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Methodology of Scientific Knowledge of Educational Axiology of Europeanisation

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Abstract

The concrete scientific methodology of sociological research expresses the system of prevailing ruling principles of theoretical concepts, techniques, methods and means of technical regulation, which unites the complex of theoretical and methodological basis and the architecture of the outline of the sociological field of sciences and knowledge, normalized by means of regulators of the system analysis in the quality of sociological research by levels: high – fundamental and philosophical foundations of sociological knowledge; sufficient – approaches, principles, techniques, methods of general scientific interdisciplinary and fundamental knowledge; concretely determinative – set of parametric evaluation in the methods and procedures of the social and philosophical technique of theoretical and applied research. The most used philosophical methods are analysis and synthesis, induction and deduction, abstraction, generalization and specification, observation and analogy, modeling and forecasting. In the perspective of social and philosophical study, the

above-mentioned methods of analysis acquire semantic application in the study of social and cultural objects of the organization in the field of education, science and innovation (namely, multidimensional analysis acquires the status of content analysis).

Keywords: methodology, methods, scientific knowledge, educational axiology

General statement of the problem

The most widely used methods and techniques in social and philosophical analysis are often used from a micro-, meso, macro- to mega and social nature – fundamental-philosophical, general-scientific and specifically applied methodologies of system cognition and management of complex organized sociocultural forms. The use of a systemic approach makes it possible not only to systematically analyze the parametric metrics of complex and organized complexes, but also to investigate the semantics and development of social systems, to study the specifics of social objects, trends of their civilizational progress. Taking into consideration the systematicity, they study the peculiarities of the functioning of complex and organized systems as not only the set of complex and organized elements, but primarily from the entire integrity and systemic unity of component relations as well as in the integral properties and semantics of integral unity. The improvement of the systematic methodology in social and philosophical research involves a complex aggregation, which is used for cognition, observation and description, including the interpretation, content, structure and semantics of social objects, which in its turn, thanks to the complex approach, actualizes the methodological discourse of intelligence, consideration, generalization, systematization and characteristics of the integrity of objects of knowledge and qualitative sigmatization of social and cultural procedures of organization of educational and scientific systems in interdisciplinary studies - noospherology, methodology of scientific studies of sustainability, axiology of civilization development, mathematical modeling and forecasting of ecological and social and ecological systems with programming of their safety in uncertain conditions, political economy, public management and administration, cybernetics and cyber security.

Subject of research

The purpose of the study is to substantiate the methodology of the phenomenon of European educational axiology in the social and philosophical dimension.

To achieve the goal of the research, it is necessary to methodologically substantiate the need for knowledge and awareness of social and civilizational European educational axiology.

Analysis of recent publications

It is clarified that since the end of the 19th century, the modeling method has been used to study any processes and phenomena or complexly organized socio cultural objects and subjects by designing and studying models as unified model analogues or simplified outlines with the purpose of application, definition or clarification mechanisms and techniques of the latest launched modeling objects. Along with modeling, the method of typology is used, i.e. the selection of partial social factors (phenomena, processes) or events from a defined set of social factors (phenomena, processes) or events in their similarity or diversity as balanced mechanisms of the formation of a generalized community, their most essential and typical characteristics (classification features such as Weber's theory of ideal types).

It has been clarified that the structural and functional analysis proposed by American scientists (Roach, Llewellyn, 1972; Merton, 1973) is an effective method of studying the architecture of socio-cultural systems with the structure and semantic content of the component composition both in partial as well as in the relations of functioning integral unity of the system. Also, a comparative analysis for the study of the outline, characteristics and trends of the vectorization of the development of socio-cultural systems (the genesis of epochs, national characteristics of peoples, the state division of countries, cultures of identity, civilizational progress) is specified using the social-active method, including the cross-cultural method, to specify trends, relationships, interaction and completeness of cultural diversity both territorially and geographically, and in time dimensions, it is meant not only Western and Eastern cultural characteristics, but also the relationship of modernity and historical cultural types. These methods are the most widely used for theoretical justification in social and philosophical analysis. In social studies, it is important to establish an invariant component of social stability as a social system-forming element (Parsons called it a social society) (Roach, Llewellyn, 1972).

In applied aspects of socio-philosophical analysis, *special empirical methods* are used – analysis and generalization, social experiment survey, selective method and analysis of documents, observation, comparison, description, measurement, analogy. With the purpose of adequate description and characteristics, for the interpretation of the developing social object, the *method of operational closure* of the "Society" supersystem is used. Since, any human activity involves at least two-way interaction, which makes it possible to characterize it and distinguish inherent differences in spatio-temporal interaction. The holistic unity of natural interaction with the *method of causal reflection* contributes to the awareness of the peculiarities of social mechanisms, methods and origins of undefined active actions (or inaction) as causes, as well as feedback for the modernization of initial conditions and structures during the transition from one qualitative state to another (process reconstructions). In conditions of uncertainty, the method of the system theory of social organization becomes especially important – *the method of contingency*, establishing and perceiving that social objects may not

be primarily imaginary, unpredictable with unexpected transformations (contingency reflects the paradoxical nature of social processes and phenomena) (Kovbasyuk, 2011).

It has been specified that the uncertainty of conditions and their turbulence can cause events in society and form complicated crisis situations that do not meet the needs of civilizational development and lead to the impossibility of avoiding them at this stage. The structural and organizational dynamics of social systems involves the subordination of subordination elements and their hierarchical architecture of construction and structure. The principle of social subordination is used in the social and philosophical analysis of communities, groups, strata as structural elements of higher level organizational systems such as society. At the same time each of the structural components can be considered as subsystems, which are characterized by certain independence and independent semantic autonomy in a set of relationships, joint actions with other subsystem components. The complexity of interaction chains reflects not only inclusion in the multi-component and multi-level architecture of society, but also determines its systemic ways of transformation.

Since in the conditions of uncertainty, the study of social dynamics has a non linear character of variable social concepts, knowledge about social and structural transformations is made possible thanks to the activation of the reverse sequence of defined social events and situations in the process of re-competitiveness. It has been determined that *competitiveness* as a process and method is used in the study of social stratification dynamics of social development of structural components as factors of vectorization of progress and identification of social strata of innovators, entrepreneurs capable of positive social transformations. A turbulently changing society at the current stage of development is characterized by interaction and counteraction of multilayered trends of processes and phenomena, which aims for homeostasis and biosocial interaction in multimodes of multilevel and multifaceted commonality (constancy) of partnership, conflict crises, confrontation, alliances, associations, contradictions as a conglomerate, which can be studied using the coherence method (study of complex, contradictory atypical, paradoxical types of social systems – objects, processes, phenomena). The method is mostly effective in the methodology of Bourdieu's topology social studies (contributes to the study and interpretation of not only established, but also transformational topos. It makes it possible to systematically determine the limits of coherence in the links of objective positions taken by subjects of multidimensional social interaction. It's typical for subjects to be characterized by evaluation and interpretation from their own subjective positions in personal concepts of expectations, imagination, aspirations and hope or disappointment. In general, the most productive is the systemic unity of the heuristic possibilities of applying methodological potential in the methods of social and philosophical research, which include the selection of heuristic methods for solving research, cognitive, and inventive tasks (Kovbasyuk, 2011).

Presentation of the main material

It has been revealed that the methodology of *social and philosophical research is* a collective unity of methods, means, techniques, ways, mechanisms, procedures and algorithmized operations, determination of social factors and their philosophical analysis to establish parametric characteristics (level of quality, organization, functional features, potential), systematization, generalization, interpretation and presentation of the state and development of social and cultural systems.

It has been established that the methodology includes: sociological methods - identification, collection of empirical information during observation, survey, interview, analysis of documents, experiment and expert evaluation of the results of knowledge; methods of data analysis and processing – decomposition (division into components of systems, processes, problems, procedures); detection of direct and inverse relationships (between constituent elements of the object of analysis); classification (division of the set into components by characteristics); reduction (unification of the structure of the object to an elementary model); assessment (systematic research to characterize the elements of the object of analysis); formalization (representation of the results of thinking activity in definitions, statements); inference (mental linking of the multifaceted content of thought into a chain of consequences); logical induction (general conclusions); deduction (partial conclusions); conclusions of identification, logical formalization and analogization, from the opposite; normalization of weighted general and partial; correlation analysis (detection of interrelationship, interdependence, ratio of elements, their probability and statistical dependence); interpolation (determination of intermediate parameter values in the logical chain of statistical data); extrapolation (extension of conclusions regarding certain aspects to the problem (process) as a whole and to its further development); modeling (knowledge of objects, their objectification when building and studying the outlines of their models – structural, functional, organizational and logical); simulation (conducting experiments on a model of a real situation to establish spatio-temporal dynamics); planning "tree of goals" (structuring of the hierarchical architecture of the set of goals of the system, process, phenomenon, problems with the selection of strategic and tactical goals and operational sub-goals, decision trees as a scheme for displaying the decision-making process); expertise (substantiated professional conclusions and evaluations of experts on problematic issues); establishment and algorithmization of priorities in terms of terms and resource provision); heuristic (special non-formalized methods of solving tasks through productive creative thinking); elimination (elimination of signs, factors, indica-

tors-exceptions unrelated to the process, phenomenon); selection of relevant data for decision-making; representativeness of a complete unity (system, process, problem) in partial composites; taking into account the factors of uncertainty and risk (the probability of obtaining the desired results in the presence of sources and parameters of influence on the object of analysis); taking into account the human factor (Kovbasyuk, 2011). The most used used methods are: factorial, comparative, correlational, causal, ranking, structural-functional, structural--logical, structural-organizational; theoretical methods of systematizationand taxonomy of empirical results – genetic, cross-cultural, structural-semantic, genesis; mechanisms, methods, rules and techniques of selective research, social indicators, semiotics, scaling, procedures, indexing for measurement and grading, ranking and differentiation of dependent and autonomous classification features, construction of functional-correlation links of inherent characteristics; qualitative methods of social research to assess the qualitative characteristics of the originality of social objects (biographical, constructive personal and collective interviews, focus groups – discussions of a group of respondents on social issues, the study of consumer priorities regarding professional image, selection of services and services, informal observation, document analysis method); social intelligence is subordinated to the research program and strategy, the methodology of studying the specifics of social objects, established tasks and is adapted according to the features of the object and the subject of research, to the social and economic, ecological and institutional resource potentials of the academic staff; verification of the effectiveness of the method requires substantiation of the validity of the sampling procedures, proof of the representativeness of the selected sample, the use of pilot surveys for the correction and selection of means, tools and evaluation criteria apparatus.

The methodology of social and philosophical research includes the development and application of *social mechanisms* as a complex of interaction of social collectives and communities, constituent elements of social architecture, means and norms of technical regulation (social standards, guidelines, technical conditions), patterns of behavior, organization of institutions, thanks to the systemic activity of which is ensured functioning of sociocultural semantics of the system. It has been established that the functions and possibilities of regulation of social mechanisms are determined triadically, namely by the social statuses of subjects, individuals, collectives, communities, on the one hand, by the specifics of operating institutions, on the other hand, and by the dominant system of *prevailing value orientations* and moral, aesthetic, legal, environmentally safe social norms in the standards of behavior in society. It was determined that the architecture and semantics of social mechanisms inherent in a certain structural subsystem of the integral unity of the social system differ in their features, namely in the types of social activity as an established system of interaction of

social groups in the spheres of politics, production, culture, education, science and innovation, nature protection, security life and civilizational development, standardization, certification and licensing, legal and technical regulation, state and public administration, informatization and digitalization, defense and social protection of the population, including the distribution, exchange and consumption of material and spiritual goods, services and services; the system is regulated in historically established conditions in a specific state, types of culture, management systems and according to the socio-cultural potential of the social structure of society.

It has been clarified that the driving force of the functioning of the social mechanism is social and economic, ecologically safe, institutional, social and political, humanistic, religious axiological cultural orientations, needs and interests of social groups capable of regulating the personal and collective behavior of people in the above-mentioned spheres of social life.

It has been specified that the development of spheres of social activity when applying social mechanisms depends on the variety of configurations of the sociocultural architecture of society: the functional division of social layers and classes (according to professional, social and everyday, public purpose and persuasion of value orientations); geographical-territorial and administrativeterritorial locations (regions, regions, cities, countries, continents), including organizational and managerial levels of population employment, specific social groups (professional, institutional, public, political, religious), which requires special application of designated social mechanisms, which with the dominant ones prevailing in certain spheres, determine the content, character and direction of social behavior of both individuals and collectives, and, in particular, the effectiveness of these spheres. The study of the social mechanisms of the development of society and its various structural components (specially designated, partial mechanisms) involves the fixation and support of effective functioning, the identification of the dysfunction of inhibitory factors, risk and danger factors in the spheres of social activity. Therefore both the optimal functioning of social mechanisms and the emergence in its implementation, destructive dysfunctions are ensured thanks to a systematic analysis of the factors of state formation and development of spheres of social activity in organic unity by social and economic, ecological, political, managerial factors in the development of production and other types of activity, the distribution of resources and consumption goods, as well as the social position of individual groups, which are the subjects of its effectiveness. The significant role of the social mechanism for the provision and development of social activity is that its results are the means of indirect action of management bodies, and mediated by the activity of social groups in the types of social and cultural organization and at the levels of its regulation. The main regulators of social activity are motivation, status, cultural identification, managerial coordination and subordination. The effectiveness of the social mechanism consists in the multifaceted mutual influence of direct reversible, tangential connections, which transform it into socially effective processes, and therefore the results of social activity are fixed at the output of the systemic process social mechanism and generalize the efforts of all representatives of social and cultural subjects in the spheres of social activity, from which the social well-being of future generations depends and based on sustainability.

A special place in the methodology of social and philosophical research is given to the method of collecting primary social and cultural information about the object of study and the application of the axiological approach in *sociological observations* regarding purposeful, systematic and direct visual and auditory monitoring (perception) and recording of significant, from the point of view of goals and tasks of cognition, social phenomena, processes, situations that are subject to control and verification. It has been clarified that social observations are classified according to their goals and tasks, the role of the researcher (observer) in studying situations and conditions, as well as the level of formalization of procedures, protocols, algorithms, applied methods, including the conditions of research organization.

The following types of observation are distinguished:

- unstructured (non-standardized) a method of studying phenomena and processes, in which the object of observation is defined, but the observer does not determine in advance the elements of the process of events, situations and states that he plans to investigate (often used at the initial stage in order to identify problem situations);
- structured (technically regulated by standards) a method of collecting empirical social information, in which the subject and object of observation, as well as the elemental composition of the process under investigation, are determined in advance, while taking into account its most important parameters for achieving the goals and tasks assigned to an observer or a scientific research group (often used for a reliable description of the subject of research and verification of the obtained results, thanks to other methods, for their correction and verification);
- external (non-involved) the method in which the researcher is outside (from the side) of the object of research, without being included in the course of events, without participating in the surveys of the individuals for which it is carried out, and records everything that is happening in a detached manner according to the goals and objectives (applied to describe the situation that interests the observer);
- included (directly involved) the way in which the researcher is to some extent directly involved in the study of the social process and directly contacts individuals and groups in joint activities;

- field a method that is carried out in the natural conditions of a real life situation in the direct interaction of the observer and the object of observation;
- laboratory a method of collecting empirical information in artificial conditions created for research and controlled by a research group;
- systematic a method of research that is carried out consistently, systematically and promptly according to the calendar and thematic plan as well as schedule with regular recording of predetermined classification signs, processes, phenomena, situations and events, which contributes to the study of their dynamic;
- episodic a method of recording phenomena, processes and events,
 which are investigated in the absence of formalized registration regulations in
 established time intervals, stages, periods of their course;
- random a method of research that does not provide for predetermined terms of observation, parameters and indicators, and the observer records interesting factors and events from his point of view;
- one-time (one-moment) a method of observation in which one event or phenomenon, or a process occurring in a specified location at a specified time, is recorded;
- panel the process of repeated, time-determined research, which is carried out at specified intervals, systematically organized research of the object with the aim of establishing its transformation;
- controlled a method that is carried out purposefully according to developed observation programs with the use of formalized plans and standard documents to obtain reliable information about the object of research and to verify research hypotheses (controlled by increasing the number of observers, intensifying the processes of a series of observations of the same object);
- uncontrollable a method carried out by an observer when studying real life situations, states, processes without clear planning.

An important role is given to the documentation of research works, namely, providing observers with clear instructions, methods and specifically defined methods for conducting observations, including specifically defined criteria, fixation, indicators and parameters, ranking by categories, levels, degrees of phenomena, events in defined groups of communities or individuals who are being observed (fixation on observation cards with certain elements of the semantics of the situation or group behavior, digital indexes of reactions to events and their codification, thanks to which the digital data of empirical studies are transformed into cards of information and digital processing by technical means).

Conclusion

The multimodality of the socio-philosophical search is in the identification of axiological types of the modern methodology of cognition – philosophical axioms (in aspects of the philosophical vision of processes and phenomena of

value content in genesis and development as objects of research); social and cultural value orientations, dispositions and narratives (on the basis of axiological scaling of individuals, groups, communities, socio-cultural forms of organization of subjects in the field of education, science and innovation, axiological vectors of social and ecological orders for noospherologists capable of creatively transforming complex and critical situations of civilization development, axiological didactics of technical regulation of standardization, certification, licensing, labeling); bioethical and bioecological axioms of life activity, life preservation and life reproduction (value postulates of eternal existence, origin and restoration of biogenesis); theology and religious scraps (a priori proven perfect theological narratives of the Old and New Testaments, by analogs of Judaism, Hinduism, Buddhism, Islamism, partial and unified confessions); the policy of noospherology and qualitology of safety and the desired quality of life (postulates of constancy, supremacy of law, will, freedom of spirit, body, soul) – supremacy of spirit – Pantheon of Glory independent nations of the European Union.

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