

70. INTELLIGENCE OF MATTER

Although demonstrating the intelligence of the universe is difficult, requiring many logical steps, however, this objective can be achieved, not only by observing living structures but also by changing the models of analysis and the logics involved. The consistency of logics development is obtained when the same invariants are obtained, but on a higher level of fractalization. Such a phenomenon can be observed in the following:

- step 1: starting from the automorphisms of the projective line, a semantic content is attached by equating $f_1 = \text{I am}$; $f_2 = \text{what}$; $f_3 = \text{how}$; $f_4 = \text{where}$; $f_5 = \text{time}$; $f_6 = \text{why}$
- step 2: the feedback of degree 1 is generated, having the last column f_4 and f_5 , these are packed according to arcs and orientations in groups of six letters.

These are re-packaged in the table of colored fields, which unfolds in the sub-tables which, from the generation point of view, have logical semantic content.

- step 3: represent the feedbacks as a triangular prism undergoing rotations on both bases. In this case each tip of the triangular prism has two characteristics: a position given by the feedback structure that becomes visible as a unicursal diagram and a semantic value of the position given by the coordinates what, how, why, where, when. The position on the unicursal diagram is of the type: data inout, data input processing, experience base, data output, evaluation of the output data, strategies base.
- step 4: the data created with double characteristics are structured on the peaks, after designing on a plan the unicursal diagram, as well as of the initial vertical lines that have moved following the rotations:

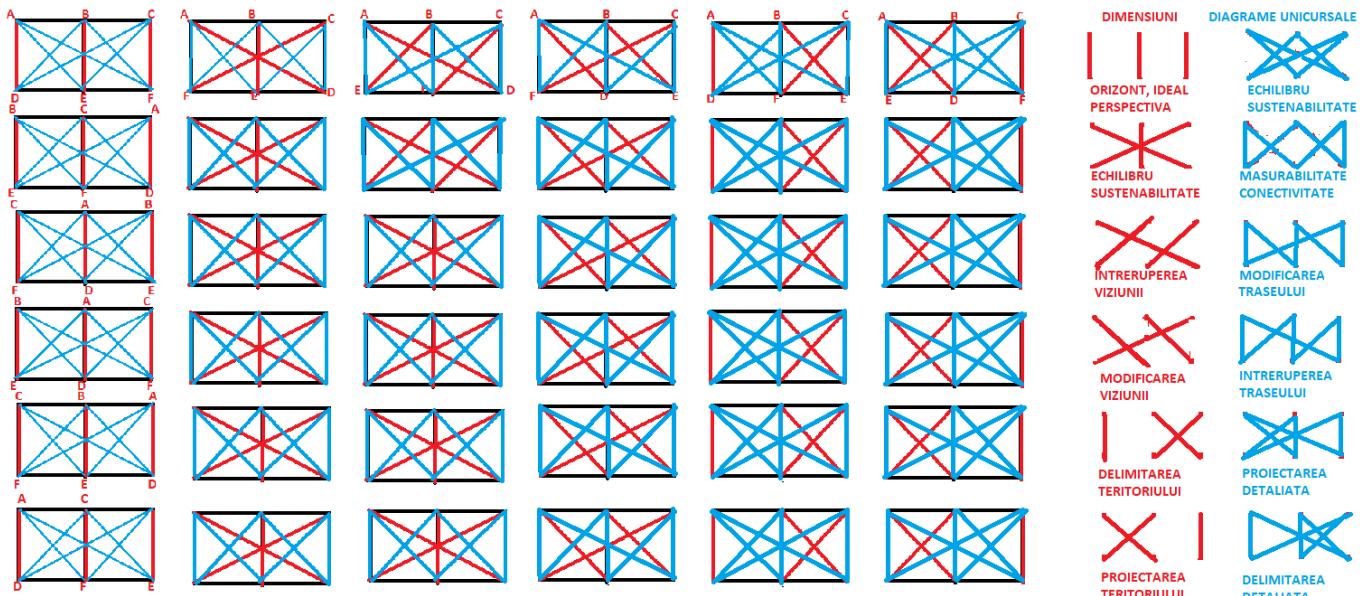


Fig 1.sizing multiverses through transpositions and semantic structuring

-step 5: take all the possibilities of constructing the feedbacks according to the same logic given by the rotations perceived as circular permutations first in one direction of the points on the main line, then in the other direction, going on both lines. A matrix of 6 is obtained at the third power multiplied by 81 positions that generate feedback.

-step 6: take the semifeedbacks as exemplified below

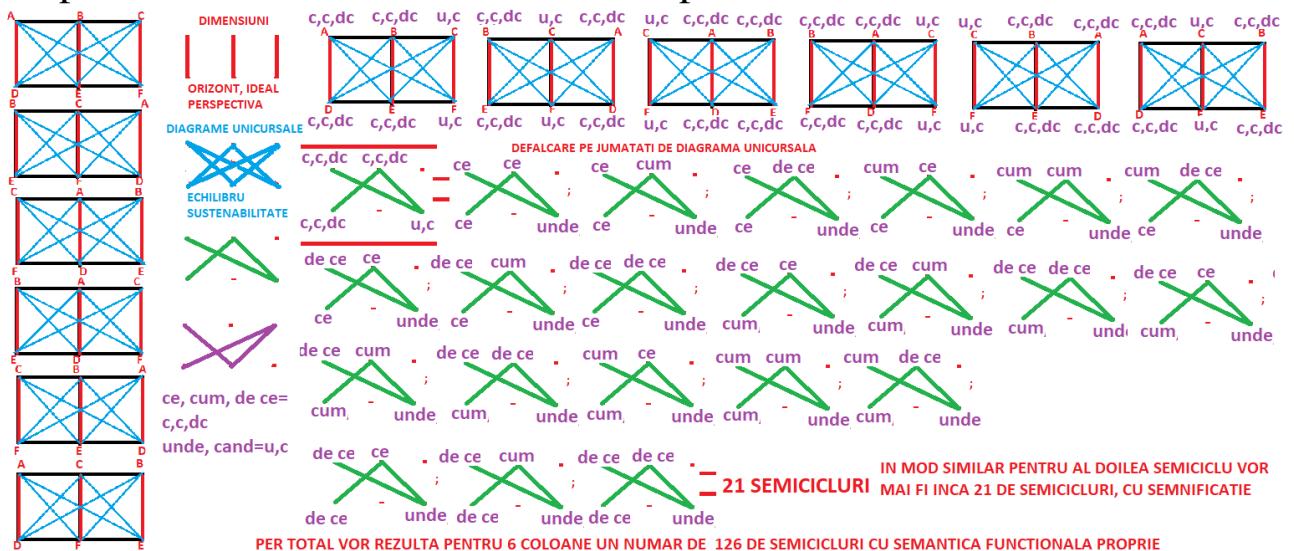
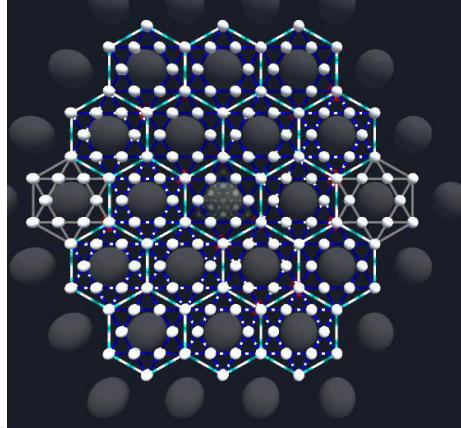


Fig.2 Simple semantic semicircles

-step 7 : semifeedbacks are placed on a sustainable hexagonal diagram, being characterized as a source, sensor, decider. In this situation we obtain a sustainable algebraic fractal structure on several hexagons (one, seven, 19, etc.).



seven, 19, etc.).

Fig.3 the sustainable honeycomb connected to the edges

-step 8 : starting from the properties expressed in figures 14 and 15, the information is organized into a four-dimensional matrix, where on each dimension one obtains the sought informational consistency

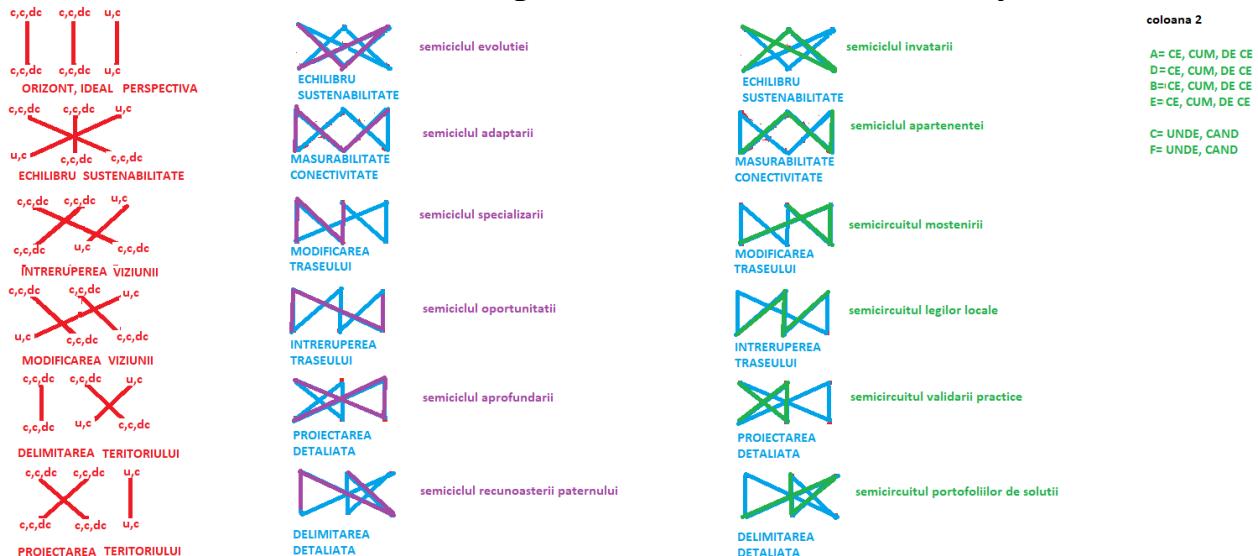


Fig.4 Semantic structuring on semicycles by functionalities

-step 9 : we obtain a structure that can be translated semantically, which has evolutionary features in 81 steps, from simple to complex. an example of coherent semantic design is below (see SEMICYCLES appendix):

COLUMN 6 - ROW 1 manufacturing of unique or small series objects



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**DELIMITAREA
DETALIATA**

0

Data Output	Data Processing	Bases Strategies	Comments
WHAT	WHAT	WHERE/WHEN	
Data Input	Assesment Answers	Bases Experiences	Design of objects according to nature's patents and standards Staged processing of creative industries development
WHAT	WHAT	WHERE/WHEN	

Purple Semicircle

Data Processing --->	Bases Experiences --->	Data Output --->	Data Input	Comments
SUBJECT	PLACE/MOMENT	SUBJECT	SUBJECT	Processing of objects on successive stages

Green Semicircle

Data Input - -->	Bases Strategies --->	Evaluare Răspunsuri -	Data Processing	Comments
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SUBJECT	PLACE/MOMENT	-->	SUBJECT	SUBJECT	Developing the industrial creation of artistic objects by shaping the nature's creativity
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1

Data Output	Data Processing	Bases Strategies	Comments
WHAT	WHAT	WHERE/WHEN	
Data Input	Assesment Answers	Bases Experiences	Procedures for the realization of the components of the objects in stages Processing in stages by copying the procedures
HOW	WHAT	WHERE/WHEN	

Purple Semicircle

Data Processing --->	Bases Experiences --->	Data Output --->	Data Input	Comments
SUBJECT	PLACE/MOMENT	SUBJECT	PROCEDURES	Staged processing of selected objects according to procedures

Green Semicircle

Data Input --->	Bases Strategies --->	Evaluare Răspunsuri --->	Data Processing	Comments
PROCEDURES	PLACE/MOMENT	SUBJECT	SUBJECT	Copying natural procedures into making components or objects



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2

Data Output	Data Processing	Bases Strategies	Comments
WHAT	WHAT	WHERE/WHEN	
Data Input	Assesment Answers	Bases Experiences	The realization of objects necessary to achieve the functionalities The processing in stages of the discovery of the technical means
WHY	WHAT	WHERE/WHEN	

Purple Semicircle

Data Processing --->	Bases Experiences --->	Data Output - -->	Data Input	Comments
SUBJECT	PLACE/MOMENT	SUBJECT	LOGIC	Processing of objects on successive stages

Green Semicircle

Data Input --->	Bases Strategies --->	Evaluare Răspunsuri -->	Data Processing	Comments
LOGIC	PLACE/MOMENT	SUBJECT	SUBJECT	Discovering technical means in nature to create specialized organs for the realization of functionalities



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3

Data Output	Data Processing	Bases Strategies	Comments
WHAT	WHAT	WHERE/WHEN	
Data Input	Assesment Answers	Bases Experiences	Object processing to achieve the desired behaviors Processing and understanding of the connections in stages
WHAT	HOW	WHERE/WHEN	

Purple Semicircle

Data Processing --->	Bases Experiences --->	Data Output --->	Data Input	Comments
SUBJECT	PLACE/MOMENT	SUBJECT	SUBJECT	Processing of objects on successive stages

Green Semicircle

Data Input --->	Bases Strategies --->	Assesment Answers --->	Data Processing	Comments
SUBJECT	PLACE/MOMENT	PROCEDURES	SUBJECT	Processing and understanding connections that transmit and coordinate information to achieve behaviors



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4

Data Output	Data Processing	Bases Strategies	Comments
WHAT	WHAT	WHERE/WHEN	
Data Input	Assesment Answers	Bases Experiences	Performing procedures for responding to new situations Processing by stages of research of reflex acts
HOW	HOW	WHERE/WHEN	

Purple Semicircle

Data Processing --->	Bases Experiences --->	Data Output --->	Data Input	Comments
SUBJECT	PLACE/MOMENT	SUBJECT	PROCEDURES	Staged processing of selected objects according to procedures

Green Semicircle

Data Input --->	Bases Strategies --->	Assesment Answers --->	Data Processing	Comments
PROCEDURES	PLACE/MOMENT	PROCEDURES	SUBJECT	The research of reflex acts that makes real-time adaptation to new situations



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5

Data Output	Data Processing	Bases Strategies	Comments
WHAT	WHAT	WHERE/WHEN	
Data Input	Assesment Answers	Bases Experiences	Procedures for adapting the circuits and mechanisms involved Processing on stages the research of means and techniques
WHY	HOW	WHERE/WHEN	

Purple Semicircle

Data Processing --->	Bases Experiences --->	Data Output --->	Data Input	Comments
SUBJECT	PLACE/MOMENT	SUBJECT	LOGIC	Staged processing of selected objects according to procedures

Green Semicircle

Data Input --->	Bases Strategies --->	Assesment Answers --->	Data Processing	Comments
LOGIC	PLACE/MOMENT	PROCEDURES	SUBJECT	Researching the means and techniques of adapting to new situations, circuits and mechanisms involved



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6

Data Output	Data Processing	Bases Strategies	Comments
WHAT	WHAT	WHERE/WHEN	
Data Input	Assesment Answers	Bases Experiences	Objects necessary for the procurement and processing of food Processing of studies on the mechanisms of alliances between species
WHAT	WHY	WHERE/WHEN	

Purple Semicircle

Data Processing --->	Bases Experiences --->	Data Output --->	Data Input	Comments
SUBJECT	PLACE/MOMENT	SUBJECT	SUBJECT	Processing of objects on successive stages

Green Semicircle

Data Input - --->	Bases Strategies --->	Assesment Answers --->	Data Processing	Comments
SUBJECT	PLACE/MOMENT	LOGIC	SUBJECT	Studying mechanisms of inter-species alliances needed for food procurement and processing



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7

Data Output	Data Processing	Bases Strategies	Comments
WHAT	WHAT	WHERE/WHEN	
Data Input	Assesment Answers	Bases Experiences	Procedures for achieving environmental sustainability The processing in stages of the mechanisms of evolutionary adaptation
HOW	WHY	WHERE/WHEN	

Purple Semicircle

Data Processing --->	Bases Experiences --->	Data Output --->	Data Input	Comments
SUBJECT	PLACE/MOMENT	SUBJECT	PROCEDURES	Staged processing of selected objects according to procedures

Green Semicircle

Data Input --->	Bases Strategies --->	Assesment Answers --->	Data Processing	Comments
PROCEDURES	PLACE/MOMENT	LOGIC	SUBJECT	Studying the mechanisms of evolutionary adaptation to different environments and co-participation in environmental sustainability

The completion of these scenarios depends on the informational energy involved.

The above table is an example of structural isomorphism that connects the automorphisms of the projective line with the semantics of the laws of the development of the semantic multiverse

If we consider that the first degree feedback can be concatenated in different ways if they are expressed in the form of unicursal diagrams, we will understand that the coherent space of the information is not only semantic but it is especially a communication environment within of the starting universe or the finally obtained multiverse. *The holograms appearing on the networks in the semantic space are generated from the interaction of two ways of looking at the problems: the multiple initiatory paths, which will help the members of the professional networks to choose the ways of personalized intervention, the second factor will be related to the place / moment (space / time).) necessary for the production of events. These contexts are generated only when the necessary conditions exist, place, time, people, with complementary vision.*

The holographic structure is found on different levels of complexity and development of the semantic universe. The earliest holographic structure appears in the first feedbacks that are characterized in two distinct directions: the arcs and orientations that show us the relations of generation between components; and unicursal diagrams showing the sequence and semantic value of events or semantems. The two directions of structured information become the generators of holographic structures. We can evaluate the evolution of the universe as the stages of its development between the holographic structures covered.

Another example of hologram appears when we put together the table of colored fields, viewed from the perspective of the forms of internal compositions with the similar table obtained by consecutive packing on different principles of the letters, a table that allows to

understand the generation of matter and time. The complexity of mutual relationships will require another type of hologram.

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Fig. 88 Grade 2 feedback

If on the table of the multiverse are arranged by transposition, both the lines and the columns will obtain specific canonical diagonal forms, which configure the situations in which a certain situation can occur globally. The generation form is given by the same device as described in the previous chapter.

If the imprint of a rectangle corresponds partially or totally with the imprint or with a superimposed part of the imprint of another rectangle, a concatenation between the rectangles can be obtained. The set of all separable rectangles forms the initial alphabet of higher-grade feedback. Considering the conclusion of the necessity of structuring the feedback of degree 1 exposed in the previous chapter, we can estimate that the number of dimensions of structuring the feedback of degree 2 is different, probably greater than of the feedback of degree 1. Further studies will be able to clarify this problem.

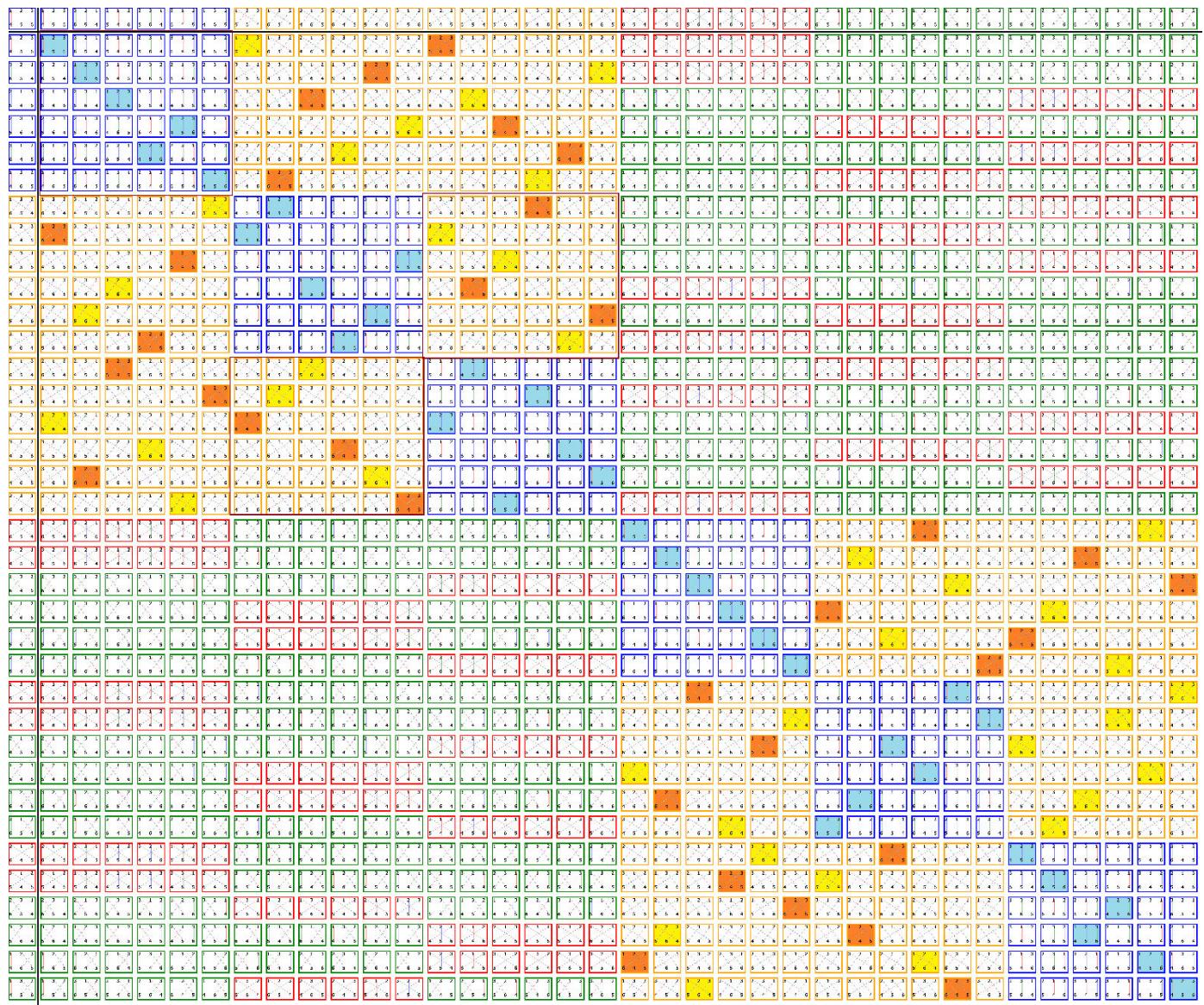


Fig. Structuring the complex information in the basis of grade 2 feedback

From another perspective, the tables above illustrate the principles of indeterminacy that are manifested on linear logic, but explained by multivalent logic. It is a warning to use experiments before analyzing through advanced thinking tools. In the context of crises and disasters that have appeared and manifested in the last period of time, the misunderstanding of the fundamental truth that the universe is more than

intelligent and sensitive becomes dangerous to our existence and to the earth.

The information to be transmitted depends so much on the internal



addresses of the gender buttons but also the content of the automorphisms that generate the feedback classes. The information transmitted on the coherent space of the information will be used depending on the compatibility between the structure information (hard), on the coherent space, and on the circulating information that can be transmitted through the hard structure. The latter will consist of feedback concatenated on one or more buttons (for 1st degree feedback) or 1st degree feedback structures, depending on the complexity of the coherent information space, for higher levels the information transmitted it will be of concatenation patterns capable of selecting compatible parts and processing them. It is this process that allows the emergence of the intelligence of the universe.

An example of a complex science approach that is similar to Grade 2 feedback theory is Structure-Function Network Mapping and Its Assessment via Persistent Homology

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5242543/>

If the diagonal tables obtained from the principle of indeterminacy overlap all the diagonal squares so that the selected squares can be overlapped on the selected color points (eg pink or blue color) then we create informational transfer wells between the selected square layers. What is obtained as a whole will be an informational structure that can be supplemented later with structures based on corresponding degree feedback, which can be concatenated with the free information remaining unconnected.

This is the mechanism of the evolutionary adaptation of the information according to the existence environment. At the multiverse level, the vertical and horizontal transpositions of the lines and columns allow alignment on any kind of existing formula (the process of adapting and flexible evolution of the multiverse).

If grade 1 feedbacks are expressed on unicursal diagrams with arcs and orientations, higher grade feedbacks are structured and expressed as cartesian. In their structure, however, unicursal meta-logical diagrams can be identified.

The coherent information space is organized completely with information transfer wells between layers and inside the layers. These systems of connection and processing of information make the intelligence of the multiverse supreme. The behavior generated by the coherent space of the information or by the flexible adaptive and evolutionary structures are those that give a stable referential and transformation processes that generate the dynamics of the logics generated by using the higher degree feedbacks.

Final conclusion

The future of humanity depends on each one of us, the human species is the only one capable of technological development that may protect the planet of danger. One of the great dangers is that our planet may hit by the giant meteorites, paradoxically weapons of mass destruction, such as the ray of death, HAARP, nuclear bombs or those with magnetic pulses, can control this phenomenon if those who own them come out of the night of the mind and become aware of reality. Another enormous danger is the invasion of germs from outer space. They can multiply explosively in the terrestrial environment by destroying the current ecosystem. And in this case the change of the analysis models, so that to discover the intimate informational structure of these germs can generate rescue solutions.

The aging of the sun and its chaotic behavior is another potential danger. Approaching the new science based on algebraic fractals can create the framework for finding solutions for this enormous danger. In 2012, one of the solar explosions threw a plasma jet at a distance greater

than the distance from the earth to the sun. Fortunately, the direction of the jet has saved us from an imminent disaster, this phenomenon can be repeated, and if the Van Allen belts will be weakened due to the changes of the magnetic poles caused by modern weapons we will have no escape.

It is up to us to manage the future and health of the planet, the planet is not only alive but also with an extremely high capacity for analysis. She created us and we need to help her grow and become a center of God's creation.