Implementation of Informational Consciousness

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Informational consciousness is a new philosophically founded and formalized concept for the study and implementation of computer-based consciousness system. Figure 1 shows the graph of the structure and organization concerning such a system.

Basic concepts of the informational consciousness system are described (defined) on the on-line, internet-based site http://www.artifico.org as

[1] **Slovenian, Croatian, English and German Comparison Dictionary on the Implementation of the Informational and the Conscious**

verbally, methodologically, formalistically and graphically. On the web site several articles and books in English, German and Slovenian (Meditations) are published free of charge.

At the beginning, there are **Basic axioms for formula composition** as syntactically as partially semantic set of the very basic rules, defining the so-called informational-conscious externalism, internalism, metaphysicalism and phenomenalism. In such an axiomatic system, operands, binary operators, parenthesis pairs and semicolon enter. Besides, in formulas, **Operator compositions** occur, as presented in Fig. 1.

Formulas are sequences of operands, operators and parenthesis pairs representing formalized meaning of operands. This meaning is acquired (formalized) from ethnical languages, video, audio, and otherwise structured sensory and consciously interior information. Formulas can be transformed into **schemes** by omitting the parenthesis pairs, and out of these, into **frames**, **graphs** and **gestalts**. Schemes is nothing else than loosened formula meaning, for instance, in an ethnic-language sentences with omitted punctuation marks.

Formula systems is the step towards the informational-conscious complexity, where formulas are separated by semicolons and enclosed into the parenthesis pair, forming a compact and necessarily also named system entity (complex operand). Formula systems can be schematized by omitting parenthesis pairs in its formulas, shaping the **Scheme systems**.

Slika 1: *The graph for the designing informational consciousness conceptually, metodologically, formalistically and implementationally.*

Over all these structures, **Decomposition classes $\mathbb{D}$, $\mathfrak{M}$, $\mathbb{C}$, ...** take the control and conceptually dominate in the informational consciousness system. Informational decomposition is a proper, generic name for the procedure generating meaning for a simple or complex operand (formula, scheme, system, etc.). Its nature underlies the current conscious system intention, operand, meaning complexity, in a spontaneous but meaning-precise way. It is a new-type, new-sort "algorithm", the most important subject within the studies of informational consciousness.

Operands, operators, operand and operator phrases constitute the nonignorable contents of the subconscious layer acquired by hearing and (computer-supported) reading of standard and professional text for the needs of entropons and the use in decomposition procedures.

Decompositions converge to the systems of meaning, called **informons**. Informon belongs to a named operand and expresses its meaning by interpretation through decomposition formulas. Informon is a meaning formula system. Together with **entropon**, it builds **informational space**, the central concept of the informational consciousness system, being strongly (strictly) formalized in a recursive sense. On the other hand, informons of the system are schematized and put into graphs constituting the so-called conscious graph in the form of **Alloy of informonic graphs**.

The alloy is a kind of landscape, the ground, along which decompositions operate, moving up and down, here and there, circularly and straightforward, to get operand-operator sequences for meaning generation. Alloy is an integrated mathematical graph in which particular scheme meaning is alloyed and cannot be reconstructed. Decompositions can take information also from the exterior ethnic language thesauri and other informational, meaningful resources.

Entropons represent the so-called subconscious area of the first rank, where experienced (learned) operand and operator phrases are located. In this way, the informational space as a system of informon and entropon becomes uniquely determined. Consciousness system is nothing other than a system of all informational spaces where the essential (necessary) part of it is with the consciousness named operand. Details are explained in (1) on several places.

Informational space looks at the first glance as a harmless definition, integrating just two different entities—informon and entropon—into a unique entity—the formalized informational space. However, something fundamentally surprising happens when this formal structure is put into a recursive relation,

namely putting the question, what is an

informational space of informational space ?

Informational space itself belongs to the superconscious category, in which conscious and subconscious components of a named operand are integrated. In this situation, the basic conscious layer fills the basic subconscious layer with operand and operator phrases (simple and composed operands and operators) attained as experience or through exterior learning, respectively. And, first of all, in the superconscious layer — being the informational space of the first rank — consciousness, concerning the operand, becomes united with subconsciousness concerning the operand, getting the insight into the subconscious domain. The rule of communication between conscious and subconscious layers is the following: conscious layer (informon) fills subconscious layer (entropon) and this becomes the ground for the superconscious layer, being informational space of the first rank with informon and entropon. Superconscious layer fills the subsubconscious layer, being the entropon of the second rank, etc., to the arbitrary rank of informational space and entropon. For all the details study [1].

By its recursive application, informational space of informational space generates a layered system of consciousness- in which informational spaces and entropons of higher ranks than 1 appear. Simultaneously, a superconscious and subconscious hierarchy is coming fore together with informational perplexity of **layers**. System of informational consciousness is formalistically a multilayered system, delivering the concept of the highly superconsciously and deeply subconsciously structured, hierarchical and meaningfully perplexed system of information.

Thus, implementing informational consciousness in the described framework becomes just a problem of system complexity in a programming, technological, developmental, international and financial way. It is conceptually and formalistically determined, with the comment and advise, that the concept of informational decomposition has to be refined, determined by the precise rules of procedure acquiring meaning.