \mu_{m2} & \\ D_1(t) & f_1 & D_2(t)\ldots & f_m & D_m(t) & \end{array}$$

$$\left\{ \begin{array}{c} \sum_{i=1}^{m} Q_i(t) + \begin{array}{cccc} \{\,\} & \{\,\} & & \{\,\} \\ v_{12} & v_{22} & \ldots & v_{m2} \\ \mu_{12} & \mu_{22} & & \mu_{m2} \end{array} \text{GrfSrt} \\ \begin{array}{cccc} R_1(t) & R_2(t) & \ldots & R_m(t) \end{array} \\ \sum_{i=1}^{m}\Big((C_i(t)\,|\,p_i) - (D_i(t)\,|\,f_i) \cap (C_i(t)\,|\,p_i)\Big) - ((D_i(t)\,|\,f_i) - (D_i(t)\,|\,f_i) \cap (C_i(t)\,|\,p_i)) \end{array} \right\}$$

for fuzzy sets $C_i(t), D_i(t),$ where $Q_i(t)$ is fuzzy Groself-set for $(D_i(t)\,|\,f_i) \cap (C_i(t)\,|\,p_i)$, $R_i(t) = (D_i(t)\,|\,f_i) - (D_i(t)\,|\,f_i) \cap (C_i(t)\,|\,p_i)$ (i = 1, 2, …, m) [14].

Consider the GrtfSpr(t) and $Grft(t)_{S_4f}$ programming at time t.

1. The process of simultaneous expelling of assignment of the expressions $\widetilde{p(t)}$ $=(p_1(t)|\mu_{\widetilde{p(t)}}(p_1(t)), p_2(t)|\mu_{\widetilde{p(t)}}(p_2(t)), \ldots, p_n(t)|\mu_{\widetilde{p(t)}}(p_n(t)))$ fom the variables $\widetilde{x(t)}=(x_1(t)|\mu_{\widetilde{x(t)}}(x_1(t)), x_2(t)|\mu_{\tilde{x}(t)}(x_2(t)), \ldots, x_n(t)|\mu_{\widetilde{x(t)}}(x_n(t)))$ is implemented through

$$\begin{array}{ccccc} x_1(t) := & x_2(t) := & & x_n(t) := & \\ & & \ldots & & \\ v_{11} & v_{21} & & v_{n1} & \text{GrfSprt(t).} \\ \mu_{11} & \mu_{21} & \ldots & \mu_{n1} & \\ p_1(t) & p_2(t) & \ldots & p_n(t) & \end{array}$$

2. Similarly for loop operators and others.

$Prfft(t)_{S_4Cf}$ – software operators will differ only in that the aggregates $\widetilde{x(t)},\widetilde{p(t)}, \widetilde{B(t)},\widetilde{g(t)}$ will be formed from corresponding processes GrfSprt(t) for the above-mentioned programming operators through form (1.1) [7, 15-17] or forms (1.1.1) – (1.4) [7, 15-17] for more complex operators, (2.1*) [] and analogs of forms (1.1.1) - (1.4) by type (2.1*) [7, 15-17].

Consider GrfSrt(t)- program operators

$$fSprt_{t_0}^{\left\{ {}^{q}\begin{pmatrix} u & g & u & & u & g & u \\ v_1 & v_{02} & v_2 & GrfSpr & v_1 & v_{02} & v_2 \\ \mu_1 & \mu_{02} & \mu_2 & & \mu_1 & \mu_{02} & \mu_2 \\ u & r & u & & u & r & u \end{pmatrix} W_q^{fSprt^{E_q}\, {}^{q}\begin{pmatrix} u & g & u & & u & g & u \\ v_1 & v_{02} & v_2 & GrfSpr & v_1 & v_{02} & v_2 \\ \mu_1 & \mu_{02} & \mu_2 & & \mu_1 & \mu_{02} & \mu_2 \\ u & r & u & & u & r & u \end{pmatrix}},\; fSprt_{d_r\left(E_{in} l^{d_r}\right)}^{\{E^{ex} l^{d_r}\}} \right\}}.$$

—program structure example, where the assemblage point d_r is the cursor, it is quite complex fself—program.

Remark. Energy with measure of fuzziness μ_1, μ_2 of a living organism other than humans:

fGrf(r, u(E_q), μ_1, μ_2) =

$$fSprt_{t_0}^{\left\{ {}^{q}\begin{pmatrix} u & g & u & & u & g & u \\ v_1 & v_{02} & v_2 & GrfSpr & v_1 & v_{02} & v_2 \\ \mu_1 & \mu_{02} & \mu_2 & & \mu_1 & \mu_{02} & \mu_2 \\ u & r & u & & u & r & u \end{pmatrix} W_q^{Sprt^{E_q}\, {}^{q}\begin{pmatrix} u & g & u & & u & g & u \\ v_1 & v_{02} & v_2 & GrfSpr & v_1 & v_{02} & v_2 \\ \mu_1 & \mu_{02} & \mu_2 & & \mu_1 & \mu_{02} & \mu_2 \\ u & r & u & & u & r & u \end{pmatrix}},\; fSprt_{d_r\left(E_{in} l^{d_r}\right)}^{\{E^{ex} l^{d_r}\}} \right\}}$$

($**_{F.3}$).

Energy with measure of fuzziness μ_1, μ_2 of a living organism of a person:

fGrhf(r, u(E_q), μ_1, μ_2) =

$$fSprt_{t_0}^{\left\{ {}^{q}\begin{pmatrix} u & g & u & & u & g & u \\ v_1 & v_{02} & v_2 & GrfSpr & v_1 & v_{02} & v_2 \\ \mu_1 & \mu_{02} & \mu_2 & & \mu_1 & \mu_{02} & \mu_2 \\ u & r & u & & u & r & u \end{pmatrix} W_q^{Sprt^{E_q}\, {}^{q}\begin{pmatrix} u & g & u & & u & g & u \\ v_1 & v_{02} & v_2 & GrfSpr & v_1 & v_{02} & v_2 \\ \mu_1 & \mu_{02} & \mu_2 & & \mu_1 & \mu_{02} & \mu_2 \\ u & r & u & & u & r & u \end{pmatrix}},\; fSprt_{d_r\left(self\left(E_{in} l^{d_r}\right)\right)}^{\{E^{ex} l^{d_r}\}} \right\}}$$

($***_{F.3}$).

$\begin{matrix} u & g & u & & u & g & u \\ v_1 & v_{02} & v_2 & GrfSpr & v_1 & v_{02} & v_2 \\ \mu_1 & \mu_{02} & \mu_2 & & \mu_1 & \mu_{02} & \mu_2 \\ u & r & u & & u & r & u \end{matrix}$ -internal energy with measure of fuzziness μ_1, μ_2 of a living organism of double energy structure, q- a gap in the energy cocoon of a living organism, r-the position of the assemblage point d_r on the energy cocoon of a living organism, W_q- energy prominences from the gap in the cocoon of a living organism, E_q-external energy entering the gap in the cocoon of a living organism, $E^{ex}l^{d_r}$ - a bundle of fibers of external energy self-capacities from outside the cocoon, collected at the point of assembly of the cocoon of a living organism, $E_{in}l^{d_r}$- a bundle of fibers of external energy self-capacities from inside the cocoon, collected at the point of assembly of the cocoon of a living organism in the same position r of the assemblage point d_r. d_r is the subject of identifying the energy fibers of the subtle energy of the Universe in position r both outside and inside the cocoon.

($**_{F.3}$), ($***_{F.3}$) can be interpreted as GrfSrt- program operators.

Appendix.

Supplement for string theory: May be to try represent elementary particles in the form of continual self-elements of the type:

$$\text{GrfSprt}\begin{array}{cccccc} \uparrow \mathrm{I} \downarrow_{-1}^{1} & w_1 & \downarrow \mathrm{I} \uparrow_{-\infty}^{\infty}\ldots & & w_n & \downarrow \mathrm{I} \uparrow_{-1}^{1} \\ v_{11} & & v_{21} & & & v_{n1} \\ \mu_{11} & v_1 & \mu_{21} & \ldots & v_n & \mu_{n1} \\ x_1 & r_1 & x_2 & \ldots & r_n & x_n \end{array} \text{ etc.}$$

Supplement for GrfSprt-logic: We consider GrfSprt-logic: consider the functional ffg(Q), which gives a numerical value for the truth of the fuzzy dynamic fuzzy statement Q from the interval [0,1], where 0 corresponds to "ffgno," and one corresponds to the logical value "ffgyes." Then for joint fuzzy dynamic fuzzy statements A, B: ffg(A+B)=ffg(A)+ffg(B)-ffg(A*B)+ffgS(D), D- Grfself- (fuzzy dynamic fuzzy statement) from A*B, ffgS(x)- the value of self-(fuzzy dynamic fuzzy truth) for self-(fuzzy dynamic fuzzy statement) x; for dependent fuzzy dynamic fuzzy statements: ffg(A*B)=ffg(A)*ffg(B/A)=ffg(B)*ffg(A/B), where ffg(B/A)- conditional fuzzy dynamic fuzzy truth of the fuzzy dynamic fuzzy statement B at fuzzy dynamic fuzzy statement A, ffg(A/B)- dependent fuzzy dynamic fuzzy truth of the fuzzy dynamic fuzzy statement A at the fuzzy dynamic fuzzy statement B. Adding the fuzzy dynamic fuzzy truth values of inconsistent fuzzy dynamic fuzzy propositions: ffg(A+B)=ffg(A)+ffg(B). The formula of complete fuzzy dynamic fuzzy truth: ffg(A)=$\sum_{k=1}^{n} f\mathrm{fg}\,(B_k) * f\mathrm{fg}(A/B_k)$, B_1, B_2, ..,

B_n-full group of hypotheses- (fuzzy dynamic fuzzy statements): $\sum_{k=1}^{n} f\mathrm{fg}\,(B_k)$ =1(“yes”).

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

GrfSprt- statement for set of fuzzy dynamic fuzzy statements A ={A_1, A_2, …, A_n}:

GrfSprtt $\begin{array}{ccccc} A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\dots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2\dots & r_n & x_n \end{array}$. GrfSprtt

$\begin{array}{ccccc} f\mathrm{fg}(A_1) & g_1 & f\mathrm{fg}(A_2)\dots & g_n & f\mathrm{fg}(A_n) \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\;\dots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2\;\dots & r_n & x_n \end{array}$ - GrfSprt- truth for these fuzzy statements. It is possible to consider the self-(fuzzy statement) $GrfS_3A$ with m fuzzy statements from A, at m<n, which is formed by the form (1.1) [], that is, only m fuzzy statements from A are located in the structure

GrfSprt $\begin{array}{ccccc} A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\dots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2\dots & r_n & x_n \end{array}$. The same for self-(fuzzy truth)

$GrfS_3\{\,\mathrm{ffg}\,(A_1),\mathrm{ffg}\,(\mathrm{A}_2),\dots,\mathrm{ffg}\,(\mathrm{A}_n)\}$.

One can introduce the concepts of GrfSprt-group: GrfSprt

$\begin{array}{ccccc} A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\dots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2\dots & r_n & x_n \end{array}$, A is the usual fuzzy group, GrfSprt

$\begin{array}{ccccc} A_1 & g_1 & A_2\dots & g_n & A_n \\ \overset{v_{11}}{\mu_{11}} & u_1 & \overset{v_{21}}{\mu_{21}}\dots & u_n & \overset{v_{n1}}{\mu_{n1}} \\ x_1 & r_1 & x_2\dots & r_n & x_n \end{array}$, where A_i is usual fuzzy group, i=1,2, …,n, x- usual fuzzy groups, self- (fuzzy group): $GrfS_i fA$, i=1,2,3, A is usual fuzzy group.

Definition F.3.5.1. A fuzzy dynamic fuzzy structure with a second degree of freedom will be called complete, i.e., "capable" of reversing itself concerning any of its fuzzy elements clearly, but not necessarily in known operators; it can form (create) new special fuzzy dynamic fuzzy operators (in particular, special fuzzy dynamic fuzzy functions). In particular, GrfSprt $\begin{array}{ccccc} A_1 & g_1 & A_2\dots & g_n & A_n \\ v_{11} & u_1 & v_{21}\dots & u_n & v_{n1} \\ \mu_{11} & & \mu_{21} & & \mu_{n1} \\ x_1 & r_1 & x_2\dots & r_n & x_n \end{array}$ is such structure. Similarly, for working with fuzzy models, each is structured by its fuzzy dynamic fuzzy structure; for example, use GrfSprt-groups, GrfSprt-rings, GrfSprt-fields, GrfSprt-spaces, GrfSelf-groups, GrfSelf-rings, GrfSelf-fields, and GrfSelf-spaces. Like any task, this is also a fuzzy dynamic fuzzy structure of the appropriate fuzzy fgcapacity . Since the degree of freedom is double, it is clear that the form of the GrfSelf-equation contains a fuzzy dynamic fuzzy solutions or fuzzy dynamic fuzzy structures the inversion of the GrfSelf-equation concerning unknowns, i.e., the fuzzy dynamic fuzzy structure of the Grfself-equation is complete.

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