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**Original Research Article**

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## **The System as a Socio-Cultural Phenomenon Philosophy of Management**

**Abstract:** *Introduction.* The relevance of the article topic is due to the fact that we live in a systemic revolution of society, its political, economic and social subsystems. The deep nature of the phenomenon of the system is not fully understood, and traditional management methods are unable to cope with the growing complexity, dynamism and systems instability. *Purpose and methods.* The purpose of the article is a theoretical analysis of the phenomenon of the system in the context of the system paradigm of management philosophy as a meta science, which allows to significantly expand the horizons of the managers vision of public organizations in terms of increasing international interdependence. The methodological basis of the study is the dialectical principle of cognition, systemic, historical, philosophical approaches to the study of organizational phenomena and processes in society. *Results.* The history of system ideas development has been investigated. The existing methodological approaches to defining the essence of the phenomenon “system” have been analyzed. The essence, role and significance of the system philosophy of management, its key aspects and worldview paradigms have been revealed. A conceptual approach to the typology of social systems has been proposed. The basic principles of construction and functioning of social systems in the context of the system philosophy of effective management aimed at preserving the integrity and viability of systems have been substantiated. *Conclusions.* The scientific novelty of the research results is the deepening of theoretical positions on the system and system

philosophy of management, the holistic view development of this complex organizational and philosophical problem and substantiation of approaches to solving its ontological, epistemological and value-semantic aspects. The practical significance of the obtained results is manifested in the possibility of their use in the management of social systems and in supplementing the general theory of systems and philosophy of management with new provisions on systemic as the basis of the modern concept in management.

**Keywords:** phenomenon system; management philosophy; systemic worldview paradigms; ontology, epistemology and axiology of social systems and management, society.

## 1. Introduction

**The problem formulation.** In different spheres of human life (economic, political, socio-cultural) each of us has to deal with different objects, the need to study them, manage them, to develop an idea of how these objects are arranged and function, to accept related management decisions. Appropriate methods are used for this, the key word in the name of which is often the word “system”. This means that this term is obviously a developed methodological tradition that characterizes an effective style of thinking. These are such concepts and scientific concepts as “general systems theory”, “systems approach”, “systems analysis”, “systems synthesis”, “systems modeling”, “synergetic” and others. Regarding the significance and role of these concepts, defining their content, areas of application of relevant concepts and methods in management, there are very different points of view: from giving them priority to statements about their triviality and even practical uselessness, and sometimes to doubts about their existence. Therefore, without claiming to be indisputable and even more so to complete the consideration of this problem, we will try to clarify the essence of these concepts and analyze the history of systemic ideas, revealing the side of their content, which seems useful given the management of social organizations in today’s super-dynamic, unstable world.

**State study of the problem.** The formation of the methodological foundations of the systemic approach, as a vision of the world in the form of the integrity of interconnected elements, began in antiquity and was carried out throughout the society history, the human culture evolution, practice and thinking. This was due to the person’s penetration, in the course of the world’s knowledge around him or her, in the internal structure of things and phenomena; as a result of mental activity, when the whole was decomposed into parts and, conversely, the union of its parts; in the course of practical human activity to create a whole from several parts, as well as the division of the whole into parts. Breaking, crushing, breaking, the person each time revealed loss of integrity and necessity

of application of the system approach. Our philosophical and historical analysis has identified five stages in the systemic ideas development.

The first stage covers the Ancient period of human history. At its core, first of all, are holistic mythological ideas of man of all things, which were later transformed into ancient Eastern (especially Chinese) and ancient (Greco-Roman) philosophy. The thinkers' ideas of this time are fundamental in the formation of a systems approach, but they are very fragmented and mostly intuitive. So, in particular, interesting are: Anaxagoras' two statements (5th cent. BC) that "everything is in everything" and "from everything is everything" (p. 238); doctrine Confucius (5th cent. BC), Heraclitus (5th cent. BC), Lao Tzu (5th cent. BC) and Plato (4th cent. BC) about space, world order, the general organization of the universe; Aristotle's use (4th cent. BC) and Epicurus (3th cent. BC) properties of the system for systematization and organization of ancient knowledge; proposed by Democritus (4th cent. BC) atomistic system of explaining the nature of all things, the elements of which are atoms and emptiness; geocentric system of the universe Ptolemy (2th cent. AD). The term "whole" was used mainly in ancient times, so in view of this Cicero (1th cent. BC) constantly emphasized that "the world organism is an inseparable whole and all elements of the universe are harmoniously interconnected" (p. 85). All these and other ideas of ancient philosophers in their infancy correlate with systemic laws, which were formulated much later.

The second stage of the system approach formation falls on the Middle Ages. The European philosophy of this historical period (patristic and scholastic), which was inseparable from Christian dogma, has done considerable work on the further formation of a systemic worldview. Exhausting intellectual disputes of the holy fathers of the church, theologians and philosophers – A. Augustinus (398), A. Boethius (524), J. Damascus (753), A. Magnus (1240), Th. Aquinas (1273), W. Ockham (1347), their attempt to systematize Christian doctrine and combine it with certain provisions of ancient philosophy, greatly contributed to the definition of such important categories as "whole", "part" and epistemological understanding of the universality of the phenomenon of integrity.

The third stage of the systemic thinking formation was realized in the Renaissance, when the ideas of systemic were particularly intensive development. The worldview of a person's holistic perception of reality is beginning to be revived on a new basis. The unity and integrity of nature is the main thesis of the philosophical constructions of this beautiful era. Thus, N. Cusa (1440) in considering the problems of the world order, applying some elements of a systemic approach, substantiated the doctrine of the Divine unity of all parts in the universe. L. da Vinci (1503) belonged to the first attempts to use mo-

deling in cognitive and practical activities as a scientific way of reflecting systems of different nature. N. Copernicus (1543), denying Ptolemy's geocentric concept of world order, offered humanity a heliocentric system, which acquired theoretical development in the works J. Kepler (1596), G. Galilei (1598), G. Bruno (1600) and others scientists. The ideas of systematization are also used in works Th. More (1516) and T. Campanella (1602) in substantiating the options for a just welfare state.

The fourth stage unfolds in the New Age. Thinkers of that historical period tried to tie the concept of "system" to a certain field of knowledge. Thus, F. Bacon (1620) proposed a system of cognition, which is based on experience (experiment) and induction (mind). R. Descartes (1637), on the contrary, in his system of cognition the mind came first, and the role of experience or experiment was reduced to a simple test of the inferences of the intellect. G. Leibniz (1685) substantiated the system called substantial pluralism or monadology. I. Kant (1781) can be considered the creator of two systems: philosophical (German classical) – using the system concept in the epistemological sense and understanding it as the unity of various knowledge related to the general idea; cosmological – applying the system concept in the ontological sense to the objects of the universe. J. Fichte (1804) developed a theoretical system of the science about science, but reduced it to a systematic form, not content. In G. Hegel (1812) the system was not the subject of special consideration. However, each thing and phenomenon to which he addressed, he revealed as an organic whole, which developed and went through certain stages of life.

In the New Age, the "system" concept is also beginning to be actively used to characterize society. Th. Hobbes (1651) considered society as a physical system, and H. Saint-Simon (1825) and R. Owen (1851) – as a system, which was built on the equality and justice principles. However, for the first time the term "social system" was introduced into scientific circulation by A. Comte (1863). He laid down the methodological prerequisites for its functioning and development, proved the inalienability of hierarchies in social systems and the unnaturalness of the social equality idea. H. Spencer (1864) considered society through the prism of an organic approach, according to which society was a specific organism that differed from the ordinary organism in its discreteness. The systemic vision of society is also characteristic of the founders of Marxism. Thus, K. Marx (1867) considered society as a material formation, the form of the system (socio-economic formation) which at each subsequent historical stage changed depending on the mode of production. Based on this approach, F. Engels (1878) proclaimed the most important principles of the systemic worldview: the objective world's idea as an infinitely

large, eternal, self-developing system; the presence of a general relationship and organization at the level of nature and society; consideration of interaction on the basis of mechanisms of attraction and elements repulsion; provisions on the circulation of matter and the critical points at which the reconstruction of objects and their transition from one quality to another.

The fifth stage of development of the system approach ideas falls on the XX and the beginning of the XXI century, i.e. on the Modern time in the human history. This period is characterized by theorizing of these ideas, the creation of the first scientific systems theories, the large-scale spread of a systems approach to all areas of knowledge and practice, the acquisition of the status of a general worldview, which is used by experts in all spheres of society.

Systemic ideas have existed for a long time, mostly in the form of the eternal philosophical category of the whole. However, the first version of the general theory of systems was proposed only in the early twentieth century by Russian scientist A. Bogdanov (1922) in the form of the doctrine of Tectology as a science of organization of systems of any nature. He believed that in the world there is a relentless struggle of organizational forms, in which more organized forms win, because an organized system is always greater than the sum of its components, and disorganized is always less than this amount. Therefore, the task of tectology is the best organization of systems.

The published ideas of A. Bogdanov on tectology were acquainted by the Austrian scientist L. von Bertalanffy (1945, 1950, 1951, 1968, 1976), who created a second version of the general theory of systems, laying the foundations of organism. The scientist's ideas became widespread in the West. However, there was one shortcoming in his understanding of general systems theory, which was that he considered it as one that could replace philosophy (Bertalanffy, 1976). This conclusion is now considered erroneous, because the study of complex systems forces the use of qualitative analysis, the means of which is possessed by philosophy.

Further development of the systems approach ideas led to the emergence of several variants of the general theory of systems; there was scientific knowledge that explained certain systems aspects, formed theoretical developments about systems of different nature. In the former Soviet Union, the systems theory ideas were developed by scientists such as V. Afanasyev (1964, 1980, 1981), V. Glushkov (1964), M. Setrov (1971, 1972), I. Blauberg (1973), V. Sadovskii (1974), A. Rakitov (1977), E. Yudin (1978), A. Uyomov (1978), G. Shchedrovitckii (1981), V. Tyukhtin (1988a, 1988b) and others. In the West, systems theory was studied by N. Wiener (1948), T. Parsons (1951, 1977), W. Ashby (1956), M. Mesarovic (1960, 1964), O. Lange (1970), R. Ackoff

(1974a, 1974b), M. Mesarovic and Y. Takahara (1975), G. Nicolis and I. Prigogine (1977), A. Rapoport (1986), I. Prigogine (1991) and others.

Today the world has accumulated a huge number of publications on the problems of systems theory and systems approach. We can talk about a significant renewal of systemic ideas of various kinds of synergetic and philosophical concepts associated with the works E. Yudin (1997), I. Prigogine and D. Kondepudi (1998), V. Vasilkova (1999), I. Prigogine (2000), I. Prangishvili (2000), V. Spitsnadel (2000), A. Uyomov (2000), V. Bransky and S. Pozharsky (2002), S. Kapitsa, S. Kurdyumov and G. Malinetskiy (2003), E. Knyazeva and S. Kurdyumov (2005), D. Gvishiani (2007), T. Gataullin and V. Malykhin (2007), S. Chernogor (2008), M. Shagiakhmetov (2009), F. Tarasenko (2010), H. Haken (2004, 2006, 2012), K. Mainzer (2007, 2017), G. Malinetskiy (2017), D. Trubetskov (2018) and many other scientists.

**Unresolved issues.** Despite the long history of the phenomenon of systems in society and the presence of a large number of fundamental scientific works on systems theory and systems analysis, this problem remains a lot of questions, the answers to which are either not, or if they are, they are contradictory or unconvincing. This is especially true of social systems and their management. There is no unambiguous and clear definition of “system”, “social system”, which creates some difficulties in understanding and identifying them, and the consistent use in its pure form of existing scientific management theories on the organization of social systems leads to some methodological impasse, in terms of a holistic problem. Therefore, objectively there is an urgent need to apply a philosophical approach, which will expand the possibilities of vision. However, the issues of system philosophy in management are very poorly covered in the scientific literature, which, in turn, also requires appropriate research. Also it still remains unresolved issues related to the modern typology development of social systems, justification of the principles of their construction and operation in new conditions. The relevance and importance of solving these issues have determined the purpose and objectives of this study.

## **2. Purpose and methods**

**The purpose of the article** is to carry out a theoretical analysis of the phenomenon of the system in the context of the system paradigm of management philosophy as a Meta science, which allows to significantly expanding the horizons of managers of public organizations, especially today, in terms of international interdependence in world society.

Achieving this goal involves solving such problems:

- to study the history of system ideas development, system vision of the world, system culture, system philosophy, system practice and system human thinking;
- to analyze the existing methodological approaches to defining the essence of the phenomenon “system”, its evolution, content, volume, characteristics and place in the conceptual apparatus of the philosophy of management;
- to reveal the essence, role and significance of the system philosophy of management, its key aspects and worldview paradigms, in the conditions of growing complexity of social systems, dynamism and uncertainty of the environment;
- to develop a conceptual approach to the typology of systems and to make a modern classification of social systems, to determine their organizational and managerial characteristics and areas of application;
- substantiate the basic principles of construction and functioning of social systems in the context of a systemic philosophy of effective management aimed at preserving the integrity and viability of social systems in a hypercompetitive environment.

**The methodological basis of the study** is the dialectical principle of cognition, systemic, historical, philosophical approaches to the study of organizational phenomena and processes in society. Based on the dialectical principle of cognition, the social system and its management are considered in the process of constant development, transformation and relationship with other systems of society. Emphasis is placed on the fact that the social system is a contradictory unity of different opposites: order and chaos, organization and disorganization, hierarchy and non-hierarchy, youth and old age, flexibility and rigidity, the interests of the system as a whole, its individual parts and the external environment. All these and other opposites interpenetrate each other, being at the same time in a state of unity and struggle. The unity of opposites means that they are interdependent, and the struggle means that they are mutually exclusive. Their collision and mutual struggle are a source of change, development and the system self-development. The struggle of opposing forces eventually leads to the resolution of contradictions, which is a transition to a qualitatively new state of the system and management philosophy.

The phenomenon of the system and the philosophy of management are studied from the standpoint of a systems approach, according to which the social system is a complex, open, dynamic, stochastic complex consisting of a set of interconnected and interacting subsystems and elements united by a common goal. Management is the governing subsystem of the social system – it is usually the main management force of the system. Other management forces are self-

organization of managed subsystems and system elements, as well as an external source of system managing. The system approach involves a systematic representation of the object and subject of managing, a systematic understanding of managing processes and the use of a systematic method of managing.

The historical approach allows studying the origin, formation and development of social systems and system philosophy of management in chronological sequence in order to identify their relationships, patterns and contradictions, better understand their essence and anticipate possible trends in the future.

The use of a philosophical approach to the formation and functioning of social systems and their management, allows developing a holistic view of this complex organizational problem and comprehensively exploring the ontological, epistemological and axiological aspects of the relationship between the governing and managed subsystems of the social system.

**Research methods.** The following general and special methods were used in the research process: contextual-analytical is to study and generalize the existing theoretical provisions on the research problem; terminological is when clarifying the content and scope of the “system” concept; phenomenological is to reveal the essence of the system as a universal phenomenon of management philosophy; classification is during the development of the typology of social systems; comparative is used when comparing different types of social systems, establishing their similarities and differences; structural-functional is in substantiating the initial basic principles of construction and operation of social systems in the context of the system philosophy of effective management; modeling is to predict possible trends in the social systems development and their management in the future; observation is when collecting empirical data about the research object; abstraction is in order to highlight the essential properties of social systems, system management and distraction from the secondary; analysis and synthesis are in-depth study of the nature of social systems, structures and mechanisms of their management; theoretical generalization is to summarize.

**Research information base.** The information base of the study consists of scientific works of the most famous domestic and foreign scientists on systems theory and systems analysis, theory of social organizations, management theory, cybernetics, synergetic, philosophy of systems management. As an empirical substantiation of the main conceptual provisions of the phenomenon of the system, the results of the authors' own research were used, which were obtained on the basis of studying the organizational reality of construction and functioning of various types of social systems. The chronological boundaries of the study cover all historical periods of society with special emphasis on the present, and the territorial boundaries are the whole world.



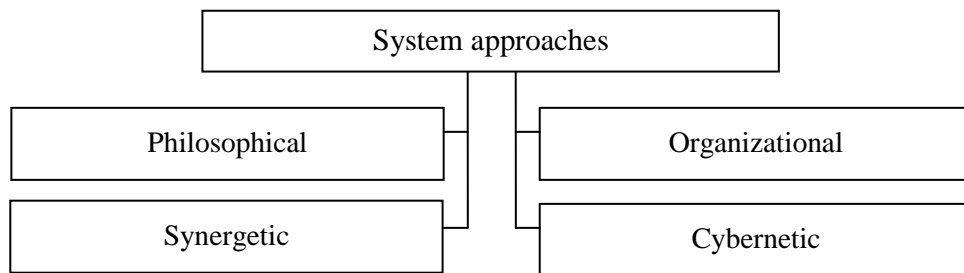
### **3. Results and discussion**

Modern philosophy of management requires a clear definition of the phenomenon of “system”. This is not easy to do, because this concept is the most universal definition. It is used in relation to a variety of objects, phenomena and processes of nature and society. Analysis of the diversity of use of the “system” concept shows that it has ancient roots and plays a very important role in the management culture, acts as an integrator of scientific knowledge, a means of understanding all things. However, this concept is ambiguous and not rigid, which makes it extremely creative.

#### **3.1. Philosophical and scientific approaches to determine the essence of the phenomenon of “system”**

Science makes very high demands on terms and the categories and concepts they denote, demanding clarity and unambiguity of their formulation. Unambiguity and clarity of definitions contributes to the clarity of understanding of certain things, phenomena and processes of the world, their identification features and differences from other concepts. However, no one has yet been able to fully solve this problem with regard to the “system” concept. Despite the huge array of developments in systems theory, today there is no single common definition of the “system” concept, there is ambiguity in the wording and differences in understanding of this key concept. Given this, we can identify the following approaches to the interpretation of the phenomenon of “system” (*Figure 1*):

1. *Philosophical approach*. This approach has the longest history of its existence. A characteristic feature of the philosophical approach since Ancient times (Anaxagoras, 5th cent. BC; Heraclitus, 5th cent. BC; Lao Tzu, 5th cent. BC; Plato, 4th cent. BC; Aristotle, 4th cent. BC; Democritus, 4th cent. BC; Epicurus, 3th cent. BC; Cicero, 1st cent. BC), during the Middle Ages (Augustinus, 398; Boethius, 524; Damascus, 753; Magnus, 1240; Aquinas, 1273; Ockham, 1347), Renaissance period (Cusa, 1440; Vinci, 1503; Copernicus, 1543; Kepler, 1596; Galilei, 1598; Bruno, 1600; More, 1516; Campanella, 1602), New time (Bacon, 1620; Descartes, 1637; Leibniz, 1685; Kant, 1781; Fichte, 1804; Hegel, 1812; Hobbes, 1651; Comte, 1863; Marx, 1867; Engels, 1878) and to this day – Modern times (Laszlo, 1972; Rakitov, 1977; Afanasyev, 1980; Shchedrovitckii, 1981; Uyomov, 2000; Gvishiani, 2007; Shagiakhmetov, 2009; Martynyshyn & Kovalenko, 2016, 2017, 2018), there is that the definition of the phenomenon of the system is based on the original philosophical categories of “whole” and “integrity” and the epistemological chain of derived categories: “thing is property is relationship”.



**Figure 1.** Approaches to defining the essence of the phenomenon “system”  
Source: own development

In this regard, Viktor Afanasyev (1980) noted that the whole or integral system was a set of objects, the interaction of which determines the presence of new integral qualities that are not inherent in these objects. He emphasized that a holistic system was a system in which the internal connections of the parts were predominant in relation to the movement of these parts and to the external influence on them (pp. 24-26).

2. *The organizational approach* emerged in the early twentieth century and has been successfully established in management to this day. However, during this not very long period of time he acquired many different interpretations.

The founder of the organizational system approach in Russia Alexander Bogdanov (1922) understood the system (“complex”) as many components, with certain relations between them, related to the development cycles and degradation, which are due to organization and disorganization.

The founder of the organizational system approach in the West Ludwig von Bertalanffy (1945; 1950; 1951; 1968) considered the system as a set of interacting elements, emphasizing not that the system consists of parts, but that the behavior and properties of the system are determined by the interaction of its parts. However, the approach to the object as a complex of interacting parts does not exhaust the understanding of the system. There are other characteristics.

Talcott Parsons (1951, 1977), Mikhail Setrov (1971), Igor Blauberger (1973), Vadim Sadovskii (1974), Russell Ackoff (1974b), Erik Yudin (1978) included in the “system” definition such features as: interconnectedness of system elements; unity of the system with the environment; the system is an element of a higher order system; elements of the system are elements of lower order. These features of the system focus the system approach not only on the analysis of the elements unity, but also on the consideration of the inclusion of the system in the environment and interaction with it.

Yuri Chernyak (1975), Leonid Petrushenko (1975), Viktor Tyukhtin (1988) meant a system as a set of interconnected components of a nature, organized by relations that had certain properties. The organization is considered in two aspects: as a property of matter, and as a product of human activity.

Well-known scientist in the field of systems theory Ivan Drohobytsky (2017, pp. 44-45) gives several definitions of the system, one part of which relates to the organizational approach, and the other is to the philosophical: “A system is a set of elements that are in relationships and connections with each other and form a certain unity”; “The system is a special organization of specialized elements combined to solve a specific problem”; “A system is an entity that, as a result of the interaction of its parts, can maintain its existence and function as a whole”; “The system is a philosophical category that characterizes the organization of matter and the spiritual world”.

3. *The cybernetic approach* originated in the middle of the twentieth century. Its founder is considered to be an American mathematician Norbert Wiener (1948). Representatives of this approach define the “system” concept based on the formal (mathematical) representation of systems and their components using the concepts of “input” and “output”, which characterize the relationship of elements with the environment (Ashby, 1956; Mesarovic, 1960, 1964; Glushkov, 1964; Lange, 1970; Mesarovic & Takahara, 1975; Rapoport, 1986; Drohobytsky, 2018). Cybernetics considers the system as a unity of control and managed elements, interconnected by direct and feedback. The basis of the system, according to the cybernetic approach, is the information that is perceived and processed by the system into control impulses.

4. *Synergetic approach* before the definition of “system” appeared in the late twentieth century. It is believed that the founder of this approach is a German physicist Hermann Haken (1977), who was the first to introduce the term “synergetic”, although the origins of synergetic theory arose much earlier. For example, they are seen in “Tectology” by Alexander Bogdanov (1922), when he concluded that an organized system was always greater than the sum of its components, etc. In general, synergetic and the synergetic approach to defining the essence of the system phenomenon arose as a reaction to the failure of pure organizational and cybernetic approaches in the face of a sharp change in the characteristics of the system environment, increasing its instability, uncertainty and dynamism, often called turbulence. This is especially true of social systems, and less so of technical ones.

The development of synergetic ideas about the system can be traced in the works I. Prigogine (1991, 2000), I. Prigogine and D. Kondepudi (1998), V. Vasilkova (1999), I. Prangishvili (2000), V. Spitsnadel (2000), V. Bransky

and S. Pozharsky (2002), S. Kapitsa, S. Kurdyumov and G. Malinetskiy (2003), E. Knyazeva and S. Kurdyumov (2005), T. Gataullin and V. Malykhin (2007), S. Chernogor (2008), F. Tarasenko (2010), H. Haken (2004, 2006, 2012), K. Mainzer (2007, 2017), G. Malinetskii (2017), D. Trubetskov (2018) and others. The analysis of various interpretations of the system phenomenon, which are given in these works, allows us to identify such characteristic features of a synergistic understanding of the “system” concept, different from purely organizational and cybernetic approaches:

1) any system (primarily social) is an open system that exchanges (energy, information, matter) with the external environment (except for some technical systems that are isolated from the outside world);

2) the system can acquire properties that none of its elements has and be considered not only from the standpoint of hierarchy, but also its absence, i.e. from the standpoint of non-hierarchy is network;

3) in addition to external managing influence and influence from the system management, the system may be even more significant, internal influence in the form of self-organization of its elements, which occurs due to the openness of the system;

4) in the system, in addition to linear (deterministic) processes, there may be nonlinear (stochastic) processes, which are predominant in social systems, so such systems are called dissipative, i.e. those that are constantly in a state of imbalances;

5) provided that the predominant external management impact and (or) influence from the management of the system, random deviations (fluctuations) are suppressed by negative feedback, which ensures the preservation of the structure and balance of the system;

6) in the case of significant energy loss, the symmetry of the system is disturbed, its order, and, as a reaction to this, there is a self-organization of the elements of the system, which contributes to the inflow of energy from the environment;

7) with the predominance of self-organization over the external managerial influence and (or) management of the system, fluctuations are no longer suppressed, but, conversely, accumulate in the system, increasing its imbalance, which with the help of positive feedback eventually leads to the violation of the old order, the destruction of the existing structure, or to the emergence of a new order, a new structure and new properties of the system or even the emergence of a completely different, new system.

Against the background of the instability of the civilization current state, a synergetic approach to defining the system as a universal phenomenon of

managing seems the most acceptable among other approaches. It acquires special significance today, as modern society and all its organizational subsystems are in a state of bifurcation, uncertainty and continuous chaotic fluctuations in the direction of finding the optimal attractor of further existence. At the same time, this does not exclude the expediency of using other approaches, depending on certain tasks that may be faced by the researcher or manager-practitioner.

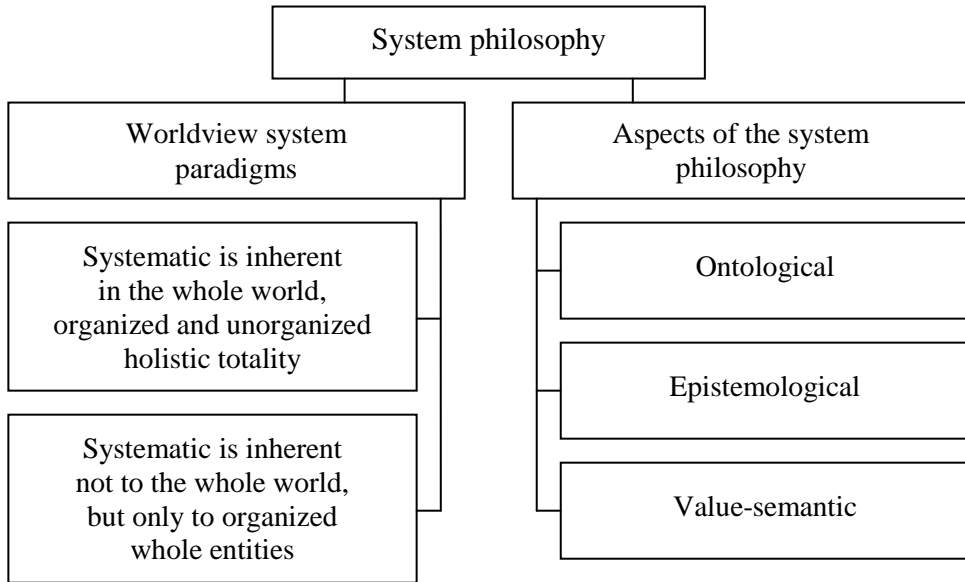
Despite the fact that today there is no single view on the understanding of the “system” concept, there is no single scientific language on this issue, but we can talk about the existence of a system methodology, the use of which allows to more successfully solve various, often very complex problems, industries (industry, energy, transport, agriculture), in scientific, cultural, political and other spheres of society.

### **3.2. System philosophy of management: key aspects and worldviews paradigms**

The phenomenon of the system and its derivatives – system paradigm, systems thinking, general systems theory, theory of organization, systems approach, systems analysis, systems synthesis, systems modeling, applied systems analysis, cybernetics, synergetic, now occupy a key place in management and its philosophy. The main philosophical question of systems philosophy, the founders of which are considered to be Ervin Laszlo (1972) and Ludwig von Bertalanffy (1976), is the question of systemic: systemic is inherent in all objects of nature and society, or not? Depending on the answer to this question, all scientists are divided into two groups. Accordingly, there are two opposing worldview paradigms regarding the systemic nature of the world. The first recognizes systemic as an objective property of all things, as the most important characteristic of matter (Bogdanov, 1922; Laszlo, 1972; Bertalanffy, 1976; Afanasyev, 1980; Tyukhtin, 1988a; Uyomov, 2000; Gvishiani, 2007; Shagiakhmetov, 2009). Another paradigm emphasizes that systemic is not inherent in all objects of nature and society, because there are disorganized, chaotic aggregates (Setrov, 1971; Blaumberg, 1973; Sadovskii, 1974; Petrushenko, 1975; Yudin, 1978; Rapoport, 1986; Tarasenko, 2010) (*Figure 2*).

We adhere to the first worldview paradigm and also believe that systemic is an objective property of the world. It is inherent in both organized (orderly) and unorganized (chaotic) whole sets. In this case, the organization and disorganization of the object, due to the limited cognitive abilities of the observer, can be incorrectly identified. Often, precisely because of this, the visible imaginary chaos (disorganization) of the object, in fact, is a higher level of its orderliness (organization), unknown to the management subject. Although,

at the same time, there are really a lot of disorganized objects (perhaps even more than organized), with weak connections between elements, unknown patterns, different backgrounds and noises, especially in society, which are integral aggregates and which are also characterized by systemic.



**Figure 2.** The structure of the system of management philosophy  
 Source: developed on the basis of (Laszlo, 1972; Blauberger, 1973; Sadovskii, 1974; Bertalanffy, 1976; Kovalenko, 2017a; Martynyshyn & Kovalenko, 2017)

The next position, which, in our opinion, should focus on the philosophy of management, is that the system as such does not really exist, but there are real objects (objects, processes, phenomena) of nature and society. Then, based on the previous one, the question arises, what is the difference between the concepts of “system” and “object”? It would seem no. However, the system is not an object or a thing. It is something complex, interconnected with a specific object in the self-propelled barge. We believe that the phenomenon of “system”, being a philosophical category, in contrast to the “object” concept (object, process, phenomenon), reflects not the whole object, which is an organic unity of content and form of the object, but only its shape, appearance, outline.

The system is a form of expression of the object content, its internal and external organization, a way of life that has a certain certainty, stability and independence. As a form of an object, it is inextricably linked with its

content and through it with the object essence, process, and phenomenon. In this case, the decisive role in the relationship between content and system, as a form of object, is played by content. It is the leading party in the unity of the system and the content of the object. The change and development of an object affects, first of all, the content, with the change of which the system as a form of the object also changes. The very change of content is the result of internal contradictions (Martynyshyn & Kovalenko, 2018b).

Content, changing, alters the system. The dominant role of content is evidenced by the entire development of social life. However, the system, as a form of existence of an object, is not something passive in terms of content. Its transformations, in turn, affect the object content. In this regard, it is worth recalling the positive and negative experience of improving the organizational forms of society. He shows, on the one hand, that the restructuring of the system should not be an end in itself, which leads to bureaucratization and formalism. On the other hand, this experience shows that systems, as forms of existence of different social objects, are too diverse. Often the same content of social organization (political, economic, and social) is manifested in different systems. Therefore, it is necessary to fight against the fetishization of outdated systems, to introduce new systems that life requires, to skillfully combine new systems with those that have not yet exhausted themselves.

We have considered the ontological aspect of systemic dimension, which indicates that systemic dimension is a form of existence of the world, the existence of its various objects. We have considered the ontological aspect of systemic, which indicates that systemic, is a form of existence of the world, the existence of its various objects. Other important positions, which should also focus on the philosophy of management is the epistemological and value-semantic aspects of the phenomenon of “system” and systemic world.

The epistemological aspect emphasizes to us that systemic is, first of all, a property of the subject of cognition. This aspect of systems philosophy suggests that the objects of nature and society are as they really are, and systemic is only a way of seeing and knowing them. Thus, from the point of epistemology view, systemic is a certain cognitive procedure, a way of rational thinking and a direction of research methodology, which consists in cognition of any object (subject, process, phenomenon) as a system is a whole set of elements, relations and connections between them.

The value-semantic aspect of systemic, in turn, indicates that the system, especially social, is a kind of reflection or external expression of the internal meaning and value orientations of the social organization as a managing object. Accuracy of the true values definition and senses gives the chance to develop

correctly mission (the program statement, philosophy) and to formulate the strategic purposes of the public organization, to adjust system of the organization on their realization. And this, in turn, is a solid basis for the formation of adequate mechanisms for management and self-organization of the managing object.

### **3.3. Typology of social systems and their organizational and managerial characteristics**

All known systems are divided into classes on various grounds. Since the subject of our study is still the phenomenon of systems not in general, but in management, which deals exclusively with social systems, we will focus on the typology of systems in this class.

The typology of systems is a rather complex problem that has not yet been definitively solved by science. One of the first attempts to create the most general typology of systems belongs to Alexander Bogdanov (1922). He divides all possible systems into organized and unorganized (p. 69), based primarily on the organizational understanding of the system essence.

Today there are a variety of typologies of social systems based not only on organizational (Setrov, 1971; Blauberger, 1973; Sadovskii, 1974; Ackoff, 1974b; Yudin, 1978; Tyukhtin, 1988a), but also on all the other approaches we have singled out: philosophical (Comte, 1863; Marx, 1867; Engels, 1878; Laszlo, 1972; Afanasyev, 1980; Gvishiani, 2007; Shagiakhmetov, 2009), cybernetic (Glushkov, 1964; Lange, 1970; Mesarovic & Takahara, 1975; Rapoport, 1986; Drohobytsky, 2018) and synergistic (Spitcnadel, 2000; Knyazeva & Kurdyumov, 2005; Chernogor, 2008; Mainzer, 2017; Trubetskov, 2018) approaches. All these classifications are very different. It is difficult to bring them together, to some common vision. In our opinion, the classification proposed by Yelena Kovalenko (2017b), in which various variations of systems are maximally integrated, seems to be quite successful. However, this scientist ties the construction of the classification as much as possible to the specific subject of his research. Based on Ye. Kovalenko' methodological approach, let's try to modernize its classification schemes, in accordance with the objectives of our study.

First of all, let us highlight those characteristics of social systems that are non-alternative and therefore cannot be a classification feature for this class of systems. First, all social systems are man-made artificial systems. Secondly, they are all real, consisting of real elements and subsystems. Third, they are always open to the external environment, between which there can be an exchange of matter, energy and information. Fourth, social systems are multidimensional; they have many inputs and outputs from the environment. Fifth, they are dynamic, their structure and functions are constantly undergoing significant changes.



Sixth, they are all stochastic; their next state cannot be unambiguously determined and accurately predicted. Seventh, social systems are purposeful systems, they are able to set goals, define aims and direct their actions to their implementation and achievement. However, it should be noted that in the case of developing a general typology of systems of different classes, these characteristics of social systems are still considered classification features.

In our opinion, the typology of social systems should be based on the concept that explains the objects they reflect. Being a multi-stage, branched division of the scope of the “social system” concept, the typology allows a broader and more specific disclosure of the content not only of the social system, but also to identify the deep meaning of the object (social organization) that it reflects.

The peculiarity of our conceptual approach to the typology of social systems, no matter how tautological it may sound, is the systemic principle of cognition, which is based on the fact that any social system is characterized by four logically interrelated cognitive aspects, such as essence, structure, mechanism of functioning and development state.

A feature of our conceptual approach to the typology of social systems, no matter how tautological it may sound, is the systemic principle of cognition, which is based on the fact that any social system is characterized by four logically interrelated cognitive aspects, such as essence, structure, mechanism of functioning and development state. Each of the four significant aspects can be represented by the corresponding sets of classification features of social systems.

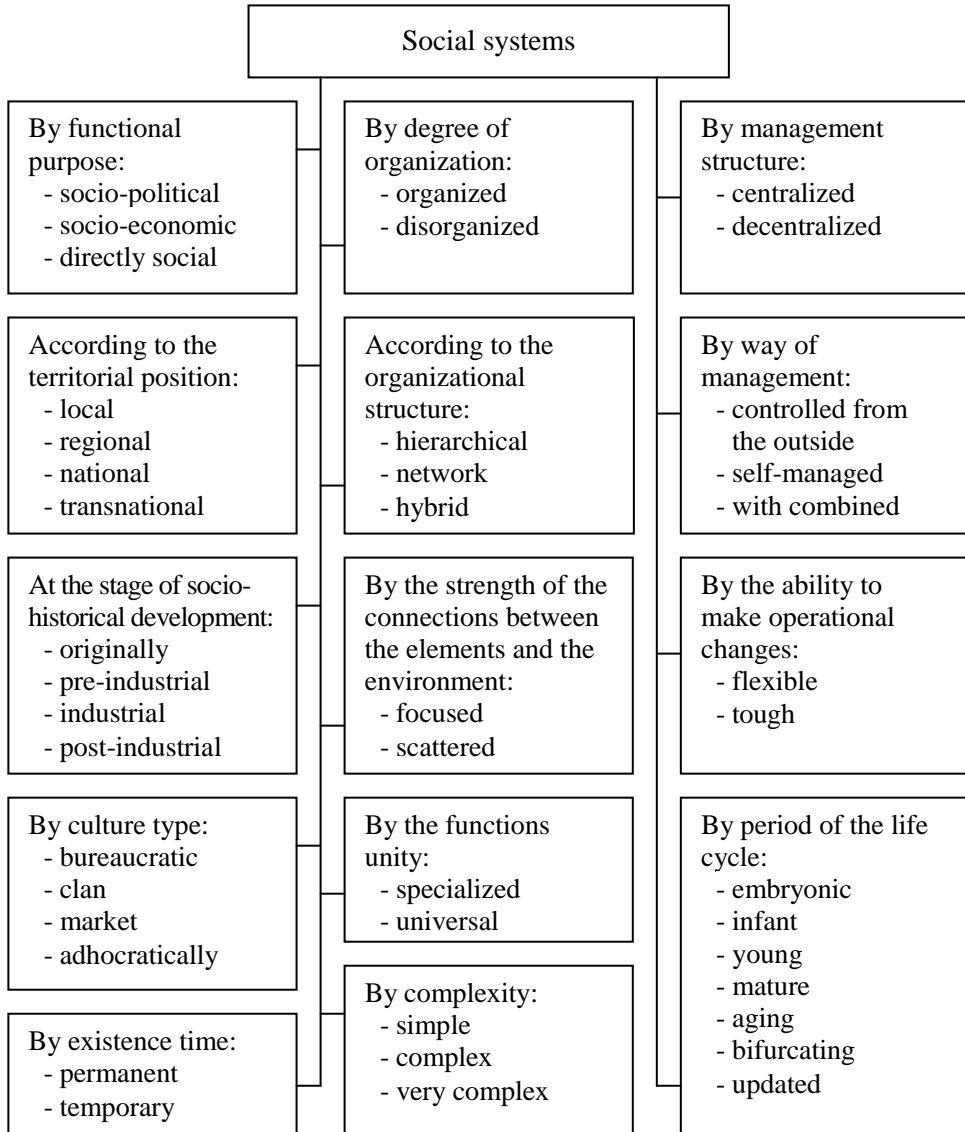
Based on this conceptual approach and methodology Ye. Kovalenko (2017b, pp. 8-19; 2018, pp. 50-56), we can offer the following typology of social systems (*Figure 3*):

1. According to their functional purpose, social systems are divided into three large interconnected groups:

1) socio-political systems, as various sets of political institutions and relations between them, whose activities are aimed at governing the state and society;

2) socio-economic systems that unite economic entities and relations between them, whose actions are aimed at the production, distribution, exchange and consumption of material goods necessary to meet the material needs of society and the accumulation of wealth;

3) directly social systems, which include communities and relations between them, whose activities are aimed at creating spiritual values and providing intangible services necessary to ensure favorable living conditions for people as biological, social and spiritual beings.



**Figure 3.** The main types of social systems

Source: developed on the basis of (Kovalenko, 2017b, 2018)

Each complex-functional system is divided into a number of relatively independent systems that perform narrower tasks, which usually correlate with the mission of the complex system. For example, the socio-political system consists of systems of legislative, executive, judicial and control power, systems of local self-government, separate systems of various political parties, public

organizations, etc. Socio-economic includes systems of enterprises of various branches of material production and service, systems of financial and credit, investment and insurance institutions, household systems. The directly social system covers the systems of health care, social security, housing and communal services, science, education, culture, art, sports, recreation and entertainment.

2. According to the territorial position of social systems are divided into:

1) local systems that do not go beyond the primary unit of human settlement: cities, villages (for example, an enterprise operating in one settlement, a local government, etc.);

2) regional systems that do not go beyond the secondary unit of human settlement: district, region (for example, transport, education, trade and service, cultural and leisure and other systems of the region);

3) national systems that do not go beyond one country (for example, national systems of different branches of government, party, trade union, industrial, financial, scientific, educational, religious and other organizations at the national level);

4) transnational systems covering several countries or all countries of the world (for example, the International Monetary Fund, the European Bank for Reconstruction and Development, the World Bank, the World Trade Organization, the Customs Union and many other organizations that go far beyond national borders).

3. At the stage of socio-historical development, the following types of social systems are distinguished:

1) primitive systems, which are the simplest and longest in time of existence (approximately to the IV millennium BC) form of society systems; they were local and self-governing;

2) pre-industrial systems, which is the next level of social systems in terms of development (their time frame from the agrarian to the industrial revolution of the 16th century AD); they are centralized, regional with an economy type “economy”; the key principle of development is traditionalism;

3) industrial systems, which are an even more complex form (the period of their existence from the industrial to the information revolution of the late twentieth century); these are centralized national systems with a predominance of machine production and economy of the “business” type; the key principle of development is individualism;

4) post-industrial systems, which are the most complex form of social systems, arise as a result of the information revolution and the increasing globalization of society; they are in a state of origin, formation, uncertainty and search for the optimal principle of their development.

4. By type of culture, social systems are divided into:

1) bureaucratic systems, which are the main and oldest form of social systems (emerged with the advent of writing in ancient Egypt in about the IV millennium BC); these are mechanistic, fully centralized, vertical, very rigid systems based on impersonal, formal rules and procedures; they dominate public administration, large organizations and low-competitive environments; most common throughout the world, but most in America and Europe, their main drawback is lack of flexibility;

2) clan systems, which are also the oldest form of social systems, but unlike bureaucracies, are organic, flexible systems resembling a friendly family with a partially centralized vertical-horizontal structure; their functioning is based on informal relations, trust, collectivism, devotion; they are most common in Eastern cultures, particularly in Japan;

3) market systems that emerged in the 1970s in the West, when stability was severely disrupted and bureaucratic systems proved incapable of living in a dynamic environment; they are also, like clan systems, organic, flexible systems, but with a partially decentralized horizontal-vertical structure and mechanism of operation, which is tuned to individualism, market competition and price signals of the external environment; these systems are most common in Western cultures, particularly in the United States;

4) adhocracy systems that began to appear at the beginning of the XXI century due to the emergence of the Internet, the growth of interdependence, uncertainty, dynamism and hyper competition in society; they are highly organic, flexible, informal, adaptive systems with non-hierarchical (network), fully decentralized, horizontal structure and self-organizing mechanism of functioning; it is believed that over time, systems of this type will become increasingly popular.

5. According to the time of existence, two types of social systems can be distinguished:

1) permanent, whose life is unlimited, quite long;

2) temporary, the existence of which is short, limited by seasonality, duration of the project, work period, etc.

6. According to the degree of organization, all social systems are divided into:

1) organized systems, the defining feature of which is the order, a state in which the system is internally organized, structured and there is consistency of interaction between its elements and subsystems;

2) non-union (disorganized) systems, the defining feature of which is chaos is a state in which the system is internally disordered (or poorly ordered), unstructured (or impractically structured) and there is no coordination of interaction between its parts.

According to A. Bogdanov (1922), an organized system is always greater than the sum of its components, and a disorganized system is always less than this sum, so in mutual struggle it is much weaker than an organized one (p. 84).

7. According to the organizational structure, we can distinguish the following three types of social systems:

1) hierarchical systems, the structure of which is vertical (pyramidal) with rigid subordination and elements conformity of lower levels to elements (subsystems) of higher levels; they are typical of public organizations of the bureaucratic type;

2) network systems, the structure of which is horizontal (flat) without subordination and conformity between the elements, but instead the use of mechanisms of collective self-government and collaboration; they are characteristic of social organizations of the adhocracy type;

3) hybrid systems, which, depending on the specific conditions, apply a certain combination of hierarchical and network principles of system design; they are inherent in social organizations of clan type, if vertical (subordination) relations between elements prevail, and market-type organizations, if horizontal (coordinating) relations between elements of system prevail.

8. According to the links between the elements and the environment, all social systems are divided into:

1) concentrated systems in which the connections between the elements inside the system are stronger than the connections between the elements and the external environment; they are characteristic of bureaucratic and clan social organizations, as well as market organizations with a low degree of decentralization;

2) dispersed systems in which the connections between the elements within the system are not stronger than the connections between the elements and the external environment; they are typical of networked social organizations, as well as inherent in market organizations with a high degree of decentralization.

9. According to the unity of functions, we can distinguish the following types of social systems:

1) specialized systems that have a single purpose and allow you to implement only one special function;

2) universal systems that are multidisciplinary and allow you to implement several disparate functions.

10. According to the complexity of social systems are divided into:

1) simple systems that consist of a small number of elements, the links between them and the environment, and do not have a branched structure;

2) complex systems that have a large number of elements and subsystems, the links between them and the environment, and have a branched structure;

3) super-complex systems that have a very large number of elements and subsystems, the links between them and the environment, and have a heterogeneous, very branched, multifunctional structure.

11. According to the managing structure of social systems can be divided into two types:

1) centralized systems in which only one of the elements / subsystems, being at the highest hierarchical level (the subject of management), performs management functions and plays a dominant role in relation to all other elements / subsystems that are at the middle and lower levels (object of managing) of the system hierarchy; such a managing structure is typical of bureaucratic public organizations; its advantages: high coherence of actions of all subsystems and elements of system, strategic orientation of decisions, duplication absence of administrative functions; disadvantages: low efficiency and flexibility, delay and distortion of information transfer, poor consideration of all the features of specific situations in which the grassroots are and, as a consequence, the low level of objectivity of managing decisions on these parts of the system;

2) decentralized systems, in which the element / subsystem, which is at the highest hierarchical level, remains to solve only the most important, strategic issues of management and overall coordination of the system, and all other powers are delegated to managing elements / subsystems at the middle and lower hierarchy levels; the result of such construction is the creation of a decentralized managing entity; this managing structure is inherent in public organizations of clan and market types; its advantages: high efficiency, flexibility, initiative, maximum consideration of all features of specific situations in which the lower levels of the system are located and, as a consequence, a high level of objectivity of decisions made independently by the same units; disadvantages: duplication of management functions, ignoring the interests of other parts of the system, the tactical nature of decisions.

A special case of decentralized systems are systems with full decentralization, when the system has no dominance, and all its subsystems are on the same horizontal level and have the same authority to implement management functions. Work coordination, in this case, is carried out on the basis of mutual coordination and self-organization. Such structures are inherent in social organizations of the adhocracy type.

12. The following types of social systems are distinguished by the managing method:

1) externally controlled if the control entity is outside the system and only external control exists;

2) self-managed, if the managing subject is in the system itself, and there is no external control; it should be borne in mind that the self-managing of the system is carried out by its two forces and the control subsystem (management) and the managed subsystem (self-organization);

3) with combined managing, if there are two managing subjects: one is inside the system, the other is outside it.

13. According to the ability to operational change, social systems can be divided into two types:

1) flexible systems that allow rapid change of relations between the system elements during operation and are able to quickly adapt to changes in the external environment; they are inherent in social organizations of clan, market and adhocracy types;

2) rigid systems, which, on the contrary, do not allow rapid or even any change in the relationship between the elements of the system, set at the stage of its formation, and in the process of operation are not subject to change, or simply unable to quickly adapt to changes in the external environment; they are typical of public organizations of the bureaucratic type.

14. The following types of social systems are distinguished by the development period or life cycle:

1) embryonic systems that arise as ideas but do not yet physically exist;

2) childish systems, which are born from ideas, begin their physical life, but are not yet able, without external support, to perform their functions independently and fully;

3) young systems that demonstrate intensive quantitative and qualitative growth, gradually gaining an increasing ability to fully perform their functions and meet the needs for which they were created;

4) mature systems that achieve maximum efficiency, run at full capacity and are considered the most advanced form of systems; at the same time, these systems are internally contradictory: on the one hand, such systems try to fully realize their potential, on the other hand, these systems are limited in their existence by the laws of the external system of which they are elements;

5) aging systems, the performance characteristics of which, due to the strengthening of internal contradictions, gradually deteriorate over time: their efficiency, power, quality of functions performed, etc.;

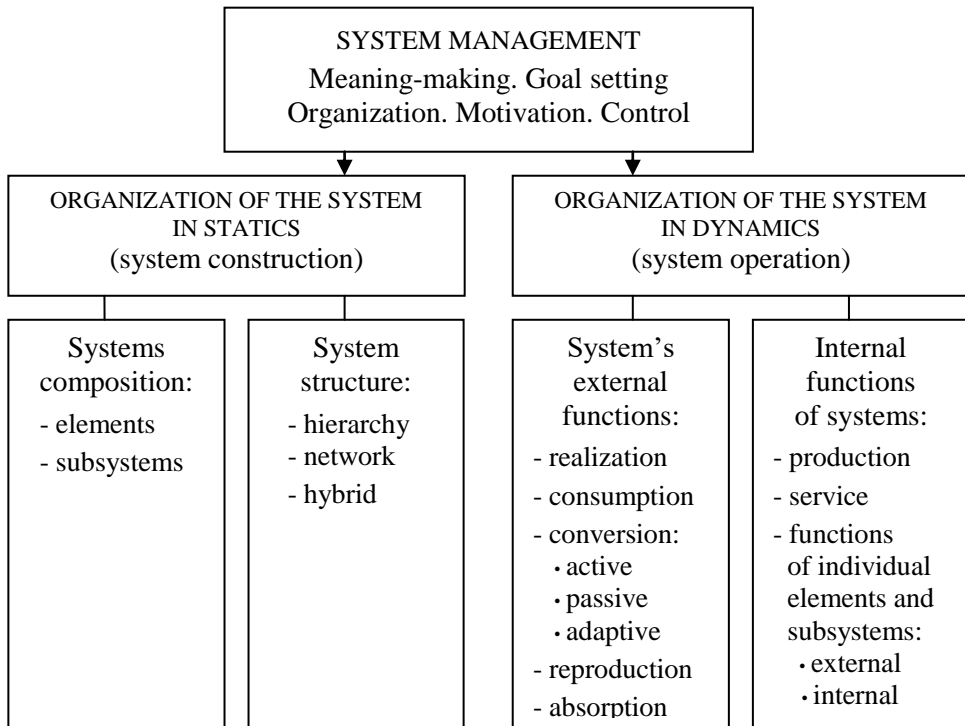
6) bifurcating systems that are in a critical state of instability to fluctuations and uncertainties, the transition from chaos to a new order, or death;

7) updated systems that arise as a result of natural bifurcation or artificial innovative changes.

The presented typology of social systems should be considered basic. It can be expanded and deepened in many areas, species and subspecies, depending on the specific challenges facing the researcher.

### 3.4. Organization of social systems in the context of systematic philosophy effective management

Each type of social system, as shown above, is characterized by specific principles of construction and operation mechanisms, which serve as a basis for developing a systemic philosophy of effective management, adequate to specific types of system (Figure 4).



**Figure 4.** System philosophy of effective management

Source: developed on the basis of (Kovalenko, 2017a, 2017b)

Construction of any social system (socio-political, socio-economic, directly social; local, regional, national, etc.) is based on the unity of its composition and structure. The composition of the system is the sum of all the elements that make up the system. It reflects the qualitative and quantitative characteristics of the elements of the system, its richness, diversity and complexity. The nature



of the social system largely depends on its composition, the change of which leads to a change in the system's properties. However, the nature of the system depends not only on one composition. It also depends on the system structure. After all, we can cite many examples of social systems that have the same composition but different properties, because their elements are differently interconnected. The availability of connections between elements leads to the appearance in a holistic system of new properties (emergence), which are not inherent in individual elements. Therefore, the philosophy of system management, in addition to the composition of the system, should use another additional characteristic – the system structure.

The structure of a social system is a set of established links within the system between its elements and subsystems, which ensure the integrity of the system. The structural characteristics of the social system (which answers the question “how is the system arranged?”), compared with the system characteristics (which answers the simpler question “what does the system consist of?”), has the ability not only to record system properties but also to explain their specific structure. According to our classification, the structure of the social system can be hierarchical, networked and hybrid, which, respectively, involves different management philosophy concepts.

The functioning of the social system is a process based on the principles of structural and functional integrity, a certain degree of autonomy of structural elements and functions of the system and its activity. The system in the process of functioning acts as a holistic formation, in which between its structure and functions there is a relationship and interdependence. The functioning of a social system necessarily relies on its structure. Each function of the system is “implemented by the structure and explained by the structure” (Markov, 1982, p. 21). There is what is called “adding activities” (Bogdanov, 1922, p. 86). The activities of the elements of the system are “added”, but not arithmetically, but systemically, under the influence of system-forming factors. It should be noted that the functioning of the social system is a continuous reproduction of the functional effect, which is reduced to the ability of the system to do what, in principle, cannot do every single element or subsystem. The functional effect is based on the affinity and differences in the elements properties, on the variety of interactions between them, their integration.

In the system philosophy of management, the functions of the social system occupy a very important place. The function is, first of all, “manifestation of properties, qualities of system in interaction with other objects of system and non-system order, expression of a certain rather steady reaction of system to change of its internal condition and external environment, reaction

to exciting influences inside and outside, original specific way system behavior, a means of resolving the constant contradiction between the system and its environment.

The functions of the system as a whole determine the functions performed in the system by each of its components” (Afanasyev, 1980, p. 132).

The basic position of the system philosophy of management is that between the system structure and its functions there is a natural relationship. “Functions, whatever their nature, can be implemented only in the structure” (Markov, 1982, p. 20). They are “inherent in the system and its components, and the system functions are an integrated result of the functioning of its constituent components” (Afanasyev, 1980, p. 130).

An important provision of the system philosophy of management is also the provision of functional dependence, which “takes place between the individual components of the system; between components and the system as a whole; between the system as a whole and another, broader system of which it is a component” (Afanasyev, 1980, p. 131). In fact, systematic and functional analysis comes down to defining these types of functional relationships that explain the mechanisms of the system functioning.

All possible functions of social systems can be reduced to two groups: internal and external functions. The question of interaction and interdependence of these two groups of functions is one of the key provisions of the system philosophy of management. It explains almost all the major problems not only of the functioning but also the social systems development. Availability of these functions is due to the fact that any system is characterized by external and internal environment, so the inherent internal and external functions.

External functions are various directed influences of social system on environment for achievement of the set purposes. External functions provide external results of the system. For example, for a commercial enterprise – it is, first of all, the promotion and sale of products (services), on the one hand, and resource provision of the enterprise, on the other hand. External functions are the system’s responses to the environment and the system’s relationships with the environment.

The external functions of social systems can be of the following types:

1) implementation functions, which are focused on the transfer to the external environment of the system of its tangible and intangible products in the form of matter, energy and information;

2) consumer functions aimed at obtaining from the environment various resources in the form of matter, energy and information necessary to ensure the functioning of the system;

3) transformational functions, which, in turn, are divided into: active, aimed at streamlining the external environment in accordance with their needs; passive, which in a crisis system are aimed at creating or increasing chaos in the environment; adaptive, aimed at adapting the system to the external environment;

4) reproductive functions, which are aimed at creating new systems in the external environment;

5) absorption functions that focus on the expansion of other systems and the environment.

Internal functions are determined by the fact that the performance of external work by the social system inevitably leads to the mobilization of work within the system. It undergoes various changes in goals, strategies, transformation of resources, etc. Establishing an exchange with the external environment requires constant regulation of elements, subsystems and relationships between them. Therefore, the internal functions should be understood as the most important prerequisite for the external functioning of the system, in which its manifestation as a whole is ensured by the manifestation and existence of its parts – subsystems and elements.

Varieties of internal functions of social systems are as follows:

1) production functions, which are aimed at transforming input resources into finished products, in accordance with the needs of the external environment;

2) service functions, the purpose of which is to facilitate the performance of production functions, providing them with specialized services;

3) functions of individual elements and subsystems, which, in turn, as well as system-wide functions are divided into external (sales, consumer, conversion, reproduction of other parts of the system) and internal functions of production and maintenance.

Thus, the external and internal functions of the social system are its properties in the dynamics that ensure the achievement of the system purpose. In this case, it passes from one state to another or retains a state. The states of the social system can be represented as points in the space of states. Hence, the functioning of the system can be represented in the form of some trajectory in the space of states. Since the achievement of the goal of the system or its target state can be ensured by moving along certain trajectories, the question arises about the best trajectory.

Determining the optimal trajectory of the social system, as well as its construction and operation are carried out with the help of system management, which formulates tasks and sets in motion the potential of the system to solve these problems. System management includes (Kovalenko, 2017a; Martynyshyn & Kovalenko, 2017):

- 1) meaning-making of the system (creation of the system meaning);
- 2) goal setting (defining the overall goal, developing strategies and plans for the system as a whole and its parts);
- 3) organization of the system in statics (system construction) and in dynamics (system operation);
- 4) motivation of elements and subsystems (stimulation and responsibility for work results);
- 5) control of system activity, its elements and subsystems.

System management is a kind of information system that processes information into managerial influences. In the process of functioning of social systems there are various problems that must be solved by system management. The most important of these is to preserve the integrity and viability of the system (Martynshyn & Kovalenko, 2018a).

Preserving the integrity of the social system means maintaining the balance and the system boundaries. In order to influence the external environment, the system needs to overcome its own limits, but it also needs to keep them under the environment influence. Social systems are characterized by fluidity, the boundaries dynamics, and often their vagueness, which allows them to better adapt, achieve their goals. The functioning of the social system always involves the use of limited resources, which can often lead to their overspending. A system that is out of balance by the actions of the environment can give it such large resources that it will lose its balance with the environment, fall into a state of destruction of structure and functions loss. Therefore, system management must constantly monitor all sorts of such changes and ensure the preservation of the boundaries and balance of the social system.

Under the preservation of the viability of the social system means those of its states that provide it with a fairly long, uninterrupted, efficient functioning. This is achieved by simultaneously adjusting the structure of the system and establishing appropriate mechanisms for its operation at each subsequent stage of the life cycle. Such managing approaches ensure a high level of response of the social system to various environmental challenges and high efficiency of social systems.

#### **4. Conclusions**

The article provides a theoretical analysis of the phenomenon of the system in the context of the system philosophy of life management in modern society. The results of the study allow us to draw the following conclusions:

1. The chronology of the systemic ideas development consists of five successive stages: Ancient period, the Middle Ages, the Renaissance, New and

Modern times, during which there was a gradual formation of systemic ideas, from mythological to modern – general systems theory, cybernetics and synergetic.

2. Today, the main methodological approaches to defining the essence of the phenomenon “system” are philosophical, organizational, cybernetic and synergetic. The latter, against the background of the instability of the current state of civilization, seems the most acceptable. At the same time, this does not exclude the possibility of using other approaches, depending on the tasks that may face the researcher or manager-practitioner.

3. The phenomenon of “system”, in contrast to the concept of “object” (object, process, phenomenon), does not reflect the whole object, which is an organic unity of content and form, but only its form, appearance, shape. The system is a form of expression of the object content, its internal and external organization, a way of life that has a definite certainty and independence.

4. The main philosophical question of systems philosophy is the question of systematics: is systemic inherent in all objects or not? Depending on the answer to this question, there are two opposing worldview paradigms: the first recognizes systemic as an objective property of all things; another emphasizes that systematic is not common to all objects, as there are disorganized aggregates. We have proved that systematic is inherent in both organized (ordered) and unorganized (chaotic) integral sets. Thus, the ontological aspect of systemic indicates that systemic is a form of the world existence, the existence of its various objects.

5. The epistemological aspect of systemic emphasizes to us that systemic is a property of the knowledge subject. Objects are what they really are, and systematization is only a way of seeing and knowing them. Thus, from the point of epistemology view, systematic is a certain cognitive procedure, a way of rational thinking and a direction of research methodology, which consists in cognition of any object as a system – a whole set of elements, relations and connections between them.

6. The value-semantic aspect of systemic indicates that the system is a kind of external expression of the internal meaning and value orientations of social organization. The accuracy of determining the true values and meanings makes it possible to properly develop the mission, formulate strategic goals, and adjust the system of public organization for their implementation.

7. A modern typology of social systems has been proposed, based on a conceptual approach based on four logically interconnected cognitive aspects (essence, structure, functioning, development) and fourteen features of systems: functional purpose, territorial position, stage of socio-historical development, type of culture, time of existence, degree of organization, organizational structure, strength of connections between elements and environment, unity of functions, complexity, management structure, management method, ability to operative changes, period life cycle.

8. The construction of a social system is based on the unity of its composition and structure, which determine the properties of the system. The functioning of the social system is based on its structure. Each external and internal function is implemented by the structure, by adding the elements' activities of the system. As a result, there is a constant reproduction of the functional effect, which is reduced to the system ability to do what each of its individual elements cannot do. This effect is based on the affinity and differences in the elements' properties, on the variety of interactions between them, their integration.

9. Determining the optimal trajectory of the social system, its construction and operation are carried out using a systemic philosophy of management, which should include the meaning of the system (creation of its meaning), goal setting (definition of common goals, development of strategies and plans), organization of the system in statics (system construction) and in dynamics (system functioning), motivation (stimulation and responsibility for results of work) and control of system, its elements and subsystems.

**The scientific novelty of the research results** is the deepening of theoretical positions on the system and system philosophy of management, the development of a holistic view of this complex organizational and philosophical problem and substantiation of approaches to solving its ontological, epistemological and value-semantic aspects.

**The practical significance of the obtained results** is manifested in the possibility of their use in the management of social systems and in supplementing the general theory of systems and philosophy of management with new provisions on systematic as the basis of the modern management concept.

**Prospects for further scientific research** in this direction may consist in a detailed study of certain types and kinds of social systems, identifying their specifics and developing appropriate mechanisms for their management.

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