

Human Development in the World Coordinate System on the Basis of Limit Equilibria

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Abstract: The main ideas of the world coordinate system based on the extreme dynamic equilibria are considered: three fundamental limits (identification, system-communication, orientation to the rhythms of world harmony), the corresponding axes, and the cells of the phenomenal space. It is noted that natural or cultural objects can be stable only if they are in the calibration nodes of the coordinate system, which are separated from each other by intervals corresponding to the frequency of oscillations of the rhythms of the world. Calibration is to identify the optimal and stable “step” of these rhythms. It is “the full-time existence” of the natural/cultural objects. The universalism of the coordinate system rests on the cell of consciousness considered in accordance with Husserl’s ideas in the phenomenal world. Two processes form the cell: from real equilibria to phenomena and horizons, and further refinement of this cell in the phenomenal space. “Intentional” and “horizontal” dimensions of consciousness are revealed in the process of phenomenological reduction. Intentional measurement is associated with the process of constant purification of consciousness, and the full consciousness of the phenomenological horizon takes into account all its possible forms (scattered, determined by memory, imagination, etc.). The model that connects the dimensions of consciousness in a phenomenal cell is much simpler than in the original cell based on the natural setting of consciousness. Therefore, the phenomenological method is the most convenient for the development of ideas about the world coordinate system based on extreme dynamic equilibria.

Keywords: dynamic equilibrium limit, coordinate system, three types of equilibria, consciousness, phenomenological reduction

INTRODUCTION

A special consideration in philosophy is given to the sphere of life, as consequence of its “central” position in relation to other ontological

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spheres. Firstly, it is caused by the main element of this sphere - “the man” and all of his part: the body, consciousness and sub-consciousness. “Man’s consciousness” connects the world around us in the wholeness. Besides, in this case is the key importance of the obviousness self-organization processes of the man and mankind on the whole, determined by their close complementary relation with the environment. These processes are supported by the life codes (genetic, phenotypic), and then by social medium and culture codes. They influence on the biosphere formation and create opportunities, turning the man into an individual and a personality. All these formations converge to the three limit fundamental equilibria: identification (*I* - limit), system communication (*C* - limit) and limit rhythm of the world harmony (*K* - limit).

THE MAIN IDEAS IN THE CONCEPT OF THE COORDINATE SYSTEM BASED ON THE LIMIT EQUILIBRIA

Let’s consider the sphere of the living being and the place of man in this sphere, and proceed from the conception of the “natural coordinates of the world on the basis of dynamic equilibriums, conditioned by deterministic chaos”, which is being developed by the authors and represented in a previous article (Kozhevnikov and Danilova 2016).

According to this concept, all natural and cultural objects may be associated with three types of limit fundamental equilibria. They are defined by different types of deterministic chaos, emerge by means of self-organization and encompass all levels of the world hierarchy. The main idea of the natural coordinate system represents as follows. The world may be defined as consisting of two unequal parts. On the one hand, the natural coordinate system that includes all the limit dynamical equilibria, which are the same at different levels of the organization of the world; on the other hand, all the unbalanced processes and phenomena.

Natural (cultural) object is characterized by *S* – the main (fundamental) quality, *E* – energy and *T* - time of its existence. It is an important characteristic the “full existence of all natural and cultural objects” too, which can be determined only from the point of view of the neighboring structural levels and unattainable from within these natural and cultural objects.

All natural and cultural objects aim at the three types of limit fundamental equilibria that correspond to three coordinate axes. 1. Any

natural or cultural object from the spheres of inanimate, living, spiritual (elementary particles, molecules, gaseous nebulae, living organisms, individuals) tend to self-organization and self-identification. 2. All natural and cultural objects tend to system-communication limit, that is, they tend toward completeness and a stable equilibrium with environment. An individual is defined by their communications; cultures exist through dialogues within and outside themselves. 3. The existence of natural and cultural objects is associated with the limit time for establishing full harmony between the limits I , C , K (the internal cells of dynamic equilibrium of the coordinate system). All of these limits remain unattainable due to opposite tendencies, therefore these natural and cultural objects reach only some intermediate dynamical equilibrium (Kozhevnikov 2014).

The coordinate system, based on the equilibriums of dynamical chaos, is created by specific natural and cultural objects, through that part of the energy that can be balanced within them. As a result, the cells of dynamical equilibrium emerge (“the interrelation cells”) common to the coordinate system and these objects. Coordinate system has no localization or space-time constraints. It is present in every part of the universe, at all levels of its organization. The coordinate system interacts only with “open natural and cultural objects” that have a tendency to self-development and dialogue.

Intermediate dynamical equilibrium of the natural and cultural objects that have not attained their identification and system-communication limits remain stable only if they are in the “calibrated” (space-time) nodes, which are separated from one another by intervals corresponding to the oscillation frequency of these fundamental limits (fundamental rhythms of the world). Calibration means defining the “interval” of these rhythms. Full lifetime of an object determines the rhythm of its optimal and sustainable development. The combination of all three types of rhythms that correspond to these limits forms stable natural objects, and the rhythms themselves define the parameters of the space-time “cells” that form the coordinate system based on deterministic chaos. The formation of these rhythms and cells are directed by the coordinate system and they can exist in the world for millions and billions of years, like galaxies, planetary systems, the atmosphere and hydrosphere of the Earth and its subsystems. Religious and philosophical conceptions exist thousands of years. The deviations of these rhythms could destroy all natural and cultural objects.

The natural coordinate system cannot exist since the world, in spite of its complexity, is amazingly organized, efficient, optimal and stable; all its levels are connected through the universal circulation of matter, energy and information. On the other hand, complexity and chaos are prevalent in the world, so a deterministic chaos is the most reliable foundation of the natural coordinate system.

The natural coordinate system cannot be comprehended within the confines of a single principle or idea and it doesn't become an aim for universal philosophical category or concept. It opens to the person directly and should gradually become clearer as it is used, so the life of the individual in the natural coordinate system is his destiny. Having entered into a stable relationship with her/himself, a person realizes her/his destiny and can even sacrifice her/his life to it. The connection with the coordinate system is so strong that the individual follows her/his mission even when the goal is not achievable. These efforts create a cell in a natural coordinate system that can survive its creator for a long time. Starting from our era, humankind must start living in the natural coordinate system – there is no other option, the mission of our generation is to ensure formation and comprehension of the natural coordinate system.

The natural system of coordinates is not the proto-notion, but certain people in a specific situation and processes form it in a particular way. The idea of this system may have many different interpretations. The use of the system of coordinates does not claim the explanation of everything unknown in the world; for every single research, it just promotes the formation of optimal initial foundation. Subjective concepts are: the first contact with the system of coordinates and intentional commitment to its fundamental equilibria. Our development approach is correlated with the concept of “ontopoiesis” of A.T. Tymieniecka's phenomenology of life and of the human condition (Tymieniecka 2004).

THE ROLE OF CONSCIOUSNESS

In spite of considerable differences of fundamental parameters and characteristics, which determine various ontological spheres of the world (inanimate, living being, spiritual), all of them can be considered from the point of view of coordinate system on the basis of limit relevant dynamic equilibrium. Such structural levels are numerous in the world. That is why the universalism of the natural system of coordinates must have only profound foundations; and consciousness

is the only one possible common measure, which enables to research all these parameters and characteristics within the consistent approach. We found upon the same structures of consciousness, while researching vacuum, mass, inertia, life and spirituality. The universality of the structures of consciousness also determines the similarity of cognitive processes and approaches for the revelation of the invariants of the system of coordinates. The cell of the natural system of coordinates is the cell of consciousness on the grounds of its natural attitude. However, the expanding of its comprehensive study leads to the necessity of considering the cell of consciousness in accordance with the ideas of E. Husserl in the phenomenal world (Husserl 1999). To choose the cell of consciousness in the phenomenal world is possible as the result of simultaneous consideration of the consciousness, corresponding to phenomenological reduction and all the horizon of consciousness, connected to this process in the whole. Phenomenological approach gives a more complete image of interrelation of natural and cultural objects with the system of coordinates, as only this approach gives simultaneous justification of the object itself and the act of perception related to it.

There are two directions of interrelation between the cell of natural system of coordinates on the ground of natural attitude of consciousness and corresponding phenomenal cell of consciousness. The direct interrelation comes from the unit of natural system of coordinates to the phenomenal units of consciousness, providing formation of the latter. This process starts with the facts of real world, which are the relevant equilibria that can be found in the world of inanimate being, living being or mental world. All these facts together give the opportunity to come over to the essences – to the system of coordinates based on deterministic chaos. The phenomenological approach creates the system of restrictions, which lets us see only this concrete intentional essence, but the method of phenomenological reduction reveals it more and more clearly.

The reverse process starts with the specification of the cell of phenomenal sphere by means of phenomenological reduction and optimization of the phenomenological horizon of consciousness; then the revealed constructions are transferred to the real sphere, providing the specification of the natural attitude. Eventually we have the complementary process. From one hand, the considerate cell of the natural coordinate system is ontologized by the real world, which is foundation of it. This ontologization is used while researching the ideal

constructions is closely related to the phenomenal cell. On the other hand, the specification of two horizons, the intentional and comprehensive ones, extends our conceptions about fundamental limits of the natural system of coordinates. Such transformation of one cell into another develops the idea of world coordinate system based on the ultimate dynamic equilibrium.

THE CELL OF THE PHENOMENAL SPHERE

The consciousness of the natural attitude and the intentionality, which exists in this case, are considerably chaotic. Phenomena of consciousness of Husserl can be considered as the states of relevant equilibrium and activity of consciousness, due to which they are revealed, being directed to transformation of chaos into order. In this case the act of phenomenological reduction can be considered as transformation from one dynamic state of consciousness, characterized by the parameter of equilibrium P_1 , to another state with the parameter of equilibrium P_2 . These states base themselves on the essential measure of deterministic chaos of dynamic equilibria. All the rest chaos of consciousness, which turns out to be excessive for the process phenomenological reduction, is rush out on periphery, where it remains within the horizon of current events. Exactly in the process of moving from one phenomenon of consciousness to another one, the object and related act of perception are described and justified. The transitions from dynamic equilibrium P_1 to the similar state P_2 are the most natural types of calibration of the full time of object's existence. It enables to organize the corresponding calibration in the unit of the natural system of coordinates more correctly.

Thus, intentional view of any natural and cultural objects presumes initial "catchment" for these objects, and then it leads to the development of consecutive phenomenological reduction: transition from one state of dynamic equilibrium to subsequent one. Another view of any cultural and natural objects includes all possible field of consciousness. It non-actualized for immediate contemplation and focused on its horizon. In such a way, we can talk about "intentional" and "horizontal" dimensions of consciousness in the process of phenomenological reduction. Intentional dimension is connected with the process of constant purification of consciousness, and full consciousness of phenomenological horizon takes into account all possible types of it (scattered consciousness, determined by memory, imagination, etc.). Besides, the third dimension related to the time

interval between two phenomena of consciousness can be considered in the process of phenomenological reduction. Transition from one phenomenon to another takes certain time and this time interval can be considered as the third coordinate of phenomenal sphere. All these time intervals are formed during the full time of existence of the object. Such quantity of measurements is enough for the analysis of natural system of coordinates.

Phenomenological reduction provides identification of the notion under examination and clears it up more and more. The process oriented towards the horizon presumes the linkage of all these notions “pushed out” by this phenomenological reduction into a single whole. Each phenomenon of consciousness can be considered as the “cover”, hiding the part of the world, which is unknown for us by equilibrated parameters or the set of such parameters. The structure of consciousness, corresponding to such a phenomenon, gives the idea of our perception, hidden behind this “cover”. The phenomenon of consciousness guarantees the meeting of consciousness with the unknown objects of the world we comprehend. Also, each phenomenon corresponds to certain level of integrity within certain horizon of consciousness.

As phenomenological study starts with “Ego-identity”, it can be introduced the concept of volume of consciousness I_1Q_1 representing the initial platform of research. In this case, I_1 is considered as the “distance (depth)” from the level of consciousness, marked as “Ego-identity” to certain phenomenon of consciousness that characterizes the process of phenomenological reduction in the period under consideration. Q_1 characterizes the “width” of horizon at the same period of research. The mechanism of activity of the processes of phenomenological reduction provides identification of consciousness. Another mechanism is gathering of consciousness, including all its peripheral types within horizon (closing this consciousness into system). We can talk about constancy of this volume, as the object of consciousness is initially defined; chaos does not disappear, but it is “taken out of the brackets”. Besides, for optimal and steady process of transference from one phenomenon to another, it must occur at the same or insignificantly changed speed. Calibrating values of the time are of fundamental importance (not full time of existence of the object). These values characterize the processes of development between two dynamic equilibriums – phenomena (in phenomenal space). In other words, the transformation of chaos into order must

flow steadily and in the optimal way. The latter can be related to the theorem on minimum of production of the entropy by Paul Glansdorff and Ilya Prigogine (1971, 48).

Thus, the ascend from the cell of the system of coordinates on the basis of dynamic equilibria (natural attitude of consciousness) to the cell of phenomenal sphere enables us to justify the peculiarities of phenomenological reduction and formation of the consciousness horizon. At the same time, the research of objects of the phenomenal world (phenomenal body, phenomenal consciousness) allows to clarify many details related to the natural coordinates system. It reveals the system of constraints that let interact with this coordinates at certain moment of time. For example, phenomenological intuition of the “body” helps to specify fundamental limits of the natural system of coordinates for the sphere of a living being. This phenomenological procedure presumes achievement and the keeping of certain state of consciousness by means of own rational research. In this case each step should be thought over consistently with full responsibility.

THE DEVELOPMENT APPROACH AND SPHERE OF LIFE

The most natural quantity of dimensions for the system of coordinates based on dynamic equilibria is equal to three. If we look at the difficulty of the world levels from the point of view of man and his environmental conditions, some dimensions turned out to be “frozen” at “more simple levels”. All three above mentioned limit equilibria can hardly be proposed for integral characteristics of vacuum. The main characteristics for the level of non-living being are identification and integrity. Time for many objects of this world, for example for electron, is of no particular importance. It appears that for the level of a living being all three dimensions are full of substantial meaning. In this case such things as identification of objects (genes, individuals, species, etc.), their involvement into stable systems (genomes, populations) and determination to the most abundant life in the process of its development are of particular importance. It should be noted that all the processes in the world of inanimate being are reversible; time becomes irreversible in the world of a living-being - “time arrow” appears.

The sphere of life and the existence of man organically continue in the sphere of spirit, where time is even of more significance, and consciousness takes the variety of shapes. Irreversible processes are appropriate for spiritual world to an even greater degree than in the

sphere of a living being. In cultural objects, the activity of man has distinguished flexibility, complexity and multi-variety. The system of coordinates formed in the sphere of spirituality helps to develop the processes of living beings, promoting their forecasting. Phenomenological procedures, coming from certain own primary embodied existences, are the most suitable for their research.

Longtime relation with the world coordinate system is possible due to the absorption of man in one of the spheres of spirit: science, religion, philosophy, etc. In case of rather deep absorption the craving for comprehension of certain essence (identification and communication limits) provides further movement of this absorption and its transference into the limits of the system of coordinates. In the latter case, the system of coordinates starts working as a powerful attractor. The model, binding dimensions of consciousness in the phenomenal cell, is much easier than in the initial cell based on the natural attitude of consciousness. That is why phenomenological method allows to clearing up the idea of the world coordinate system based on limit dynamic equilibria.

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