THE LIVING LOGICAL SYSTEM PARADIGM THE ECONOMIC CONCEPT AND THE CONCEPT OF LIVING LOGICAL SYSTEM – NECCESARY AND SUFFICIENT PREDICATES

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Abstract:
Through the current research we advocate for the conceptualization of economics and the grouping of the Living Logical System (a concept introduced by prof. Phd. Emil Dinga) on economics, with the purpose of increasing the understanding we have on economic forces. The system which we created, as an extention of the Living Logical System, will be called the Economic Living Logical System. The need for such a research is given by the fact that orthodox economic knowledge is considered a prisoner of the mechanical paradigm.

Keywords: economic, living logical system, economic living logical system

1. Introduction

The current paper wishes to tackle the conceptualization of the economic and the restraining of the *Living Logical System* (a concept introduced by prof. phd. Emil Dinga), with the purpose of increasing the understanding of economic phenomena.

In order to build the economic concept we will start from the principle of the sufficient reason of social behavior and we will identify the sufficient and neccesary predicates of this concept.

To build the concept of an economic living logical system, we will identify its required and sufficient predicates.

The system that we created, as a particularization of the *Living Logical System,* will be named the *Economic Living Logical System.*

The need for such a research is given by the fact that orthodox economic science is considered a prisoner of the mechanical paradigm.

In this way, the ideas within the current text will have the following succession:

1. Of knowledge – several guidelines;
2. The tackling of the issues raised by the existance of the mechanical paradigm as a foundation of orthodox economic science;

3. The tackling of the phenomena and the conceptualization of the economic;
4. He construction of a system through which we can increase the understanding of the phenomenas within the economic (the concept of *Economic Living Logical System – sufficient and required predicates*).

2. Several conceptual guidelines

- Through knowledge, we understand a mixture between the capacity to gain representations (the reception of impressions) and the abiliy to know and object with the help of such representations (the spontaneity of concepts) – *the kantian expression of knowledge.* We speak of intuition and concepts – through intuition we recieve representations, and through concepts we think these representations.
- Through the economic concept, we understand a species of the proximal gender of act or human action.
- Through ”glasses”, we understand a system, meaning a logical scrap of reality, in which concepts are organized, used with the purpose of knowing the phenomenon, and which, in an onthological fashion, has a problematic character (possible). Through this we can ensure the understanding of reality.
- Through living, we understand that certain something which meets the following sufficient and required predicates:
  1. *It reproduces;*
  2. *It grows;*
  3. *It conserves.*
- Through logic, we understand a mechanism of reason which makes for the object of concepts, judgements and reasoning.
- Through the concept of Living Logical System (LLS), we understand a species of the proximal system gender. This concept was introduced by *professor phd. Emil Dinga,* as a requirement of the fact that *the real praxiologic process within a society is a mixed process,* meaning a mixture of the natural and social process, and this lack of difference among the two categories of processes is considered an onthological one. As a result, the purpose for which this specific genre was introduced was in order to set into argument the logical and onthological basis of economic orthodox models.
- Through the concept of *Economic Living Logical System,* we understand a restraining of the *Living Logical System.* Through this system, we try to increase the growing of the understanding of the phenomena world within the economic.

3. Of knowledge – several guidelines

The theory of scientific knowledge which dominates and whose modern form is given in its most part by the phylosopher *Karl Popper,* puts stake on the fact that science must be considered *a process of solving problems* [Deutsch, D., 84-85].

This tackling, opposed to the inductive framework (which regards the registry of our past observations as some sort of a skeleton theory and which argues that science is designed to fill the voids in theory through interpolations and extrapolations), starts from the best existing theories, being criticised in a permant fashion, and some of these theories *seem inadequate to us, ergo we desire new ones,* and this is a problem which needs to be solved.

Talking about social sciences (a field which includes economics), *Thomas Kuhn,* in his paper called "*The Structure of scientific revolutions*", mentioned the fact that among the researchers of this science alone, there is no minimal agreement on several fundamental matters, such as recognizing several research problems and evaluating solutions for such problems, and in this way the concept of *paradigm* was introduced. "*Paradigms – Kuhn writes – are scientific realizations which are universally known and which, for a period of time, offer model problems and solutions to a community of practicians.*"

In other words, *paradigms,* represent those scientific realizations which serve to the members of a group of researchers to model after them their own research and to evaluate their own accomplishments, and after this, these solutions must be taken as good within manuals and treaties of such disciplines considered *mature.*

According to such an endeavour, knowledge (explanation), included into a paradigm, unlike knowledge formulated through statements and scientific theories, is considered – Kuhn says – mostly *tacit.*

So, according to this framework (a paradigmatic frameword), a researcher manages to model the formulation and solving of a problem by guiding himself after a paradigm without the need to know what consists the resemblance between his problem and the paradigm on which he guides himself.

Solving such problems on the basis of tacit knowledge is what Kuhn calls *normal science or normal research,* and the type of formulated and solved problems within the normal research as *puzzle problems,* meaning problems which researchers will in the end solve within the existing paradigm.

Karl Popper`s objection [1970: 53-55], reffering to the concept which Kuhn introduced (the concept of normal science), is that through this we understand a research which lacks critical spirit and considers it dangerous to science, meaning that he asks himself questions concerning the fact that some researchers which are famous in history, could practice the *normal research* in Kuhn`s sense.

Kuhn himself favorizes the confusion created through inconsequences in the terminology concerning *normal science,* which can be met in his book (*The structure of scientific revolutions*), but, as response to these critics, Kuhn clearly showed that the *normal science* expression must not be understood as the attempt to apply a theory (which must clearly be confirmed or infirmed), rather it must create a better correlation between theory and facts.

In other words, it is the fact that the object of criticism are only the solutions which researchers propose for known problems, not the paradigms which lead them in formulating and solving these problems.

Between the development of science through solving problems in Popper`s vision and the development of science through solving problems in Kuhn`s vision there is a fundamental difference concerning the critical spirit.

In essence, both say the same thing concerning the neccesary condition, namely the critical spirit required in developing science, only that Popper`s vision reffers to the permanent critique of paradigms, where as Kuhn reffers to the critique of solutions brought by researchers within a paradigm.

We also notice the fact that for both Popper and Kuhn, knowledge is considered a primary one, meaning that its generated by solving problems, being exclusively contextual and empirical.

Having said this, with this primary knowledge we also have the secondary knowledge generated by comprehending primary knowledge, meaning that knowledge which requires the elaboration of theories and knowledge systems which save thinking and which is acontextual. This type of knowledge is not generated by the solving of these problems, rather it generates problems.

From the two types of knowledge we will mention, within this material, only the secondary knowledge.

4. Orthodox economic knowledge is in a crisis situation of the existential paradigm?

In the paper of professor Emil Dinga (2009), he mentions the fact that *orthodox economic science* is still a prisoner of the *mechanical paradigm, because:*

The economic process is considered a mechanical process:

- A completely causal process;
- The causality of the economic process is of an eutaxiological type (the noticeable order hase an efficient cause – within Aristotle`s sense); we must note the fact that, within the teleological causality, the noticeable order has a purpose (the final cause – in Aristotle`s sense);
- Time and space which localizes the economic process is considered absolute (and independant from the economic process itself);
- The economic subject is considered a sui-generis machine of decision optimization; it is situated on the outside, as compared with the economic process (different in a decisive manner);
- The values on which a society guides itself and which determine its vision on the world (religion, scientific and theological innitiatives, political and economic order, etc.) are not considered variables of the economic process (the main values presented within actual economic models are those which can be quantified through the attribution of monetary equivalents);
- Non-linearity, biffurcation points, atractors, are not attributes of the orthodox process;

As a result, orthodox modeling of the economic process has the following attributes:

- It is based on optimal criteria;
- It is based on dynamic type ecuations (even if a certain relaxation of the dynamic characteristic is produced by involving random variables, of a statistical type);
- It is based on the invariability of innitial conditions (or final ones, according to case) of the economic process;
- It is based on the exogenous nature of the human process (as a decider and as a participant), which ignores the Oedipus effect (the Oedipus effect is the one which modifies innitial conditions);

Taking these aspects into account, our question is whether or not orthodox economic knowledge is a prisoner of the mechanical paradigm?

Undoubtedly, and we mention here the fact that the vision (which is a paradigm) of the physical world, like a mechanical system comprising of elementary components, which has modeled our theoretical thought, including that of social sciences and more so economics. The world of economics is still regarded as a machine consisting of a multitude of components, but in reality it is not like that, rather it is a whole, undivided and stable continuous, but with a dynamic far from equilibrium and whose parts are linked together in an essential way.

5. How do we solve this problem of the mechanical paradigm within economics?

Before we answer this question, we believe that it is neccesary to better understand *what a scientific problem is.*

A scientific problem is a *phenomenon* for which there is neither an explanation that verifies the principle or causality, nor for which the existing causal explanation is not generally applicable (*eg: the collapse of the wave function in quantum mechanics, meaning the invariance of mass as ratioed to the traveling speed – newtonian mechanics – does not verify when the traveling speed comes close to the speed of light – relative mechanics*) (Dinga, 2011).

If orthodox economic science is at this time a prisoner of the mechanical paradigm (see arguments below), we believe that *economic phenomena, as part of an economic reality,* can not be thoroughly explained through it.

How do we solve this problem?

We propose the construction of ”*glasses*”.

We call these ”glasses” ***The Economic Living Logical System (ELLS),*** and their basis is the concept of ***Living Logical System.***

Through these *”glasses” (system)* we intent to obtain the increase of comprehension of economic phenomena. In other words, we are talking about the construction of a new paradigm within economics.

6. The phenomenology and the conceptualization of economics

Next, *we set out to define economics.*

Before we do that, we believe that the first neccesary stept is to create a phenomenon endeavour, with the purpose of creating, as a result, the scientific economic, meaning to become anchored within a knowledge to which all rational human beings can adhere to.

Such an endeavour is paramount, we believe, because of the fact that within this science, any point of view seems better than the other one and as a result of this fact one creates ”a gamespace”, for all the possibilities of opinions or viewpoints.

We know the fact that phylosophy, mathematics, the theory of knowledge and logic can establish scientific knowledge, because they seek the universal principles of knowledge (a standard example for such logic laws is the principle of non-contradiction, which tells us that no sentence can be true and false at the same time and under the same ratio), its laws expressing truths which we know a priori, thus independant from any other experience or empirical research.

Perhaps economic Science can be a science without prejudice, without adhering from the start to a theory?

We do not know, but we believe that, at a first glance, the basics of phenomenology can help us and we try, for the start, to elaborate a *purely atheoretical* description which is revealed as a phenomenon, in the way that they appear to us.

In phenomenology, we mentrion the fact that experiences are *not only feeling per se, rather feelings of something, or about something.* Thus, when we see something, we have a conscience of something. All these experiences are characterized by the fact that they are a conscience of something, experiences are oriented towards something. To this oriented character towards experiences and feelings, Husserl gives the name of *intentionality,* meaning that certain something towards which our conscience (***intentum***) and the conscience of somenting (***intentio***).

Firstly, through intentionality we understand a complex structure which includes both intentio and intentum.

Secondly, intentionality is independece from the existence or objectual nonexistance. Intentionality may exist even when the object of intentional reports does not exist. In other words, the is intentionality even if the coresponding object does not exist, this being a pure fantasy or a wrong perception of reality.

Thirdly, we notice that every experience is structured in this fashion, and the linguistic expression of this is the usage of the word ”phenomenon” in two ways. If for example, in economics, we talk about the financial phenomenon we can reffer to the conscience of the financier (intentio) as well as the financier as the object of conscience (intentum). Intentionality is neither objective nor subjective, and it is not a relationship between two things, between the thought a something and the intentional respective object of something else, towards which my thought is oriented.

Through these, husserlian phenomenology considers that it is possible to create a description of phenomena in all their complexity.

We observe, as connected to intentionality, several extremely important aspects:

- *It implies conscience and conscience of something;*
- *The object of intentionality has no relevance – intentionality exists only if the object of my intentional reports is non-existent;*
- *Lack of distinguishing from an intentional object-subject conscience and the object of conscience are not separate feelings of conscience;*
- *Intentionality is of a cultural origin and not an instinctual one.*

Through all these, husserlian phenomenology considers that it is possible to create a *description* of phenomena in all their complexity. Without a doubt, but we are talking *about an atheoretical description of phenomena.*

Phenomenology helps us, but how do we know a phenomenon, rationally? *A theory plan.* For this, we start from the principle of the sufficient reason from the social sphere (our premise is that economic science is a species of the proximal genre of social science). This principle is called the ***principle of will.***

Principle: The principle of will. The law which governs this principle is motivation.

The consequence of this principle is the act or human action.

But, which predicates are sufficient to characterize the act or human action?

The act or human action has as a subject the human being and is characterized by the following sufficient predicates [Dinga Emil, 2009]:

1. *The nature of the act is without relevance, meaning that an act can be an act of intervention / modification, an act of reflection, an act of moral position;*
2. *The object of the act is without relevance, meaning that the act can be exercised on any entity, be this within or outside of the subject;*
3. *The structure of the actional subject has no relevance, meaning that the actional subject (the human being) can be considered an indivirual or can be aggregate according to several criteria.*
4. *It is of a cultural origin.*

Sufficient predicates for an act, which obviously will be required predicates, and are independent and consistent.

Next, by defining specific differences of the economic act, will not mean something else that particularization irrelevant aspects when defining the proximal genre (which is the act).

Thus, sufficient predicates for the economic act are:

1. *It involves the intervention of the subject in nature, and has as a finalitythe enthropic exchange between man and nature;*
2. *It involves the fourth cause of Aristotle (causa finalis), separating it from a natural phenomenon governed by an efficient cause;*
3. *It involves choice.*

Once an economic act exists, does it present any particularity with a required attribute? In other words, do we have new required predicates, generated by the existance of economics itself?

In our opinion, we have two new predicates:

1. *Meaning*
2. *Sense*

On the basis of what we stated above, we believe that we can conclude on the subject of economics, as an attribute of phenomenology, as such:

Economics is the externalization of an intentionality which involves the enthropic change between man and nature on the basis of a choice, with a certain purpose, meaning and sense.

7. The concepts of *living logical system and economic living logical system*

The concept of Living Logical System (LLS) – sufficient and neccesary predicates

The concept of LLS was introduced by the professor Emil Dinga, as a neccesity of the fact that the real praxiological process from society is a mixed process, meaning a mixture between the natural and social process, and this lack of discerning between the two categories of processes is considered an onthological one.

As a result, the concept puts into discussion the logical and onthological basis of orthodox economic models.

Sufficient predicates, which are independent and consistent, for the Living Logical System (LLS) are:

1. ***It is a system (S) (*)****;*
2. ***It has a disipative character****, meaning that it is an evolution far from equilibrium, meaning it maintains or even shrinks enthropy within a membrane with the price of accelerating the enthropy within its environment;*

Sufficient predicates, which are independent and consistent (which will obviously be needed predicates), once verified, generate other two new predicates:

- ***It has autopoietic (**)capacity**, meaning self-generating capacity, the capacity to heal itself, to regenerate itself, to organize itself, to reproduce itself);*
- ***It is a complex system** (characterized by non-linear dynamics), meaning that it can not allow predictions, only the diminishing of uncertainty concerning the future;*
- ***It is an invariance of total complexity,** meaning that it maintains as invariance, with a permanence character, of a logical sum between the internal complexity of a LLS and its external complexity (also named an ecological complexity, expressing the degree of metabolism with its environment).*

On the basis of what was mentioned above, we believe that we can conclude on the *Living Logical System* as such:

The Living Logical System (LLS) is a system which verifies the sufficient and required predicates mentioned above.

The concept of Economic Living Logical System (ELLS) – sufficient and neccesary predicates:

Next, we wish to establish the concept of Living Logical System (LLS) to the level of economics or its economic process, with the purpose of increasing the intangibility of economic phenomena.

The sufficient predicates, which must be independent and consistent, for the Economic Living Logical System (ELLS), are:

1. ***It is a Living Logical System (LLS)***
2. ***It implies the intervention of the subject of the act within nature, meaning the enthropic exchange between man and nature;***
3. ***It implies the fourth cause of Aristotle (causa finalis);***
4. ***It implies choice;***

The sufficient predicates, which are independent and consistent (and which will obviously be required predicates), once verified, generate two other new predicates:

a. ***meaning***
b. ***sense***

On the basis of what we mentioned above, we believe that we can conclude on the Economic Living Logical System as follows:

The Living Logical System (LLS) is a system which verifies the sufficient and required predicates mentioned above.

As a result, by noting with S the crowd of predicates for a system, with a LLS the crowd of predicates for the living logical system and with ELLS the crowd of predicates for the Economic Living Logical System, we can write:

$$S \cap SLV \cap SLVE = S$$
$$S \cup SLV \cup SLVE = SLVE$$

8. Conclusions

- *Economics* is the outpourring of an intentionality which involves the enthropic exchange between man and nature on the basis of choice, with a purpose, meaning ans sense.
- *The Living Logical System (LLS*) represents the real system which is desired to be an alternative to the mechanical system.
- *The Economic Living Logical System* represents the real system which is desired to be an alternative to the mechanical system in economics.

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(*) Sufficient predicates – which must be independent and consistent for a **system** (S) are:

1. *To establish the distinction between the way in which something comes to be and that something. In other words, to establish a membrane, a representation, under the shape of a model, of nature before the intention pours aut.*
2. *To contain a crowd (countable or not) of composing elements (different among them or not, divided among them or not);*
3. *To establish a crowd of connections (material, substiantial or energetic, enthropic, informational, etc.) among components as well as between them and the environment in which they work.*

These predicates are enough, they are consistent and independent, and once verified, they generate two new predicates:

1. *It has metabolism (reactions);*
2. It has a qualitative identity, meaning that it contains a set of invariance which are reproduced as a result of metabolism and which ensure the logic continuity of the system

(**) In biology, this characteristic combines the two defining elements of life, meaning the physical border and the metabolical network, with the purpose of maintaining the same ensemble structure, for an organism and in spite of a continuous flow and changing components. Of course, this thing matters even less because the biologic living logical system must be a species of the living logical system.

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