Innovations in synergetics of socio-humanitarian processes

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Abstract: Scope of the research – philosophical aspects of cross-disciplinary science synergetics where the practical interest lies in the opportunity of extrapolation of classical synergetic principles into the sphere of social knowledge.

The analysis made has revealed a number of concepts which have developed modern philosophical and synergetic approach to queries of world vision including cosmogony, beauty and order. The concept of the fractality of the universally recognized golden ratio beauty standard and synergetic nature of the beautiful, concept of social synergetics as postmodern philosophy where attractor is limiting state of the system, limit of mankind evolvement motion to which is nonlinear and per se infinite as endeavor to a universal ideal, concept of synergetic management theory where attractor as a determining essence can be provided with properties which help the system self-organize according to the goals set.

The results of the analysis indicate that the notion of the attractor as invariant diversity, consequence of self-organization process can be made explicit in the most diverse way in consequence of its multidimensional ambiguous nature. This gives the foundation for further development of synergetic approach to philosophy and lets present the attractor as robust philosophical category. In particular this approach is used by the author in cosmogonical concept based upon popular Bible version of Genesis origin interpreted from the point of view of basic synergetic ideas. Attractor as a philosophical category appears as fertile ground for humanitarian researches, for example, allows to assume that synergetic system model is a complex nonlinear process of essence appropriation in the scale of the universe.

Innovative nature of synergetics assumes the possibility of absolutely new, ingenious approach to traditional problems of humanitarian knowledge. The problem of understanding of classical philosophical categories from the point of view of self-organization is still opened and attracts attention of ever-increasing amount of modern academic philosophers by its vast potential. The process of emergence and further spreading of innovations and their institutionalization from the point of view of the self-organization theory represents the transition of the social system into conceptually new state and is connected with the deviation from the equilibrium due to the effect of feedbacks. States interrelated with this instability point create a uncertainty factor which possesses most vigorous creative innovative potential. Philosophical aspect of innovation is opened up through the systematic synergetic approach to this definition emphasizing fundamental nature of the innovation applied to the description of the world order, stating
the revolutionary nature of emergence of absolutely new transition of evolvement to a brand new level. Practical interest provokes a possibility to extrapolate classic synergetic principles into the sphere of social knowledge what allows to have innovative vision of Genesis as a result of philosophical understanding.

Innovation in synergetics of social processes can be defined as new social system functioning concept built upon fundamentals of synergetics and possessing as a global goal the forecasting of possible system states and ways to correct the latter. This implies the observance of system principles (integrity, structural properties, interdependancy, hierarchy), synergetic notions (self-organization, open systems, nonlinearity, dissipation, bifurcation, attractor), and corresponding limits in the frames of the range set.

Proceeding from the definition mentioned above a short analysis of a number of concepts is provided which have developed to our opinion modern philosophical and synergetic approach to the queries of world vision and have presented mankind with new conscious vision of cosmogony, beauty and order.

One of the most creative components of new paradigm is the theory of fractals[1] (objects, mathematically described by equations with fractional numbers and possessing property of self-similarity), which has been integrally philosophically processed in the concept of fractality of the universally recognized beauty standard – golden ratio. Thus the synergetic nature of the beautiful is confirmed. The fractality of the vast majority of natural objects as well as the fractality of outstanding art objects is a unique fact representing a clear and legible prove that unstable and nonlinear is surrounding us everywhere. The emergence of fractal geometry as the alternative to Euclid’s geometry tells about an absolutely new turn in the evolvement of human knowledge where the nature itself with its creations demonstrates absolutely new level of difficulty – self-similar infinity and multidimension of the surrounding.

Infinite self-similarity in application to philosophical categories provokes ambiguous assessments. On the one hand the researcher assimilates to the character of Kafka’s “Castle” wondering around infinite amount of roads each one of which per se is right but doesn’t take to the the initial clearly stated goal. On the other hand with the emergence of fractal geometry classic cognitive means obviously demonstrate their incompleteness: the world is much more diverse, and there is a vast amount as empiric objects so mental categories which do not fit into strict linear frames, and fractal simply lifts the veil of ambiguity and subjectivity of all matters incarnating postmodern tendencies of refusal of unambiguous assessment and reconciliation with multiplicity.

One of the first approaches to synergetics as to social science which defines basic laws of society operation is the theory of global synergetic historicism[2]. The concept of social synergetics as postmodern philosophy of history represents the projection of basic synergetic notions as dissipation,
bifurcation, attractor on common picture of historic process. The results of such research extremely interesting: the role of driving progress factor performs social selection-choice out of vast amount of possible structures that takes place in consequence of system endeavour to maximum stability. The understanding of attractor in the application to society is original; in the society the attractor acts as utmost system state, a global superattractor, limit of mankind evolvement motion to which is not nonlinear and per se infinite as endeavour to a universal ideal. Thus the idea of global historic progress acquires clear synergetic form. The concept of global synergetic historicism has an important meaning for modern philosophy demonstrating an opportunity for new interpretation as the whole of historical process so moral postulate as the notion of superman theory is introduced – formation of superman, transformation of a human with comparative morality and freedom into a superman with absolute morality and freedom which embodies the endeavour of a human and society to superattractor and possible perspective of managing it.

The notion of attractor as invariant diversity, consequence of self-organization process can be made explicit in the most diverse way due to its multidimensional ambiguous nature what gives productive results at detailed philosophic analysis and allows to present attractor as valid philosophic category. In particular synergetic management theory offers understanding of attractor as a determinative essence true meaning of which lies in self-management and self-organization according to goals set. In the frames of management theory during research of some technical systems ideas of possible artificial construction of attractors, directions of process to change the structure of the system to the desired side are confirmed. This approach is used by the author in the cosmogonical concept[3],[4] based upon the Bible version of Genesis interpreted from the point of view of basic synergetic ideas. Attractor as a philosophical category represent fertile ground for humanitarian researches, for example, allows to assume that synergetic system model is a complex nonlinear process of essence appropriation in the scale of the universe.

Actual premise of emergence and wide spread of innovation per se is the synergetic nature of creative processes of modern science what stipulates the necessity of emergence of corresponding cross-disciplinary notions describing reality in the frames discourse set. Undoubtedly ambiguity in the solving of the query of revelation of conceptual innovation invariant properties in humanitarian knowledge lies in the absence of possible fixation of empiric result and difficulty of tracking of innovation emergence moment in the frames of elemental and spontaneous structural genesis. Nevertheless innovations are visible demonstration of fluctuating jump of modern knowledge what allows philosophers affirm the formation of new paradigm as a paradigm of innovative ideas which arise in intersection of different scientific directions and give radically changed view of common things.
References: