

## Informational Methodology for the Definition of Meaning

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### 1. Introduction

Within informational consciousness, meaning concerns different forms of its appearing, as for instance, linguistic, sensual (video, audio, tactile, temperature) and other sorts of meaning. In this way, meaning demands understanding in the broadest sense of possibilities functioning as cause for certain measures in human and machine behaviour. How could the complex methodology in the framework of informational consciousness be put together? Do there still exist entities being not completely recognized within a methodological process? Which are the concrete methodological processes at all? Some of them are known, but are they known in real details, so that they do not remain unconscious for the researcher or user of methodology? This article will analyse in a sharpened way the processes of informational methodology, going into several details of the thinking processes. The term informational consciousness is to be understood as for the biological as well as for the artificial consciousness, thus neutral to the degree of conscious behaviour of man, animal or machine.

Methodology we already know is the alloy of informational graphs belonging to schemes of informational formulas. This alloy performs as a landscape along which the actual consciousness is walking hither and thither, forward and backward. Thinking a situation, we can introduce a complete graph with named nodes, while the connections between them remain unnamed, performing as a potential for the free choice of concrete, meaningful verbal phrases. By examples we shall show how this methodology becomes useful in practical and everyday life of human and how it can be transferred into the domain of a machine possessing conscious abilities. This method can be transparently used in cases of psychological, social, scientific, strategic, human character concerning, and in many other situations. The problem is, how to use the multiple node graphs presented in a real transparent form, for instance, nodes being displaced on a circular, radial, evidently friendly examined platform. The author usually takes complete graphs with 36 nodes displayed on a sheet of paper, looking comfortably the picture and writing down meaningful and/or absurd sentences of a study. But, what really still sticks and lurks in the unknown background of the method is not known up to the date.

A second, even more sophisticated method is a diagram, where different naming of the axes can be used and, within the diagram, several presentations of mathematical, semantic and other consciousness concerning aspects can be introduced, depending upon the inventive, intuitional and research abilities of the explorer (Fig. 2, Železnikar 2010). Upon such diagrams, studies can be developed which retrogradely impact an existing diagram to be changed and renovated, giving new opportunities for further investigations to some satisfactory state of the art. The problem of informational or meaningful *infinitesimal* diagram-context process appears up to the satisfactory situation of the re-

search.

Further methods of meaning determination can be developed using geometrical tools and reversely improving the results of a study by mentioned diagram-context processes and infinitesimal approaching to a final result, where processes are stopped for the sake of common sense. For instance, three- and multidimensional images can be used which additionally sophisticate the research into previously unknown depths, bringing new cognitive or scientific results of the investigated subject. In this article, we shall only indicate such possibilities, but the realisation will depend on the **intuitive-ness** of the methodology user, how to implement his/her concept into several details in the field of research.

An indicative example concerns the so-called *informational space* as a phenomenon within the system of informational consciousness. The question, how the concept of informational space can be stretched over the entire consciousness domain brings to the foreground the antisymmetric structure and organisation of the system, the concept of subconscious and superconscious levels and also the consciousness cloud situation, the dependence of consciousness upon the cosmic impacts and its impacting of the cosmos. Informational consciousness by itself can be understood just as a cloud within the universe. The graphical model will be deduced from a sufficiently late informon in which all the previously obtained informational spaces are imaging and projected onto a graphical foundation in a two-dimensional representation. Several other graphical presentations can be found in the literature (Železnikar 2013).

## 2. Methodology Using a Transparently Complete Graph

By this method we use the radially positioned names of nodes, easily readable on the edge of the operator (graph inside) area, t.i. nodes connection area in the middle of the graph “circle”. The white colored graph nodes are named by appropriate substantives or substantive phrases, while the connections between nodes are named by verbal forms or verb phrases. The interconnection area inside of the node circle represents usually a non-concrete, unnamed, circularly perplexed set-up, even between two nodes more than one connection can take place. As a starting point, we take a 36-node complete graph offering sufficient complexity for a concept definition belonging to the meaning of something. Walking along the connection paths from one to the other node, the meaning comes into existence in the form of informational strings representing schemes of informational formulas. Usually we use the non-formalized forms for named nodes and named connection arcs representation. For instance, instead of operand  $\mathfrak{D}_{\text{operand}}$  we name the operand in the graph just as *operand*. For instance, instead of the substantive phrase  $\mathfrak{I}_{\text{informational\_consciousness}}$  we use the informal denotation *informational\_consciousness*. Similarly, for a concrete operator in the graph, we use instead of  $\mathfrak{D}_{\text{operator}}$  just informal arc denotation *operator*, etc.

What may still lurk behind this transparently complete graph hidden to our consciousness? For instance, which sort or strategy of choosing the names for operands and operators is guiding us? How do we actually proceed in the taking of concrete names or phrases for operands and operators? We are certainly influenced by the will to concentrate on the substantive name or substantive phrase of the beginning node, concentrating on possible synonym and antonym possibilities matching best our inten-

tion to represent the case in our specific mind situation, disposition and curiosity what will come out by this kind of striving. In this sort of striving the experience, also life style, knowledge and values play the most significant role. We use our life orientation, specific research intention, hard and precise style of thinking, diversifying the outlined way to satisfied and sensible final result by a limited number of steps of names and phrases development, also originally shaped to content specific forms grammatically and orthographically. All this is clearly present in mind in the process of choosing names. Finally, the result of the named and also unnamed complete graph stays before our eyes offering a new challenge how to proceed now further still open possibilities in graph interpretation. In the field of linguistics the writing down of sentences upon the graph representation can begin. In the area of sensual situations, the meaning can be expressed sensually, using also specific formalistic aids for the expression of formulas, schemes and systems. Thus, the informational graph functions theoretically as an axiomatic system, from which expressions can be deduced precisely by the use of a specific “grammar” concerning linguistic, innerly conscious, real, sensual and other possible or imagined situations. By this methodology we are finally moving into the domain of free, spontaneous, sensible, nonsense and other nature of conscious phenomena. The space of manifold investigations opens to us in different branches of science and professional activity.

The question remaining scientifically is how to conduct the proof of the obtained results in the field of non-formalistic sciences, for instance, pointing out the truth or falsity of the results being in the domain of opinion, belief or simply stories, myths, legends, judgements, metaphors or the similar. Here, probably, the decision on validity is leaved to common sense, public (majority) opinion, doctrinarian sciences and also public demagogy or ideology. That shows that a live or artificial consciousness system cannot be simply just a science-like, doctrine-like or other discipline-like arrangement of rigid axioms, deduction rules and proof arguments being common in exact sciences. The future system of informational consciousness has to follow this kind of comments.

### 3. An Example Concerning the Leftist and Intellectual Logic

Usually, the distinguishing between the leftist logic or leftist intelligence, on one side, and intellectual logic, on the other side, remains hidden for an average observer or researcher of informational consciousness. The method using a complete graph for the meaning analysis delivers a clear answer to the problem. It is being relevant to compare the leftist logic with the intellectual logic. Leftist logic is, in fact, merely a synonym for *leftist intelligence* which uses this kind of logic consequently through leftist discourse. Especial disturbing happens in leftist media which sell public rubbish on the fields of influence, making fools of their own audience. On the next two pages a direct visual comparison of the graphs in Fig. 1 and Fig. 2 is possible.

Characteristic features of the leftist logic can be outlined looking into the graph in Fig. 1, for instance, the *Values* as there are *notorious lie* and *quasi-truth*, on which the leftist logical system is based. Next come *Axioms of Leftist Logic*, the obligatory rules of opportunism as *revolution*, *privilege*, *terrorism*, *manipulation*, *monolith* and *collectivism*. These axioms lead to *Deriving Demolishing of People* by *demagogy*, *hatred*, *provocation*, *disqualification*, *discredit* and *liquidation*, the methods rooting in the total-

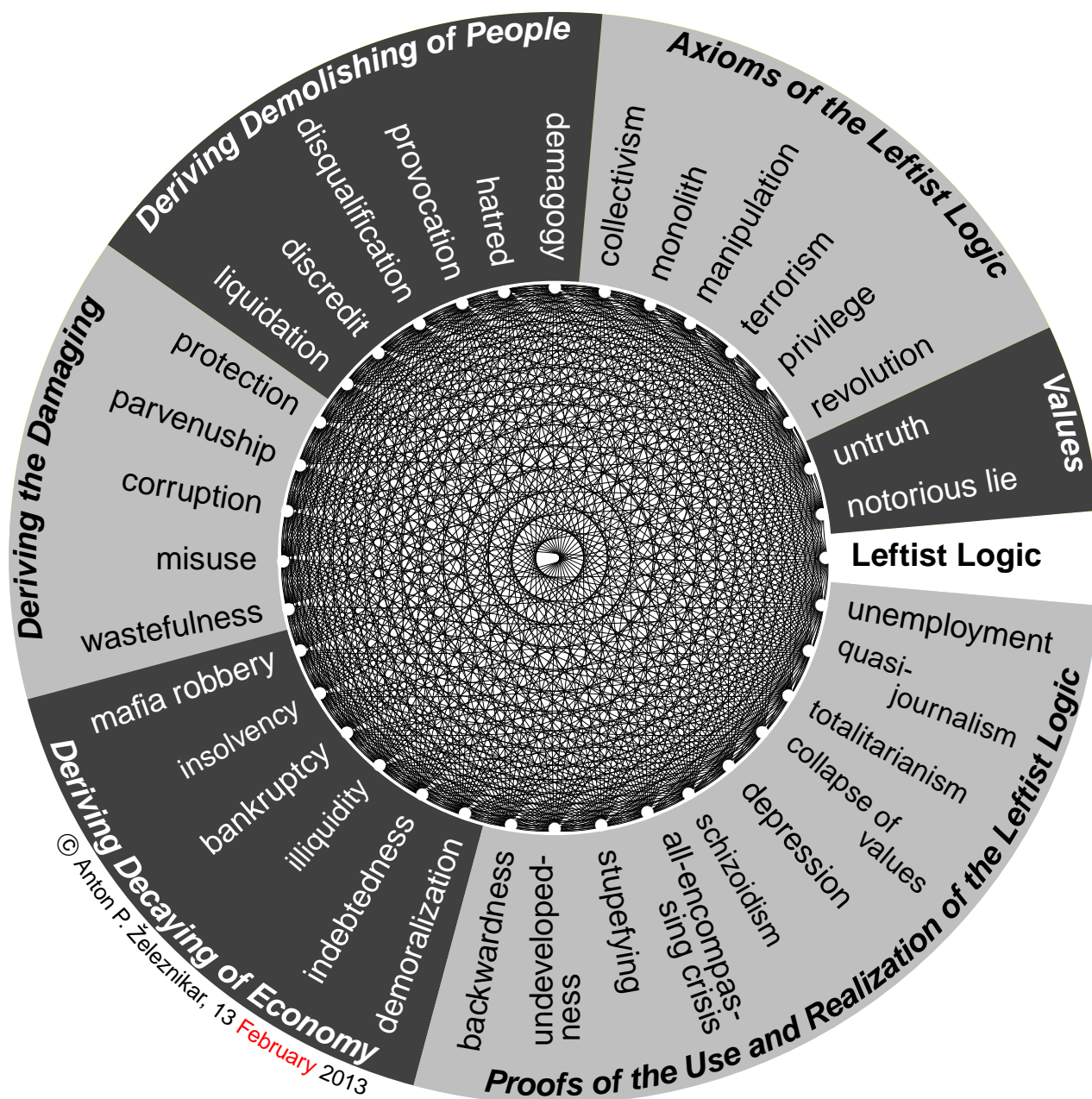


Figure 1: Leftist logic, as compared to mathematical logic, has its values, axioms, deriving rules and proofs.

itarian past. All this continues to *Deriving the Damaging* through *protection* (favour), *parvenuship*, *corruption*, *misuse* and *wastefulness* in relationship to other people. Further, *Deriving Decaying of Economy* with *mafia robbery*, *insolvency*, *bankruptcy*, *illiquidity*, *indebtedness* and *demoralization* is taking place. At last, some *Proofs of the Use and Realization of the Leftist Logic* are listed, that is, *backwardness*, *undevelopedness*, *stupefying*, *all-encompassing crisis*, *schizoidism*, *depression*, *collapse of values*, *totalitarianism*, *quasi-journalism* and *unemployment*.

Contrarily, *Intellectual Logic* emphasizes its basic *Values* as recognized lay and evident truth. *Axioms of Intellectual Logic* are recognized as *evolution*, *equality*, *harmony*, *stimulation*, *variety* and *individualism*. Now, *Deriving Human Freedom* can be presented by the components *freedom*, *love*, *respect*, *enabling*, *avowal* and *revival*.

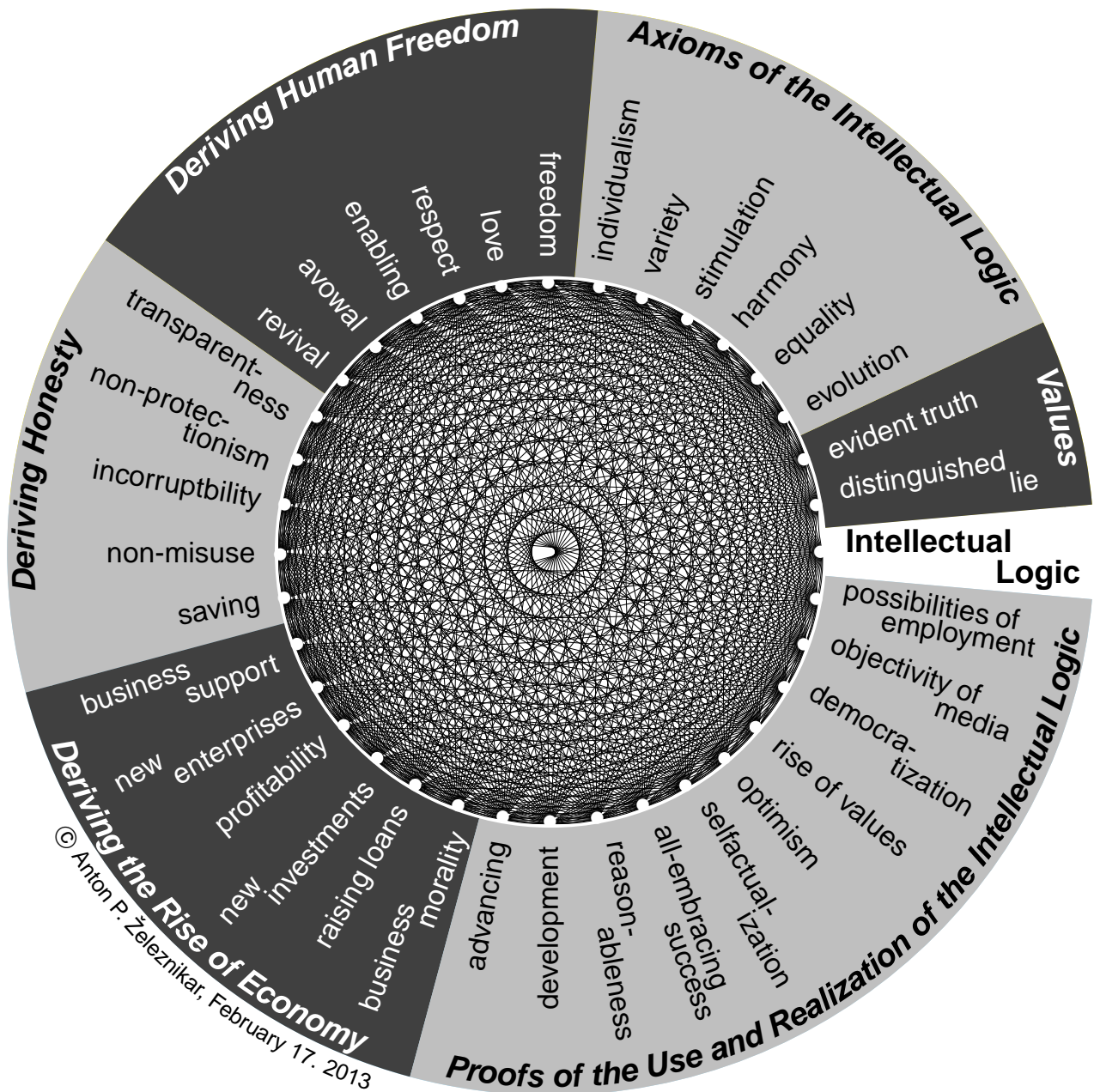


Figure 2: We see how intellectual logic can be compared, step by step, with the leftist logic in Fig. 1 and, how does it **result**, in fact, in antiintellectualism.

*Deriving Honesty* demands transparentness, non-protectionism, incorruptibility, non-misuse and saving. *Deriving the Rise of Economy* is the next category concerning business support, new enterprises, profitability, new investments, raising loans and business morality. *Proofs of the Use and Realization of the Intellectual Logic* are seen in advancing, development, reasonableness, all-embracing success, selfactualization, optimism, rise of values, democratization, objectivity of media and possibilities of employment.

#### 4. Complexity, Perplexity, Circularity and Parallelism of Informational Graphs

Informational graph, as conceptualised within informational consciousness, is simultaneously a syntactic structure and meaning organisation represented by nodes and all their possible connections as sketched in Fig. 3. In this figure the *graph formula* is

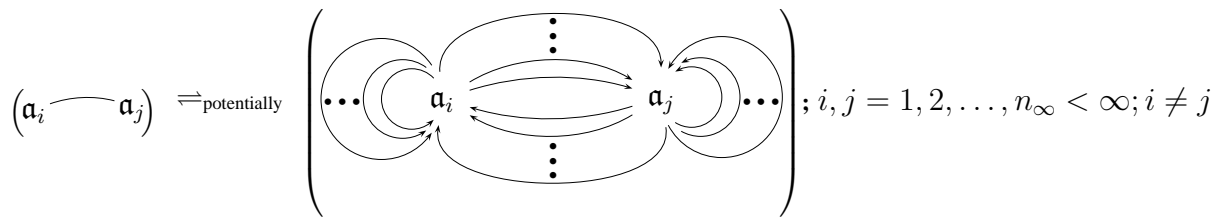


Figure 3: The meaning (operator  $\rightleftharpoons_{\text{potentially}}$ ) of a connection between nodes  $a_i$  and  $a_j$  in a graph, on the left side, reveals the potentiality, in fact, unlimited parallelism of possible connections, on the right side. In this sense, the extreme diversity and complexity of consciousness graphs between two nodes is pointed out. The connection complexity of nodes in a consciousness graph is, literally, not limited in advance ( $n_\infty < \infty$ ), but  $i \neq j$  (a node can appear only once).

being introduced, using on its left and its right side of operator  $\rightleftharpoons_{\text{potentially}}$  geometrical graph structures as operands and, regularly, any common informational operators. The additional formula  $a_i, a_j = 1, 2, \dots, n_\infty < \infty$  defines a system of graphs between two nodes, concerning all the nodes of the potentially connected complete graph. Thus, the connection core (inside) of the graph with black arcs between nodes represents such a sort of potential complexity (Fig. 3).

## 5. Informational Spaces of Informational Spaces

Informational space of informational space is another innovative concept — which formalized as it is — brings into the foreground semantically and graphically relevant recognition of possible structure and organisation of informational consciousness system. Here, there is shown, how a pure formalisation can impact and influence the interpretation and new understanding of the concept and vice versa, trigger additional formalisation possibilities. By this, the initial formalized concept is spreading into the philosophical, linguistic, graphical and other domains of research.

Informational space,  $(\underline{a_i}, \overline{a_i})$ , is a characteristic concept of meaning as it appears in consciousness system. Informon  $\underline{a_i}$  marks the meaning system of formulas concerning the named operand  $a_i$  while entropion  $\overline{a_i}$  stands for a set of operand and operator components, that is, operand and operator phrases occurring in informon  $\underline{a_i}$ . In this way, informational space within an ethnical language, doesn't refer to the so-called grammar and orthography but merely to the live and also senseless or only possible or potentially possible use of language being the elementary matter of experience and still of not yet experienced or used, respectively.

Informational space, IS, is a substantial innovation together with its formalistic record or expression. Namely, it enables, as it is being defined, its recursion in the elementary form as *informational space of informational space*, that is,

$$\left( \underline{(\underline{a_i}, \overline{a_i})}; \overline{(\underline{a_i}, \overline{a_i})} \right).$$

Here, one can recognize how the recursive effect is simply attained by *underlining* and *overlining* (emphasising) of an operand: the underlined belongs to informon, the overlined to entropion. In this way it is possible to express simply an arbitrary step, the depth of IS recursion. For instance, ranged by  $[r]$ , it is represented in Fig. 4. Thus, there is evidently  $\underline{(\underline{a_i}, \overline{a_i})}^{[3]} \rightleftharpoons \left( \underline{(\underline{a_i}, \overline{a_i})}^{[3]}; \overline{(\underline{a_i}, \overline{a_i})}^{[4]} \right)$ , where  $\underline{(\underline{a_i}, \overline{a_i})}^{[3]}$  is the informational

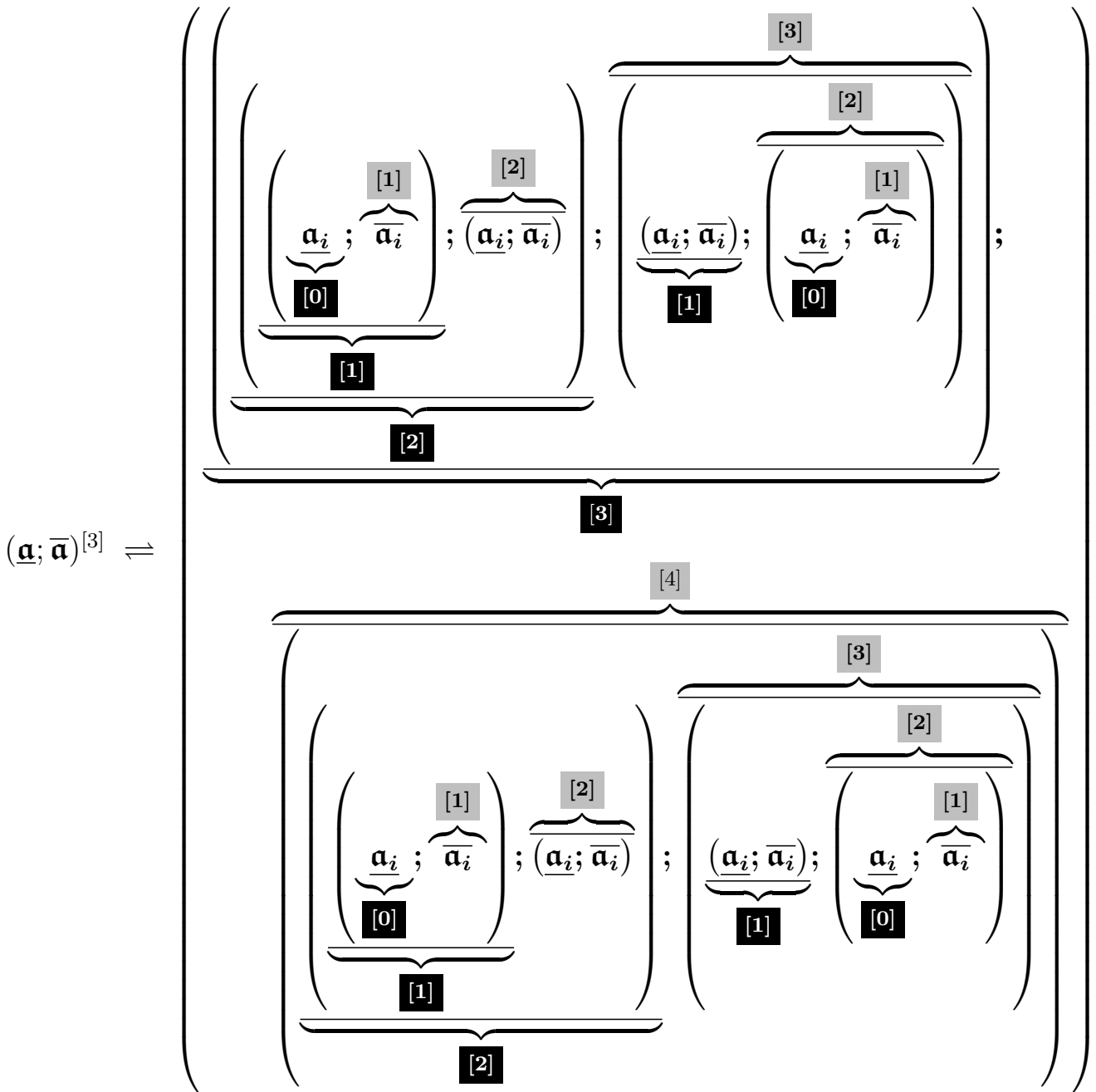


Figure 4: The third rang,  $r = 3$ , of informational space concerning the initial operand  $a_i$  is being evidently equal to the expression  $(\underline{a}_i; \overline{a}_i)^{[3]} \Rightarrow \left( (\underline{a}_i; \overline{a}_i)^{[3]}; \overline{(\underline{a}_i; \overline{a}_i)}^{[4]} \right)$  in the domain of different graph nodes, that is,  $a_i = 1, 2, \dots, n_\infty < \infty$ . The **black** boxes consequently denote the informons and the **gray** boxes the entropons within the corresponding informational spaces.

space uniting the corresponding informon  $(\underline{a}_i; \overline{a}_i)^{[3]}$  and the corresponding entropion  $\overline{(\underline{a}_i; \overline{a}_i)}^{[4]}$ . In general,

$$\boxed{(\underline{a}_i; \overline{a}_i)^{[r]} \Rightarrow \left( (\underline{a}_i; \overline{a}_i)^{[r]}; \overline{(\underline{a}_i; \overline{a}_i)}^{[r+1]} \right)}$$

is valid. By formalisation, subconscious and superconscious layers or clouds of consciousness system are formed, as demonstrated transparently in Fig. 4 up to the rank 3. Higher ranks can be obtained automatically in a recursive way. Here, the ranked space  $(\underline{\mathbf{a}}_i; \overline{\mathbf{a}}_i)^{[r]}$  has to be distinguished from the ranked informon  $(\underline{\mathbf{a}}_i; \overline{\mathbf{a}}_i)^{[r]}$ , in fact expressed formally and rigorously, out of the ranked space  $(\underline{(\underline{\mathbf{a}}_i; \overline{\mathbf{a}}_i)})^{[r]}$ .

## 6. A Concrete Case Applying the Concept of Informational Space

The concept of informational space isn't being widely explored at all. It concerns deeper layers of subconsciousness and higher levels of *superconsciousness*. The term superconsciousness isn't known in psychology and philosophy, however it was introduced by the theory and philosophy of informational consciousness. The question is how both, the subconsciousness and the superconsciousness can be presented concretely, in a reasonable way. Usually, consciousness proceeds from a named object, for which it searches the meaning in the form of informon and entropion, that is, as its informational space. Then, that investigation can proceed to deeper and higher levels of the conscious system. If  $a_0$  is the initial object of conscious exploration, then  $a_1$  is its meaning in the form of the informational space. Still two deeper and higher levels can be denoted by  $a_3$  and  $a_4$  in the sense of the formula in Fig. 4.

The deduction of this case means that  $\mathbf{a}_0, \mathbf{a}_1, \dots, \mathbf{a}_4$  have to be named as informational spaces of the basic (conscious) and the higher ranks, it has to be objectified in the following way, e.g.:

$$\begin{aligned} ((\underline{\mathbf{a}}_i; \overline{\mathbf{a}}_i)^{[0]} \rightleftharpoons \mathbf{a}_0) &\rightleftharpoons \mathbf{o}_{\text{object}}; \\ ((\underline{\mathbf{a}}_i; \overline{\mathbf{a}}_i)^{[1]} \rightleftharpoons \mathbf{a}_1) &\rightleftharpoons \mathbf{m}_{\text{mentality}} \left[ \mathbf{o}_{\text{object}} \right]; \\ ((\underline{\mathbf{a}}_i; \overline{\mathbf{a}}_i)^{[2]} \rightleftharpoons \mathbf{a}_2) &\rightleftharpoons \mathbf{p}_{\text{philosophy}} \left[ \mathbf{o}_{\text{object}} \right]; \\ ((\underline{\mathbf{a}}_i; \overline{\mathbf{a}}_i)^{[3]} \rightleftharpoons \mathbf{a}_3) &\rightleftharpoons \mathbf{m}_{\text{mythology}} \left[ \mathbf{o}_{\text{object}} \right]; \\ ((\underline{\mathbf{a}}_i; \overline{\mathbf{a}}_i)^{[4]} \rightleftharpoons \mathbf{a}_4) &\rightleftharpoons \mathbf{s}_{\text{spirituality}} \left[ \mathbf{o}_{\text{object}} \right] \end{aligned}$$

Let us concretize the *object* (basic level) by the name “totalitarianism”. What comes out concerns now

$$\begin{aligned} \mathbf{t}_{\text{totalitarianism}} &\rightleftharpoons (\mathbf{c}_{\text{communism}}; \mathbf{f}_{\text{fascism}}; \mathbf{n}_{\text{nazism}}; \mathbf{s}_{\text{socialism}}; \mathbf{f}_{\text{Francoism}}; \mathbf{m}_{\text{Maoism}}; \mathbf{t}_{\text{Titoism}}; \dots); \\ \mathbf{m}_{\text{mentality}} \left[ \mathbf{t}_{\text{totalitarianism}} \right] &\rightleftharpoons (\mathbf{i}_{\text{ideology}}; \mathbf{d}_{\text{demagogy}}; \mathbf{r}_{\text{revolution}}; \mathbf{l}_{\text{leftist\_intelligence}}; \mathbf{p}_{\text{plot}}; \mathbf{c}_{\text{cynicism}}; \mathbf{c}_{\text{comradiness}}; \dots); \\ \mathbf{p}_{\text{philosophy}} \left[ \mathbf{t}_{\text{totalitarianism}} \right] &\rightleftharpoons (\mathbf{m}_{\text{Marxism}}; \mathbf{l}_{\text{Leninism}}; \mathbf{s}_{\text{Stalinism}}; \mathbf{c}_{\text{corporativism}}; \mathbf{a}_{\text{arianism}}; \mathbf{h}_{\text{Hitlerism}}; \mathbf{g}_{\text{Guevarism}}; \dots); \\ \mathbf{m}_{\text{mythology}} \left[ \mathbf{t}_{\text{totalitarianism}} \right] &\rightleftharpoons (\mathbf{i}_{\text{idolatry}}; \mathbf{h}_{\text{holocaust}}; \mathbf{m}_{\text{murderousness}}; \mathbf{c}_{\text{cult\_of\_personality}}; \dots); \\ \mathbf{s}_{\text{spirituality}} \left[ \mathbf{t}_{\text{totalitarianism}} \right] &\rightleftharpoons (\mathbf{c}_{\text{consecration}}; \mathbf{s}_{\text{sacredness}}; \mathbf{s}_{\text{sacrificing}}; \mathbf{g}_{\text{Gottgläubigkeit}}; \mathbf{s}_{\text{symbolism}}; \mathbf{p}_{\text{phanatism}}; \dots) \end{aligned}$$

The dilemma is how the concept of higher ranks of informational spaces fit to philosophical doctrines and schools, where mind is researched as *unity* being not hierarchically organized or structured as a system in any respect at all. It means that a kind of domination of a mind entity is presented more or less just as a investigated property of



consciousness among other more or less important entities, for instance intention, presentation, representation, psychological entities, e.g., cognition, emotions, motivation, etc., without any functional hierarchy and being philosophically grasped as naive. On the other side, philosophy is evidently just a philosophical talk as a game in ethnic languages dependent substantially on linguistic expressiveness, subjecting the language to its specific needs and use of meaning. However, from the time immemorial to the present days, one will hardly find the real great philosopher of the rank Descartes, Nietzsche, Husserl, Heidegger, Wittgenstein, Popper etc., attacking the theme of the informational. The informational with meaning as a substance of consciousness remains like a **taboo** to a serious philosophy topic.

### 7. *Understanding Conceptual Dualism between Informational Consciousness and Intelligence*

Informational consciousness, IC, as a term being reasonable for live as well as artificial consciousness, AC, considers intelligence as only one of IC components, informing together with awareness, attention, cognition, emotions, homeostasis, motivation, intention, etc. as behavior. On the other side, artificial intelligence, AI, argues that AI is a measurable entity (IQ) and therefore being more reasonable as consciousness, especially in the field of scientific research and technology. In the last time, AI defenders try to persuade its own community, that consciousness is just a part of intelligence and that AI in the future will master consciousness as one of its components. But, today AI is just an algorithmic discipline, which methodology is computer programming of deterministic concepts. What does now primarily touch this context is the state of truth where intelligence is put over the domain of emerging consciousness.

Following Grossman's (2011), Kurzweil's (1990, 1999, 2006) and the author's forecast (Železnikar 2010, 2011, 2013), the development of information technology, IT, and the transition from the today *weak* AI to the tomorrow strong AI will result into machine or technological intelligence and intelligent robots. On the other side, the concept of Železnikar's IC will succeed not only to reach artificial or machine IC but also substantially improve understanding of live consciousness. Both, strong AI and IC should exceed abilities of all human minds together by using diverse in new IT computer systems connected over the globe and into the universe.

#### *References*

- GROSSMAN, L. 2011. Singularity. *Time* 177:7:2027.
- KURZWEIL, R. 1990. *The Age of Intelligent Machines*. MIT Press. Cambridge, MA.
- KURZWEIL, R. 1999. *The Age of Spiritual Machines. When Computers Exceed Human Intelligence*. Penguin Books. New York.
- KURZWEIL, R. 2006. *The Singularity Is Near: When Humans Transcend Biology*. Amazon BC.
- ŽELEZNIKAR, A.P. 2010. Der sinngemäße Zufall und das Aufkommen der Bedeutung. *grkg* 51:3:157–143. <http://www.artifco.org>.
- ŽELEZNIKAR, A.P. 2011. Informational Recursiveness Against Singularity. *Electrotechnical Review* 78(3): 85–90. Ljubljana. <http://www.artifco.org>.
- ŽELEZNIKAR, A.P. 2013. Informational Meditations. Pp. i–xxxviii+1–520. In Slovene. <http://www.artifco.org>.

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## Informationelle Methodologie für die Bedeutungsdefinition

**Kurzfassung.** Im Rahmen des informationellen Bewusstseins betrifft die Bedeutung verschiedene Formen seines Entstehens, z. B. des linguistischen, sensuellen (Video, Audio, Tasten, Temperatur) und andere Bedeutungsarten. Wie kann die komplexe Methodologie im Rahmen des informationellen Bewusstseins zusammengesetzt werden?

Das Problem ist, wie man die Nutzung der mehrfachen Graphenknotten in einer realtransparenten Form darstellt und, zum Beispiel, als Knoten auf einer kreisförmigen, radial, offenbar freundlichen Plattform untersuchen kann. Der Autor nimmt normalerweise *vollständige Graphen* mit den 36 benannten Knoten auf einem Blatt Papier angezeigt, sehend bequem das Bild und die Niederschreibung der bedeutungsvollen und/oder absurden Sätze einer Studie mit Substantiv- (Knoten) und Verbalphrasen (Knotenverbindungen). Eine zweite, noch ausgefeiltere Methode ist ein Diagramm, der im Koordinatensystem der unterschiedlich benannten Achsen verwendet, wo innerhalb der Darstellung, mehreren Darstellungen von mathematischen, semantischen und anderen das Bewusstsein betreffenden Aspekten eingeführt werden, je von den erfinderischen, findigen, intuitiven Fähigkeiten des Forschers abhängig (siehe Abb. 2 in Železnikar, 2010). Bei solchen Grafiken können Studien weiterentwickelt werden, die sich retrograd auf das bestehende Diagramm auswirken, das geändert und renoviert wird, was neue Möglichkeiten für die weitere Untersuchungen zu einem gewissen befriedigenden Stand der wissenswerten Erfahrung mit sich bringt.

Die Graphenformula, eigentlich das Graphensystem,

$$\left( \mathbf{a}_i \text{ --- } \mathbf{a}_j \right) \Rightarrow_{\text{potenziell}} \left( \begin{array}{c} \left( \dots \left( \mathbf{a}_i \right) \left( \mathbf{a}_j \right) \left( \dots \right) \right) \\ \left( \dots \left( \mathbf{a}_i \right) \left( \mathbf{a}_j \right) \left( \dots \right) \right) \\ \left( \dots \left( \mathbf{a}_i \right) \left( \mathbf{a}_j \right) \left( \dots \right) \right) \end{array} \right); i, j = 1, 2, \dots, n_\infty < \infty; i \neq j$$

beschreibt *zweifache* Potenzialität des Graphen, nämlich die knottenartige und die verbindungsartige Potenzialität. Zugleich beschreibt dieses System den ganzen konkreten Bewusstseinsgraph, gleichwertig der Methode mit dem früher behandelten vollständigen Graphen mit den 36 konkret benannten Knoten. Solche Ausdrückung des *graphischen* Systems ist in diesem Artikel zum ersten Mal eingeführt. Die graphischen Entitäten befinden sich oben in runden Klammerpaaren, links und rechts des Bedeutungsoperators  $\Rightarrow_{\text{potenziell}}$ , der die konkrete Potenzialität mit  $i, j = 1, 2, \dots, n_\infty < \infty$  ausdrückt, doch  $i \neq j$ . Die graphische Darstellung ist eine anschaulichere Form im Vergleich mit der rein informationell-formalistischen Ausdrucksweise.

Der informationelle Raum des informationellen Raumes ist ein anderes innovatives Konzept, das – wie es formalisiert ist – eine semantisch und graphisch relevante Erkennung der möglichen Struktur und Organisation des informationellen Bewusstseinsystems zum Vordergrund bringt. Hier wird es gezeigt, wie die reine Formalisierung wirkt und wie sie die Auslegung und das neue Verstehen beeinflussen kann und, vice versa, die zusätzlichen Möglichkeiten der Formalisierung auslöst. Mit der Einführung des Informons  $\underline{\mathbf{a}}$  und des Entropons  $\bar{\mathbf{a}}$  als Konstituanten des informationellen Raumes ( $\underline{\mathbf{a}}; \bar{\mathbf{a}}$ ) taucht das Konzept des Überbewusstseins auf und damit auch des asymmetrischen Aufbaus des Bewusstseinsystems mit rekursiv entstandenen und hierarchisch gelegten Komponenten der Unter- und der Oberbewusstseinschichten (oder informationellen Wolken) (siehe Abb. 10 und Abb. 11 in Železnikar, 2013). Die unterbewussten und die oberbewussten Schichten (Wolken) stellen nämlich nichts Anderes als die informationellen Räume der höheren Ränge (Rekursivität) dar.

In der Abb. 4 ist zunächst die genaue Struktur des Informons des dritten Ranges im entsprechenden informationellen Raum anschaulich präsentiert und dann ein konkretes Beispiel des vierten Ranges des Oberbewusstseins gezeigt. Das geschieht in der Form  $\left( (\underline{\mathbf{a}}_i; \bar{\mathbf{a}}_i)^{[4]} \Rightarrow \mathbf{a}_4 \right) \Rightarrow \mathfrak{s}^{\text{spirituality}} \left[ \sigma_{\text{object}} \right]$  (Geistlichkeit) und mit den zuerst rahmenartig, hierarchisch untergelegten konkreten Komponenten  $\mathfrak{m}_{\text{mythology}} \left[ \sigma_{\text{object}} \right]$  (**Mythologie**),  $\mathfrak{p}_{\text{philosophy}} \left[ \sigma_{\text{object}} \right]$  (Philosophie),  $\mathfrak{m}_{\text{mentality}} \left[ \sigma_{\text{object}} \right]$  (Mentalität) und  $\sigma_{\text{object}}$  (Objekt) und dann mit dem genauer erwähnten konkretisierten Objekt,  $\mathfrak{t}_{\text{totalitarianism}}$ , (Totalitarismus mit Kommunismus, Faschismus, Nazismus, Sozialismus, Francismus, Maoismus, Titoismus usw.), mit konkreten totalitären Mentalität (Ideologie, Demagogie, Revolution, Linksintelligenz, Verschwörung, Zynismus, Kameradschaft usw.) konkreten totalitären Philosophie (Marxismus, Leninismus, Stalinismus, Korporativismus, Arianismus, Hitlerismus, Guevarismus usw.), konkreten totalitären Mythologie (Idolatrie, Holocaust, Mordlust, Persönlichkeitskult, usw.) und konkreten totalitären Geistlichkeit (Weihe, Heiligkeit, Opfern, Gottgläubigkeit, Symbolik, Fanatismus usw.).

Endlich wird die Entwicklung der Informationstechnologie und der Übergang von der heutigen schwachen zur morgigen starken künstlichen Intelligenz zur Maschinenintelligenz oder technologischen Intelligenz und in die intelligenten Roboter resultieren. Auf der anderen Seite wird dem Konzept des Železnikars informationellen Bewusstseins gelingen nicht nur das künstliche oder maschinelle informationelle Bewusstsein zu erreichen, sondern auch wesentlich das Verständnis des lebendigen Bewusstseins zu besseren. Sowohl die starke künstliche Intelligenz als das informationelle Bewusstsein sollten die Leistungsfähigkeiten der sämtlichen menschlichen Bewusstseine zugleich überhöhen mit der Nutzung von diversen, informationstechnologischen Computersysteme, verbunden global und mit dem Weltall.