On the Dynamic of Information in Different Levels of Reality

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Abstract

This paper uses the transdisciplinary dynamic logic of contradictory in order to find out what happens with the energy of the body naturally allotted for the act of knowing, creating compelling needs for the human organism: the contact with information, the transmission of information, the assimilation of information with or without included middle, the evolution. Outwardly, as according to Gödel's theory any understanding must remain open and with a certain degree of incompleteness and uncertainty, this allows and fuels within the social systems the important contradiction between true and false, between objective knowledge and charlatanry. Therefore, the form of the information becomes an important included middle which supports the coexistence of different levels of Reality for knowledge and understanding. In the end, if we apply the Pareto principle to the matter in question, we easily understand why objective knowledge has to be a burden for its carriers.

Keywords: Transdisciplinarity, information, Pareto, charlatanry, uncertainty, objective knowledge, evolution

1. A general need for information is innate to all human beings, but in order for such need to not suffer alterations caused by imagination and self-calming, manifesting itself as mere curiosity, and to nurture not only the mental component of the human being, it must be closely intertwined with the need for evolution. For this superior need compared to other needs, there must be a part of the human being, also superior compared to the other parts if you use the same criterion.

Special attention should be paid to the phenomenon through which the human being gets into contract with information. Following the logic of the cosmic principle of interdependence, corroborated with the tertiary structure of reality, if the information is not consumed by an optimum of exchanges, respectively through a proper proportionality between question and answer (created by the honest interrogation as included middle), the information will be either stored with the help of memory lacking the integration through understanding or it will be spread through meaningless curiosity. In both cases, information is wasted and the body stores either material subject to toxic decomposition or is malnourished. Thus, interrogation becomes an included middle which structures the contradiction between information and the specialized energy in a body for the act of knowledge, triggering its proper consumption, without the occurrence of any toxic phenomena such as spread through meaningless curiosity or sterile storage through the accumulation of information which is not integrated through understanding.

The same mechanism applies to the knowledge already possessed. Knowledge is information assimilated through consumption of the specialized inner energy in opposition with the external energy represented by information. The product of a proper consumption, i.e. conscious consumption, is the understanding¹, but following the process of consumption performed correctly through interrogation, the result is still information within the body, eventually transformed following the process. The act of knowing is a trajectory of movement under certain laws and, as anything else, it must be contextualized in time, although knowledge remains the same in a certain level of Reality. Knowledge must be offered to others, one way or the other, otherwise a new one cannot be received. Otherwise, the cosmic logic of exchanges is not respected. However, the transmission of knowledge entails serious questions.

¹Understanding is, from a transdisciplinary point of view, a fusion of knowledge and science. See Nicolescu, Basarab, *Ce este realitatea*?, Editura Junimea, Iași, 2009, p. 126.

2. If in mathematics we deal with real things, but not demonstrated, according to the theory of Kurt Gödel, then we will be even more compelled to face this situation in other sciences: "The implications of Gödel's theorem have considerable importance for all modern theories of knowledge. First of all it does not only concern the field of arithmetic but also all mathematics which includes arithmetic. Now, obviously the mathematics which underlies theoretical physics include arithmetic. This means that all research for a complete physical theory is illusory. If this affirmation is true for the most rigorous fields of the study of natural systems how can one dream of a complete theory in an infinitely more complex sphere - that of the human sciences?"². In the light of this question, we must consider that the social system is a complex system in which different levels of Reality interact, out of which only one is the one of the classical mechanics, they act according to various collections of lawfulness, out of which only some can be proven, only some can be known and even less can be proven and known at the same time.

Inevitably, we reach the coexistence of charlatanry, spiritual imposition together with the true bearers of objective information. From a transdisciplinary point of view, this is a interesting contradiction, obviously necessary and which reveals its mechanism entirely if we use as included middle, the need of exchange of systems, in particular, contextualized, the need of energy, the need of food.

More correctly, if we apply the principles of the symbolic mechanics to the ontological needs of information, we must conclude that a certain amount of information, in a given form at a given level, must include truth and falseness in a certain proportion. Otherwise, its existence at that level would not be stable: it would be either explosive or uninteresting for the system. The form of information thus becomes an included middle which reconciles the contradiction between truth and falseness and which enables the stable existence of an amount of truth in a certain level of Reality.

According to the principle of gradation, everything in the universe unfolds per degrees³, (disciplinarity and transdisciplinarity included)⁴, and the absolutes from a level of Reality are intermediary values in other levels of Reality. Therefore, what is truly absolute in a level of Reality will be relative in another or containing a certain amount of falseness.

A gnosiological remark, equally important, refers to avoiding confusion. The distinction must be made between the source of knowledge and the form of its manifestation. Both are part of the circuit of the knowledge's transmission. However, it would be simplistic to overlap them, especially in the case of a certain Subject when the can be significantly different. Following the dynamic logic of contradictory, a phenomenon occurs often, which makes human beings who face the truth to act aggressively and with fear although human nature aspires to truth, through which they can find their freedom and happiness. The spiritual masters of humankind have used at least a tool to transmit information in order to avoid the auditorium's position: tales, metaphors, legends or parables. In terms of the energy's logic, these tools are included middle, representing the form by which truth can coexist with falseness in a certain level of Reality, without causing explosions or instable contradictions. "A tale is required to replace a tale. Metaphors and tales are stronger than ideas."⁵ Human knowledge is metaphorical in nature and the phrases are constructions to pass from a paradigm to another.⁶

The enforcement of movement laws in another order of movement laws can mean only de-structuring, respectively destruction. A proper example is the atomic explosion on Earth: movement laws from the Reality level of the Sun or the stars apply to the order of movement laws of a planet. From this perspective, the contract between illusion and reality is the application of the movement laws of a world in another world. The de-structuring of the trajectory on which illusions are structured leads to the destruction of illusions and destruction is mostly perceived as a painful process by the human body, which explains the pain felt in contact with a form of truth, as representation of Reality.

² Nicolescu, Basarab, "Gödelian Aspects of Nature and Knowledge", in *Systems: New Paradigms for the Human Sciences*, Gruyter Verlag, Berlin - New York, 1998, pp. 385-403.

³In the theological literature, the idea has been expressed through the concept of ladder of the being which corresponds, from a transdisciplinary point of view with the ladder of Reality. See Nicolescu, Basarab, "Transdisciplinarity: The Hidden Third", in *Human and Social Studies*, Vol.I, No.I, Editura Universității "Alexandru Ioan Cuza", Iași, 2012, p.16.

⁴ Nicolescu, Basarab, *Transdisciplinaritatea: Manifest*, Editura Junimea, Iași, 2007, p. 54, 147.

⁵ Taleb, Nassim Nicholas, Lebăda neagră, Impactul foarte puțin probabilului, Editura Curtea Veche, București, 2009, p.24.

⁶ Pop, Ioan G. & Vereş, Otniel L., *Elemente de semiofizică aplicată*, Editura Risoprint, Cluj-Napoca, 2010, p. 30.

The violence of the reaction in contact with the truth is proportional with the degree of calmness brought by illusion. Falseness, appearance, as agent of stability, of social calm, of energetic self-tranquilization, in general, and psychogenic, in particular, plays its indispensable role in the contradictory interaction between the levels of individual and social relation, situation generally expressed clearly by the legal saying "the common error creates the right"⁷.

The form is the one that stabilizes, having the role of included middle, the proper dose of the quantity of truth in a package of information. However, we have to say that the dose of falseness is not necessarily false information, but rather which does not exercise new, liberating, contradictory action. We can speak about perfectly valid statements, but entered in the general order of the level where the package of information is, information entered in the nature of things, general believes, normality. This effect has already been noted even if it hasn't been clarified through *thêmata*, in other words of the contextualized contradiction between actualization and potentialization: "The surprise effects of messages, the novelty of information will be higher as less probable, as less expected, as they are the result of chance, happening... Information is higher as it is less probable. In this respect, information is "improbability."⁸

To give an historical example, we can refer to the amount of truth contained by the heliocentrism of Galileo Galilei compared to his age's geocentrism. Geocentrism also contains the true information about the rotation of celestial bodies but this, accepted by the social system as such, being part of its lawfulness, cannot give birth to contradiction. We can only consider that Galileo Galilei did not find the proper form to represent the included middle to allow the integration of the heliocentrism's truth in the system or maybe it did not exist at the time, possibly because the energy released by the contradiction between heliocentrism and egocentrism borne by the system had not reached its climax: "Cardinal Bellarmine, his friend. The first thing arising from the documents is that Galileo Galilei had an atomic theory, which said that matter loses its properties at the atom's level, which is clear today. The Church saw in it an infringement of the dogma of Eucharistic: it means we cannot communicate with God at atomic level. And about Copernic's system, Bellarmine says to Galilei: Very well, but he says it is a model, he does not say it is the Truth. And Galilei answers: No! It is the Truth! Thus, curiously, the roles reverse: the Church's representative is a relativist and the science's is an absolutist."

3. Applying the individual ternary truth-false-form to the social system, in other words elevating the individual mechanism to the society's scale, we notice the inevitable situation of the bearers of objective information, compelled by the principle of exchanges, to transmit information in the social system whose members they are, but, on the other hand, they find it impossible to prove it in order to obtain the recognition of the social system and accompanied by and often mistaken for impostors, whose existence is correlative to their existence. In this case, the form allowing the stable existence of contradiction must be a specialized information organization, able to keep, manage and send information in the social system. Such organization will defend the bearer of objective information from the "society's reaction to the newly applied intellectual forces".¹⁰ The information organization becomes thus a formal structure with the role of included middle which meets the need for truth of the social system.

If we apply the Pareto hypothesis to this state of things we find out that the bearers of objective information cannot exceed 20% of an ordinary informational system. According to the logic of energy correlated with the Pareto hypothesis, if the bearers of objective information exceed 20%, the organization will not integrate in the social system and they will be persecuted, in other words the informational organization will disintegrate through social explosion and if they are less than 20%, the informational organization will become socially uninteresting, which corresponds to its metaphoric "cooling".

⁷In Latin: "Error communis facit ius". Referred to in the modern law as the **theory of appearance**, the legal valid state created by an general error, illustrates, par excellence, both the contradiction between the level of individual and social relation and the one belonging to the emotional dimension of the social system, between the appartenance to the community and its rules. See Hanga, Vladimir, *Adagii juridice latinești*, Editura Lumina Lex, București, 1998, p.38.

⁸ Fuchs, W. R. (1971), Cybernetics for the Modern Mind, MacMillan, New York, 2013, <u>http://www.brint.com/Peterold.htm</u>, [01 august 2013].

⁹ Nicolescu, Basarab (2013), *Esențial este să-ți găsești locul pe acest Pământ*, <u>http://www.romlit.ro/basarab nicolescu -</u> esential este sa-ti gasesti locul pe acest pamant, [01 septembrie 2013].

¹⁰ Lalescu, Traian, "Mecanica socială a d-lui Sp. Haret", în *Operele lui Spiru Haret*, vol. X, Editura Comunicare.ro, București, 2010, p. 259.

To be interesting for the public, a speaker must have 80% of prejudices in common with the public and 20% different or even reversed. This proportion will identify them in the eyes of the listeners as interesting and different, but not crazy or misunderstood. Under such conditions, there sometimes appears a diluted current of truth which passes through everybody, feeding them and bestowing a feeling of owning the truth. Considering other important principle of the symbolic mechanics, the one of usefulness, we must also conclude that only a stable informational organization, or comprising 20% of bearers of true information and 80% of false information, by true and false understating the characteristics of the information described above, it can be useful in the social system given that only such organization can feed the need of truth of the social system.

The exceptions from this proportion correspond to a reversed polarity, which implies the reversal of the proportion from 1 to 4 with one of 4 to 1 for the same pairs of involved contradictories. From a transdisciplinary point of view, it implies the change of a transdisciplinary process with another, for instance the process of involution or circular causality, which the usual gravitational process with the one of evolution, anti-gravitational. Such an informational organization can serve however only an entirely special social system compared to the social systems known historically. In all cases, given that the need for truth of the social system, obviously an outcome of the individual need of truth of all the system's components, is a contextualized need at the defined levels of Reality and perception, it will have the characteristics of gradation of the levels where it exists. In simpler words, in a non-absolute level of Reality, the need of truth of the system can be fed with information containing only truth and falseness together.

Given the aforementioned, the conclusion is that the ultimate, symbolic truths are not provable or transmissible, but only accessible through the existence of their own knowledge, and they imply a burden for their carriers. The idea that truth is always provable, source of the endless friction between the faith in science (sic) and the faith in religion is an application of the ternary analyzed above: in a certain level of Reality, with correspondent at the same level of human perception, the statement that the truth can be demonstrated or it is not truth is a stable form of information with a certain amount of truth and a certain amount of falseness. A contradiction in a level of Reality will be reconciled only in a different level of Reality. Thus, a science, discipline whatsoever can never create the bridges necessary to obtain "harmonization", in fact, the reconciliation of the contradictions inevitable in the scientific adventure as it is, for example, the one between quality and quantity, represented by contextualization, within knowledge, by the contradiction between the unity of knowledge and its babelization. From this perspective, we can refer to transdisciplinary research as research *in vivo*. Knowledge must mandatory be substantiated on the cutback of the bridges connecting all these things in order to be truly objective: thus, transdisciplinarity is needed.

References

Books and articles

Hanga, Vladimir, Adagii juridice latinești, Editura Lumina Lex, București, 1998.

Lalescu, Traian, "Mecanica socială a d-lui Sp. Haret", în *Operele lui Spiru Haret*, vol. X, Editura Comunicare.ro, București, 2010.

Nicolescu, Basarab, Ce este realitatea?, Editura Junimea, Iași, 2009.

- Nicolescu, Basarab, "Gödelian Aspects of Nature and Knowledge", in *Systems: New Paradigms for the Human Sciences*, Gruyter Verlag, Berlin New York, 1998, pp. 385-403.
- Nicolescu, Basarab, "Transdisciplinarity: The Hidden Third", in *Human and Social Studies*, Vol.I, No.I, Editura Universității "Alexandru Ioan Cuza", Iași, 2012.

Nicolescu, Basarab, Transdisciplinaritatea: Manifest, Editura Junimea, Iași, 2007.

Pop, Ioan G. & Vereş, Otniel L., Elemente de semiofizică aplicată, Editura Risoprint, Cluj-Napoca, 2010.

Taleb, Nassim Nicholas, Lebăda neagră, Impactul foarte puțin probabilului, Editura Curtea Veche, București, 2009.

Links

Fuchs, W. R. (1971), Cybernetics *for the Modern Mind*, MacMillan, New York, 2013, http://www.brint.com/Peterold.htm, [01 august 2013].

Nicolescu, Basarab (2013), *Esențial este să-ți găsești locul pe acest Pământ*, http://www.romlit.ro/basarab_nicolescu_ _esential_este_sa-ti_gasesti_locul_pe_acest_pamant, [01 septembrie 2013].