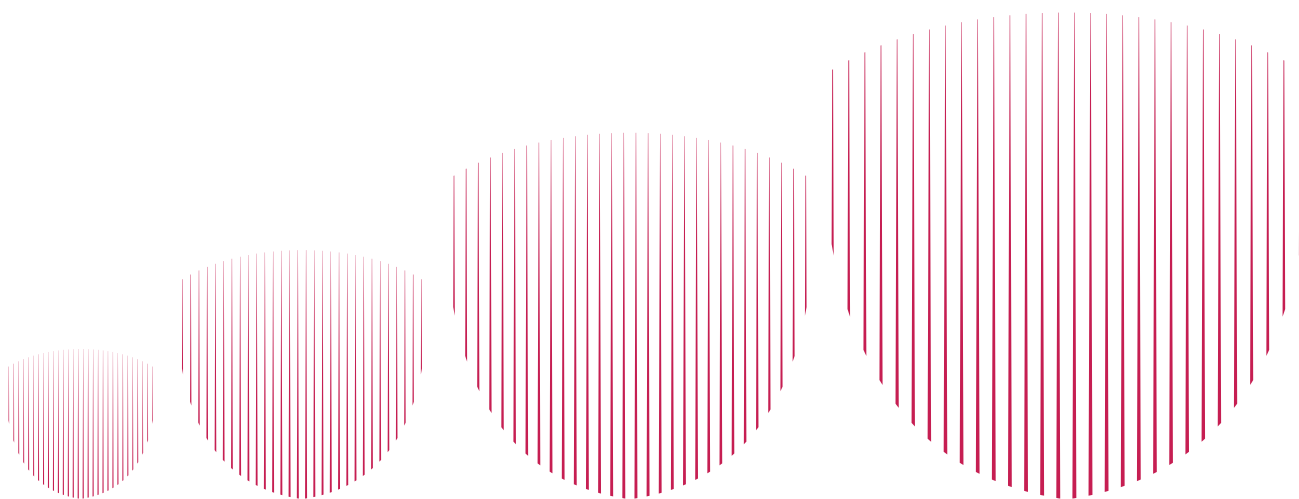


# INNOVATIONS IN SCIENCE

THE CHALLENGES OF OUR  
TIME  
Collective monograph



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VARNA FREE UNIVERSITY  
«CHERNORIZETS HRABAR»  
(BULGARIA)



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**INNOVATIONS IN SCIENCE:  
THE CHALLENGES OF OUR TIME**

*Collective monograph*

**Edited by  
Maryna Dei**

**2023**

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# ***PECULIARITIES OF THE METHODOLOGY FOR STUDYING SOCIAL, LEGAL AND HISTORICAL LEGAL SYSTEMS***

## ***INTRODUCTION***

In the context of the development of the national legal science (including the history of law and comparative history of law), the issues of legal research methodology are becoming increasingly important. This necessitates the use of modern approaches which may result in the acquisition of knowledge which would adequately reflect the entire “palette” of social, legal and historical and legal reality, and identify the common and distinctive features of national and European law from the historical perspective.

Such approaches should be based on the principles of research objectivity, social responsibility of scientists, and the diversity of methodological links between legal science and social sciences and humanities. One example of the use of an interdisciplinary approach is the “mastery” of the synergistic approach by legal science. It is fundamentally different in its content from the “traditional” approaches used in legal and historical and legal studies.

## ***STATUS OF SYNERGETICS: PROBLEMS OF DEFINITION***

As is well known, one of the founders of synergetics was I. Prigozhin and H. Haken. However, V.I. Arnold, M.V. Volkenstein, M. Moiseev, U. Maturana, F. Varela, E. Jancz, M. Feigenbaum, F.A. von Hayek, and a number of other scholars made a significant contribution to the development of this scientific field. All of these scholars differed in their approaches and subject areas of research, but they had one thing in common: the search for universal patterns of order emerging from chaos, the description of the causes and mechanisms of relatively stable structures and their disintegration.

The main provisions of the synergistic model of world building are as follows:

- existing systems are characterized by states of order and chaos;
- they are open, dynamic, constantly evolving, and their structural elements have the ability to co-evolve; such systems are characterized by processes of change of states and qualities, self-organization;
- they are open to external influences;
- fluctuations (deviations of various kinds) are important for self-organization processes, due to which the system becomes unstable;
- there are so-called bifurcation points (the moment of choosing a further path, it is characterized by irreversibility, unpredictability, randomness, and multivariance). Fluctuations can be of several types and lead to both the destruction of the system and the

formation of a completely new structure of this system. At the point of bifurcation, “processes of non-return” occur, and various components of the system move towards the attractor, i.e. the stable state of the system, through a “phase transition”.

According to scientists, synergetics at the current stage of development is a scientific picture of the world, an independent science, methodology, and interdisciplinary approach. As a science, synergetics studies the universal laws of emergence, existence, stability and evolution of dissipative structures that self-organize and arise in open systems of different nature in the course of irreversible processes; some scholars tend to consider synergetics as a general scientific or private scientific theory, scientific or methodological paradigm [1, p. 10; 2, p. 21; 3, pp. 146-148, 171; 4, p. 8; 5, pp. 38-39; 6, p. 5]. Such a variety of points of view on the status of synergetics proves that the latter is currently in the process of formation.

Scientists note the importance of synergetics as a methodology of postnonclassical science and its heuristic capabilities as an interdisciplinary approach; synergetics claims to be a general scientific approach, as it focuses on the study of self-organization processes, the transition from order to chaos and vice versa in complex systems of different nature (physical, chemical, biological, technical, social). As a method, synergetics studies the nature of systemic relationships between the structural elements of complex systems; it considers each object in formation, the mechanism of its development over time and describes it with a single system of concepts [7, p. 26; 8, p. 17; 9, p. 76].

However, it is worth outlining the limits of the synergetic approach. Like dialectics, synergetics studies the movement of matter, but, unlike dialectics, it is considered as a “system”; moreover, this movement is based not on cause and effect, but on chance. However, not all phenomena of the highly complex and contradictory real world can be represented as systemic formations.

Moreover, these “systems” must be open: they must exchange matter, energy, and information with the environment. These “systems” should also be quite complex, with a significant number of structural elements. It should also be emphasized that synergetics studies only one aspect of development - the self-organization of structures in a cyclic pattern: “order” - “chaos” - “order”.

### ***SOCIAL SYSTEMS AS AN OBJECT OF A SYNERGISTIC APPROACH***

According to a number of researchers, today there are processes of formation of one of the branches of synergetics - social, which reveals the universal mechanisms of self-organization as a process of evolution of order in social systems. In their study, the synergetic approach is aimed at finding general patterns of social self-organization, identifying the relationship between social order and chaos [10, p. 65; 11, p. 174].

The synergistic approach within the framework of social synergetics studies the social system as an object. However, the latter differs in its substantive characteristics from inanimate nature and biological systems: the functioning of social systems depends not

only on the self-organization of structural elements, but also on the conscious and volitional activity of a person as a phenomenon of historical and social reality. A person only partially influences the “movement” of the social system.

Thus, it is necessary to distinguish between self-organization and management activity, and the latter is the limit of the synergistic approach. Therefore, the peculiarity of using the synergetic approach in the study of social systems is to identify a specific type of self-organization patterns that differ from the patterns of self-organization in natural systems.

Obviously, the synergistic approach should serve not only for philosophical generalizations. It is important to emphasize its role in specific studies: on the use of social technologies in the processes of social self-organization, analysis of the problems of social reforms [12, p. 118 - 120; 13, p. 458 - 472], forecasting social crises and explosions, studying the “field” of trajectories of overcoming a possible crisis based on the analysis of the potential capabilities of elements that can be attractors.

There are certain developments in this area in Ukrainian science. In particular, L.D. Bevzenko considered the social bifurcation crisis in Ukraine, N.O. Omelchenko - the stages of social chaos in Ukraine, identified the determinants of optimizing the formation of a new social order in various spheres of life of Ukrainian society [1; 14].

However, the application of the synergistic approach in the study of social systems has a number of significant problems:

1. What do scholars mean by the concept of “social system” (“community”)? Researchers either avoid interpreting this concept altogether or there is uncertainty about it. For example, the social system is identified with society; the social community is organized within the state; it is people and relations between them; the social community (society) is characterized by the unity of living conditions in all respects and, as a result, is united by a common culture, etc. [14, p. 180; 10, p. 70; 15, p. 16]. Perhaps we can talk about a complex system with a sufficient number of elements for self-organization, and in the historical context it can be associated not only with the state period of development of human communities.

2. The key concepts of sociosynergetics are “social chaos” and “social order”; the problems of their mutual transition are considered, emphasis is placed on their synthesis [16, p. 4; 17, p. 31]. But the problems are a clear definition of the content of the concepts of “social substance, energy, information”, the concept of “environment” for a social system; identification of the mechanism of the said exchange between the system and the environment.

3. The statement about the “constructiveness” (birth of a new order) and “deconstructivism” (destruction of order) of social chaos is rather relative, because it should be verified by historical practice. For example, the great economic crisis of 1929-1932 led to the destruction of the “old order” in many countries (including the legal order), and it can be seen as chaos, from which the “new order” emerged.

The chaos can be recognized as constructive in the case of the American way out of the crisis (democratic legal traditions were preserved); but was the chaos constructive in the case of the German way? After all, the “new order” in Germany was aimed at the destruction of millions of people, its “activities” were one of the causes of the Second World War, etc.

Another example: the war of the conquistadors with the inhabitants of South and Central America (war, like crisis, is also a plunge into chaos); as a result, unique civilizations (as well as their “legal values”) were destroyed, the “new order” directed its efforts at turning Indians into slaves, creating a monstrous slave system of the Ancient Age during the Middle Ages. These examples demonstrate the need to “measure” the qualities of chaos by the universal values that have been formed over the long period of human history.

4. Finally, the problem of formalizing many concepts and factors of social evolution, the need to take into account socio-psychological, conscious-will factors (feelings, emotions, conscious actions, etc. of individuals, small social groups), many parameters of social models, different scales of the phenomena under consideration, the diversity of relations between elements of the social system, etc. is quite complex [18, p. 202, 213; 19, p. 57 - 58; 5, p. 68].

#### ***LEGAL PHENOMENA AS OBJECTS OF A SYNERGISTIC APPROACH***

The social system of society includes a number of subsystems, including the legal system, and it, in turn, includes legal phenomena, some of which can be represented as systems. Therefore, hypothetically, the synergistic approach can be applied to the study of legal systemic formations.

The legal scientific literature emphasizes the need for explication as a scientific theory of legal synergetics, which can play a direct methodological role in the study of specific elements of the objects of jurisprudence, the synergistic approach is understood as a reflection of the methodological role of synergetics in legal science, and the methodological importance of the synergistic approach in the study of legal phenomena is emphasized. At the same time, scientists rightly note that it is unacceptable to mechanically transfer the concepts and patterns of self-organization of physical, chemical, biological systems to legal systems, and there should be a creative understanding of the concepts of synergetics, their interpretation, and adaptation to describe legal phenomena [20, p. 123; 21, pp. 430-438; 22, p. 103].

Based on the above, it is important to identify those legal objects which can be studied by a synergistic approach. A number of scholars define such objects as the legal system, the mechanism of legal self-regulation and legal custom as its element, legal consciousness, collective forms of lawful behavior, legal practice, the system of law, legal relations, lawmaking, and legal culture.

At the same time, it is emphasized that the synergistic approach is limited or even inapplicable when studying such systems as positive law, legislation, sources (forms) of law

(except for legal custom), and legal institutions [23, pp. 89 - 107]. The first group of objects is characterized by such features as complexity, openness, and availability of internal resources for self-organization; the second group is dependent on regulatory influence, intervention of lawmaking entities and the State.

Therefore, the limit of the synergistic approach is the ability of systems to self-organize; closed systems (those that require organizational intervention from the outside) should be studied by other approaches, for example, systemic, system-functional, etc.

Given the peculiarities of the synergistic approach, we can distinguish the subject matter “field” that is formed as a result of the study of some systems of legal origin by this approach. At the fundamental level, this may include identification of the specificity of manifestations of the laws of self-organization in the legal sphere, and the peculiarities of implementation of the mechanism of legal self-organization as a result of mutual transitions of “legal order” and “legal chaos”.

However, the synergistic approach is also promising when conducting specific studies. In particular, such studies may include the study of the conceptual foundations of legal order, which includes elements of self-regulation of social relations; development of legal policy alternatives which would include foresight of various scenarios and the impact of external factors; development of an effective mechanism for overcoming normative disorganization; study of the impact of legal customs on the processes of self-regulation of social relations. The author also emphasizes the prospects of research of legal systems of “transitional type” and “transitional periods” in the development of the legal system [23, p. 109 - 117].

A number of researchers note that the synergistic approach also has heuristic possibilities when conducting comparative legal research. In particular, it can be aimed at identifying patterns, mechanisms, principles of evolution and self-organization of legal systems; in addition to the dialectical one, a synergistic logic of comparative legal research is formed, etc. [24, p. 150; 9, pp. 78 - 79].

The problems of applying the synergistic approach in the study of social systems have been emphasized above. They are explicitly present in the study of legal systems, but there are also “own” problems. They are as follows:

1. The meaning of the term “legal chaos” should be clearly understood. Yes, it can be a gross and systemic violation of human rights. But this can hardly apply to totalitarian regimes (Nazi Germany, the Bolshevik USSR in the 20s and 30s, the Pol Pot regime in Kampuchea, etc.): first, these violations are an inherent property of such regimes, and second, in the above-mentioned states, the legal systems were not in crisis, but in a state of order. Another thing is the periods of revolutions (the February Revolution in Russia in 1917, the Revolution in Germany in 1918, etc.) when the social system and its subsystems (including the legal system) were in a state of crisis and a new order was gradually being formed. The concept of “legal chaos” can also be understood as a significant increase in crime, regulatory disorder, etc.

2. The problem of the exchange of “legal information, substance and energy” between the legal system and the “environment” needs to be addressed. Perhaps, the latter can be understood as other subsystems of the social system, and according to some scholars - society. The legal system “receives” public demands from society, but it also actively influences its energy characteristics; perhaps, the legal system “transmits” a rule of conduct in the form of information to other subsystems and society.

Thus, there is an urgent need for research aimed at identifying “synergistic” relationships between the legal and economic, ideological, political, cultural, etc. systems, as well as solving the problem of synthesizing “legal order” and “legal chaos”, the relationship between non-heterogeneous processes in the legal system and entropic processes in other subsystems of the social system and society.

#### Synergy in the Study of Comparative Legal History.

One of the most important issues is to identify those objects of comparative legal history that can be studied by a synergistic approach. If synergetics focuses on the study of open, complex systems, then it is natural that such an object is a “historical and legal system”.

But what is the meaning of this concept? A number of researchers tend to present the entire historical process of development of human communities as a system at the global level, thus, the history of mankind is presented as an alternation of phases of order and chaos, as a process of self-organization [25; 2; 26, p. 5]. This interpretation of the historical process raises a number of questions.

First, what elements belong to such a “system”: socio-economic formations, civilizations, stages, or something else?

Secondly, in the general progress (the world-historical process), the uniqueness of the legal development of human communities, the uniqueness of their existence is lost.

Thirdly, how does such a “system” relate to irrational actions of people, individual historical phenomena and events?

Therefore, the answer to the question: what can be used as objects of comparative legal history that are studied by synergy, may be as follows. Throughout history, mankind has been trying to create proper living conditions (in some historical periods - survival) in the environment. To this end, humanity has created such a “phenomenon” of its own culture as law. Legal systems were formed on its basis. Provided that such legal systemic formations are open, complex, dissipative, and capable of self-organization, they can be considered as objects of study of the synergistic approach.

It is also worth emphasizing the following important aspect. Every legal historian (including a scholar who conducts research in the field of comparative legal history) operates with such categories as “time” and “movement”. They should be used in conducting specific comparative legal history research. That is why, without taking into account these categories, the above-mentioned systems can be considered only through the prism of the systemic approach (their qualitative substantive characteristics are revealed, the systems are represented in static), but not the synergistic approach.

Thus, we are talking about the dynamics, movement and development of these systems in the time plane, and the synergistic approach should aim at studying the system's mobility and dynamism. Only under this condition can these objects be interpreted as "historical and legal systems" (historical and legal system can be understood not only as a legal system which is "included" in the historical process, but also as a number of other legal system formations).

However, the synergistic approach is aimed at studying not the entire movement of the system, but a part of it - the transition-jump between the states of the system. The point is that a jump means revolutions, wars, social crises and riots (bifurcation), which result in dehierarchization of the system, search for a way out of chaos, self-organization of a new structure, and stabilization of the system due to the appearance of an attractor [27, p. 48].

For example, it is hardly possible to use a synergistic approach when studying the development of the legal system of Kievan Rus in the tenth - thirteenth centuries: the system developed linearly, objectively, and there were no deviations that could lead to the destruction of the system.

Another example is the period of the social revolution and the national liberation war of the Ukrainian people in the mid-thirteenth century (bifurcation point). As a result, a new state, the Hetmanate, emerged on the Ukrainian lands with a qualitatively new legal system (the old one was destroyed), and the legal consciousness of the Ukrainian people can be considered an attractor that "attracted" other structural elements of this system and ensured its stability.

Given the above, we can talk about the limits of the synergistic approach in the field of comparative legal history: first, the object of study should be only open, complex, dissipative historical and legal systems; second, the emphasis should be on the transition of these systems from one state (order) to another (chaos), and the process of self-organization of structures in the transition from chaos to order should be considered.

A number of researchers rightly emphasize the possibility of studying the nonlinear development of systems: random fluctuations occur at bifurcation points, and further development is unpredictable and multivariate. Moreover, it is not unreasonable to believe that such randomness is associated with a subjective factor: the role in the history of the individual [28, p. 208 - 209; 29, p. 98 - 99; 30, p. 24].

The activities of a number of historical figures suggest that this statement is true. For example, thanks to the perseverance, great efficiency, and talent of O. Cromwell, during one of the stages of the English bourgeois revolution of the mid-seventeenth century, an important historical and legal document - "Instruments of Government" (1653) - was adopted.

As a result, there was a redistribution of powers between state institutions: the executive branch, represented by the Lord Protector, received extraordinary powers; the principles of military organization were transferred to the administrative-territorial structure of the state; a dictatorship reigned in the country; the state and legal history of England changed (for a certain time, of course) the trajectory of its development.

Another example is the reformist activities of the archon Solon in ancient Athens (sixth century BC). At the time of the proclamation of legal reforms, the polis state was in a state of social crisis, which inevitably had to lead to a social explosion and civil war.

However, the compromise nature of the reforms of the prominent statesman, Solon, stopped such an explosion; however, the state, legal, and economic systems acquired qualitatively new features. It can be stated that there was a significant democratization of the Athenian state system, the state guaranteed the inviolability of the rights of Athenian citizens, debt slavery for Athenian citizens was abolished, the slave system existed at the expense of foreign slaves (mostly “barbarians”), etc. [31, c. 42].

The nonlinearity of the development of systems leads to the use of a synergistic approach within the framework of such a system. “alternative” history (“theoretical”, “historical mechanics”). It is based on the use of methods of “retroforesight”, mathematical and computer modeling, and counterfactual analysis.

According to the researchers, the emphasis should be placed not only on existing but also on unrealized potential scenarios; the influence of the future should be taken into account, possible alternative ways of further development should be compared with the present, past and unrealized past; evolutionary earlier processes should be considered in the light of evolutionary later ones, and the past should be viewed through the prism of the future; it is possible to develop “realistic strategies and diagnostics of utopias”. Alternative history draws attention to the prediction of trajectories of systems, historical nonlinear dynamics, the identification of possible paths of the historical process, and even the paradoxical influence of the future on the present [25, p. 54-58; 1, p. 129, 269; 32; 19, p. 25, 44; 2, p. 21-23].

It should be noted that it is within the framework of this approach that the history of law ceases to be descriptive and becomes subjunctive. The synergistic nonlinear model makes it possible not only to assert the existence of a “realized” historical and legal reality, but also to present an alternative “virtual” reality in an implicit form [33, p. 425]. At the same time, historical and legal systems are “located” in the space-time evolutionary plane, which is characterized by a high degree of diversification, and have both the existing evolution scenario and various options for evolutionary processes.

The scientific literature today already has a certain number of historical and historical and legal studies that use a synergistic approach. These are, for example, the works of A.O. Stepin (interpretation of the history of social development of Ukraine), I.S. Kryvtsova (similar and distinctive features of the mechanism of evolution of legal systems belonging to different legal families in the process of their development were identified), T.I. Bondaruk and I.V. Muzyky (a number of synergistic characteristics of the legal system of Byzantium were determined), L.A. Korunchak (the possibilities of a historical and synergistic view of the problem of formation of legal custom were clarified), etc. [34, pp. 22 - 27; 35, p. 30; 23, pp. 142 - 188; 36, p. 149; 37]. These works are a good example of the synergistic approach aimed at highlighting the already implemented evolution scenarios.

In light of the above, it is interesting to note the use of a synergistic approach by a group of scholars who explicate the alternative history of human communities. An analysis of their works allows us to identify important common features: first, all works are based on a synthesis of methods of natural, technical and social sciences and humanities; second, all historical processes are considered as nonlinear and dynamic, with options for their deployment in the future; third, the studies present an apparatus for mathematical and computer modeling of the evolution of human communities, using a number of logical and mathematical methods.

It should be noted that scientists emphasize the need to use mathematical methods and computer modeling and forecasting. It is emphasized that it becomes possible to study not only reality, but also situations of choice, bifurcation points of the historical process; recognition of multifactoriality, multiple aspects and global integrity of trends in a developing society and events that change each other involves computer-based solutions to the problems posed; synergistic methodology is genetically linked to mathematics [3, p. 148; 32].

At the same time, a number of scholars emphasize the need to limit the predictive capabilities of alternative history. In particular, it is emphasized that it is necessary to look for answers to the questions: "could events have developed in a different way?", but it is not necessary to describe what could have happened if events had unfolded in a different way; it is important to analyze why the choice was made in favor of this particular direction of development, etc.

The scientific literature raises the issue of defining the tasks of the synergistic approach, which also affects the formation of the subject field when it is applied, - the search for universal patterns of self-organization of systems or the study of specific historical situations at bifurcation points; there is an ongoing scientific discussion on the possibilities of applying this approach within the framework of national, world, universal, regional, civilizational history (including legal history) [38; 39, pp. 300 - 301].

Given the above, it is possible to define in basic terms the subject area which is formed as a result of the synergistic approach. It includes:

- first, to clarify the patterns and accidents of transitions of historical and legal systems from a state of order to chaos, as well as the patterns and features of self-organization of structures in the transition from chaos to order;
- secondly, it includes determining the influence of historical figures at the bifurcation points on the choice of a given scenario of system development;
- third, it is the development of alternative potentially positive options for the development of historical and legal systems in the future. In this case, the basis should be modeling of situations with the inclusion of the past, taking into account the impact of the future on the present.

It is worth emphasizing the problems that exist when using the synergistic approach

in these studies. These are:

1. The problem of the exchange of matter, information and energy between the “historical and legal system” and the “environment” needs to be solved, as a result of which the “system” becomes ordered; in the environment, the opposite processes of chaos occur. Suppose that such an environment for a system is another spatial system within the same time period.

For example, the barbaric Germanic states were formed on the wreckage of the Western Roman Empire, which was in crisis, and Germanic tribes contributed to its destruction; the original Cretan-Mycenaean states were destroyed by northern barbarian tribes that built their own states; large empires - British, Spanish, Russian, Austro-Hungarian, etc. - created colonies as a result of suppressing the aspirations of the local population for self-determination. So, the “synergistic scheme” can be applied (at least conditionally) to the events of the historical past, but the problematic issues of exchange, defining the content of the concepts of “substance”, “energy”, “information” in the historical context remain open.

The difficulty lies in some limitations of the use of mathematical methods. For example, scientists take into account only quantitative indicators of a relatively small group of historical and legal factors, and it is difficult to model legal culture, legal consciousness, legal psychology, etc. This is due to the fact that a human being, by virtue of his or her immanent nature, is the most unpredictable, not subject to mathematical and logical “synergistic measurements”, since in many cases he or she acts spontaneously and irrationally, especially in bifurcation periods.

2. Another problem (within the framework of alternative history) is that the scientist inevitably faces the need to study not only the actual evolutionary directions, but also the “mass” of more or less probable unrealized variants of system evolution [40, p. 258].

Of particular difficulty is “delving into the past centuries”, finding out the peculiarities of the legal mentality of various groups of people in relation to specific historical conditions of life, etc. That is, there is a possibility of “error” or “averaging” in the assessment of various specific data. One of the solutions to the problem is to introduce into scientific circulation and develop the concepts of “forecast horizon” and “limits of prediction” [19, p. 151], which make it possible to “cut off” unforeseen cases from actually predictable scenarios.

4. An important problem is the search for criteria to distinguish between objective and subjective factors that influenced the choice of this particular direction of development at the bifurcation point: whether it was a pattern or small deviations (the activities of a historical figure) that caused such a “turn of events”.

For example, few doubt F. Roosevelt’s significant contribution to the gradual overcoming of the crisis of the US state and legal system in the 1930s: his perseverance, determination, and creativity in decision-making made it possible to turn the tide. However, it can also be argued that all his activities as President of the United States were a natural result of a compromise between the two political parties, and that the way out of the crisis

was objectively determined by the active intervention of the state in economic processes, etc.

Another example is related to the activities of such a historical figure as King Alexander the Great. One can certainly say that his military talent, mobility, courage, will to win, and other character traits contributed to the construction of a huge Hellenistic state with a peculiar legal system. However, we can also emphasize the objective reasons for the victory of small Macedonia: the disunity of Greek city-polises, the obvious weakness of the Persian state, which was diverse in ethnic, economic, religious, state and legal aspects, etc.

5. Finally, it is necessary to emphasize a clear distinction between the self-organization of the structural elements of the system and their organization as a result of managerial and governmental intervention. For example, it is hardly fair to say that the legal system of Soviet Ukraine self-organized after the Bolshevik coup and civil war: the ordering of its subsystems (normative, ideological, institutional) took place under the absolute power intervention of the Bolshevik Party.

Another example is related to the destruction of the Western Roman Empire and its legal system; a number of barbarian states with specific legal systems emerged on its former territory. For example, the Frankish state emerged in Gaul, and its legal system was regulated by both government intervention and self-organization (social relations (especially in land and family law) were regulated by the ancient customs of the Salic Franks, and public self-government bodies continued to exist).

We can cite another example that already demonstrates the priority of self-organization in streamlining the system. For example, the fragmentation of Rus and the Batu invasion led to the destruction of the ancient Ukrainian legal system: western Ukrainian lands were captured by the Kingdom of Poland, while others were incorporated by the Grand Duchy of Lithuania.

While in the western Ukrainian lands the legal system was rebuilt according to the Polish model, in the "Lithuanian" part the ancient Ukrainian legal system was not destroyed for two reasons: first, the non-interference of Lithuanian princes in the legal life of the lands ("no new things, no old things") (i.e., the absence of administrative influence); second, the powerful influence of the "memory element" - legal custom. Social relations were regulated on the basis of legal customs formed "naturally" as a result of a set of folk ideas about lawful behavior, recorded in regional charters and implemented in folk courts. As a result, the ancient Ukrainian legal system was modified in a number of local legal systems (Volyn, Lutsk, Kyiv, etc.).

## ***CONCLUSIONS***

1. The analysis of the views of scientists allows us to assert that synergetics is considered as a scientific picture of the world, an independent science, methodology, interdisciplinary approach, private scientific theory, general scientific theory, scientific paradigm. Such a

variety of points of view on the status of synergetics proves that the latter is currently in a state of formation.

As a methodological approach, synergetics focuses on: 1) studying such an aspect of development as “self-organization”; 2) studying the self-organization of such a part of matter as systems of different nature that meet the criteria of complexity, openness, and dissipativity; 3) studying the self-organization of systems within the framework of the scheme: “order” - “chaos” - “order”.

2. The differences between social and natural systems determine the limits of the synergistic approach in the study of social systems: the organization of systems as a consequence of managerial influence is studied by other approaches. Therefore, its main task is to identify a peculiar type of patterns of social self-organization that differ from the patterns of self-organization in natural systems. When applying the synergistic approach, a number of problems arise that are related to a clear definition of the concepts of “social system”, “social energy, matter, information”; mutual transition of social order and chaos, constructiveness of social chaos, etc.

3. The synergistic approach has a number of heuristic possibilities in the study of some legal systems and, in general, focuses on identifying the specificity of manifestations of the laws of self-organization in the legal sphere, the peculiarities of implementation of the mechanism of legal self-organization as a consequence of mutual transitions of legal order and chaos.

However, its application is limited to the study of open systems only, and closed systems are studied within the framework of other approaches. Specific problems arising from the use of this approach are the definition of the concept of “legal chaos”, identification of the mechanism of exchange of “legal information, substance and energy” between the legal system and the “environment”, and the essence of the synthesis of legal order and chaos.

4. The synergistic approach has specific features in the study of historical and legal systems in the field of comparative legal history. They are due to two important factors: the limitation of the “historical plane” (the transitions (bifurcation point) of systems from order to chaos (wars, social revolutions, crises when structures collapse) and vice versa (processes of self-organization of structures based on a certain attractor) are studied; and the impact of fluctuations-deviations (activities of historical figures) on a particular scenario of “development of events” is identified.

Recognition of the non-linearity of the evolution of historical and legal systems leads to the perception of the view of comparative legal history as an alternative and multivariate process. This makes possible developments in the field of alternative comparative legal history: the search for alternative potentially positive options for the development of historical and legal systems in the future. In this case, the basis should be modeling of comparative situations with the inclusion of the past and taking into account the impact of the future on the present.

5. The application of the synergistic approach in comparative historical legal research, where historical and legal systems are the object, has a number of specific problems: identification of the essence of the exchange between the “historical and legal system” and the “environment” of substance, information, energy; limitation of the use of mathematical methods; search for criteria for distinguishing between objective and subjective factors which influenced the choice of this particular “scenario of events” at the bifurcation point; distinguishing between self-organization of the structural elements of the system and their organization.

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