Development and Transformation of the Communicative Element of Socio-cultural Activities

Oksana A. Telep
Uzhhorod Institute of Culture and Arts, Uzhhorod, Ukraine

Inna V. Balashenko
South Ukrainian National Pedagogical University named after K.D. Ushynsky, Odesa, Ukraine

Pavlo P. Fedaka
Uzhhorod Institute of Culture and Arts, Uzhhorod, Ukraine

Liudmyla I. Ukhach
Uzhhorod Institute of Culture and Arts, Uzhhorod, Ukraine

Yelizaveta M. Sivak
Uzhhorod Institute of Culture and Arts, Uzhhorod, Ukraine

Abstract---The relevance of the subject matter derives from the fact that communication is one of the oldest institutions of humanity and plays a crucial role in modern society. The authors used general scientific methods such as generalisation, analysis and integration of elements of the concept of conventional communication as well. The purpose of the study is to define the essence of the models of socio-cultural transformation, as well as the characteristics and features of the development of socio-cultural activities. The study analyses how socio-cultural content functions in social communication; the key theoretical thesis of the functionality message is identified. The study discusses the models that influence socio-cultural transformation on the global level and make changes both in the global cultural space and in the cultural space of countries, communities, and people in particular. The study proposes means to strengthen the innovative potential of Ukrainian culture. The authors emphasise that the phenomenon of communication culture requires in-depth theoretical and methodological studies of the problems of its design and support. The theoretical significance of the study lies in definition of the essence of the concept "content functionality", a significant expansion
of ways for its development and improvement in socio-cultural issues of the functioning of social communications; in the theoretical substantiation of the criteria of functioning of socio-cultural content in social communications. The practical significance of this study lies in the design of technology for the development of socio-cultural activities.

**Keywords**—content functionality, cultural communication, international relations, mutual understanding, socio-cultural transformation.

**Introduction**

Communication greatly increases the audience, reveals its abilities and interests, creates fundamental values. Culture is one of the main of these values. The modern world shows that culture is becoming a global phenomenon. The socio-cultural aspect of globalisation enhances the interaction, interconnection, interpenetration of different cultures, while the actualisation of the problem of human understanding, considering the specifics of each civilisation, is a value system on its own. Openness of the world implies democratisation of intercultural, interstate and interregional relations, where culture is an important component. Globalisation, which has a multifaceted nature, influences significantly the transformation of social life in all of its variety and has a powerful impact on human practical activities (Axon, 2020; Scholte et al., 2015).

Communication leads to the emergence of new information connections, structures and ways of influencing the development of modern society, which leads to transformation of functions of establishment and implementation of public policy. Communication affects public life to the fullest, except described areas, which caused significant problems in the modern state. In this discourse, the study of the specifics of the spread of communication processes in the development of modern society is the most relevant, which induces the transformation of various value systems that are the basis for the relevant ideological doctrines of public policy (Agnidakis, 2018; Smith et al., 2018). Cultural communication is one of the mechanisms for the existence and development of society, which offers the possibility of forming cultural ties, managing people’s lives, accumulation and transfer of experience, and undoubtedly affects the institutionalisation of cultural change. Culture, as well as communication, can be defined as a set of natural and artificial signs (languages, symbols, images), through which the preservation, accumulation and transmission of human experience from generation to generation is transformed into new ideas and discoveries. It is the activities that shape social memory and influence the organisation of future cultures. This understanding of culture is the most functional in relation to the subject matter.

Social communications are viewed as an important factor in the socio-economic analysis of transformation processes in terms of philosophical understanding of the post-industrial information society. Moreover, until communication is institutionalised, it will not be the subject matter for the study of the theory of
communications. Some elements of social communication come first including science (Holzer, 2018), library services (Cobos et al., 2018; Ilganaeva, 2017), journalism and general structural institutionalisation around the world, social communication activities (Zernetska, 2017). However, there are problematic questions related to the structure of communicative activity, its definition in terms of the theory of social communication, process and subjective work. The theoretical significance of the study is in definition of the concept "content functionality", a significant expansion of ways for its development and improvement of socio-cultural issues of the functioning of social communications; in the theoretical substantiation of the criteria of functioning of socio-cultural content in social communications. The design of technology for the development of socio-cultural activities is of practical significance.

Cultural policy is not only a continuation of public policy in the socio-cultural field but also includes social communication, which should be the model of the mechanisms of the natural socio-cultural process apart stimulating the accelerated development of society in the socio-cultural context (Kohar et al., 2020). Due to modern social change, humanity is rethinking the role of culture, updating its forms and functions. On the one hand, culture still reproduces conventional attitudes and patterns of behaviour, which is largely determined by the way of thinking. On the other hand, modern forms of mass media (television, cinema, written press, advertising), which strengthens the development of ideological and moral stereotypes of mass culture and "fashionable" way of life, are becoming more popular. Media offer different meanings and new identities and change the way people think. Thus, the mutual influence of culture and mass communication as a process of formation of "human capital" and moral resources of socio-economic development of the state acquires special significance. The special feature of the latest socio-cultural aspect of the Ukrainian media in Ukraine is primarily the fact that society, which consumes the media, is at the stage of socio-cultural transformation, where the type of its organisation and existence is changing. The versatility of the term "communication" allows emphasising one of its meanings, i.e., social one, which is used to define and describe the various connections and relationships that are present in society. That is why philosophers, sociologists, political scientists, linguists, psychologists seek for the solution of the problem of communication and consider it as infinite and diverse as human society or the external world (Dowell et al., 2019; de Miguel Álvarez & Martinez, 2020; Servaes & Lie, 2020).

International cultural cooperation has a long history. Dialogue between countries is not the latest achievement of mankind but more of intercultural cooperation is reaching new levels and gaining momentum. Human need to share experiences, transfer cultural resources and possessions has led to the constant development of foreign cultural policy. The authors of the study believe that cultural policy is an integral part of the country’s public policy on the international arena. It covers the cultural and humanitarian Fields and focuses on the country’s integration into the global cultural space. Leaders select integration partners either between several the foreign states that cooperate at the international level. Thus, intercultural cooperation is an invariable tool for shaping the image of a country, which direction is cultural resources, to create favourable conditions for
influencing the public opinion in foreign countries (Liu & Alley, 2019; Feghali, 1997).

Literature Review

Ukrainian society has a culture of tight intercultural communication with nations living in different countries. The Ministries of Foreign Affairs, state and non-state institutions, separate subjects of international activity, etc. are involved in these relations. As a result, during the establishing trust between the partner countries, friendly relations between people of different nationalities develop. At the same time, ignorance towards foreign cultures can negatively affect companies, governments and non-governmental organisations working together in multicultural associations. Success of this cooperation is extremely important for world trade and foreign relations. According to Kolbina (2010), the three types of cultural interaction are direct interaction between representatives of different cultures; their indirect communication (intermediaries can be translators, communication technologies); communication through various media (printed, electronic, audio and video), where people study aspects of another culture. The authors of this study agree with the definition of the cultural dialogue and morality as a social act, which implies the constructive or destructive interaction between representatives of different cultures (national and ethnic), sub-traditions.

A common feature of all stages and forms of cultural communication is the participants' ignorance of cultural differences. They believe that their way of life is the only one that leads them in the right direction. And only during contact between people of different cultures, the usual rules of conduct stop working and people begin to think about the reasons for their failure. A critical understanding of intercultural communication emphasises the phenomenon of culture shock. The study by Sadokhin & Grushevitskaya (2013), has interpreted this concept as a protective reaction of the psyche to a large amount of information. In terms of direct intercultural interactions, this psychological state of mind occurs due to the fact that people do not support their usual cultural value system and do not fully understand the intentions and values of other cultures, when entering the world of another culture. Emigrants seem to feel a deep sense of culture shock when leaving their home country caused by the uncontrolled flow of information in a new environment. They experience better material surroundings but it is accompanied by a state of shock, a feeling of nostalgia, sometimes mental disorders, or a negative assessment of the native culture. Culture shock has some influence on the course of intercultural interactions. Kovalinsksa (2012), names six main obstacles to effective intercultural communication:

- The concept of similarity (this is an absurd view of the theory of cultural interaction and the study of similar or identical subjects).
- Linguistic differences (communicators often believe that the sentence they give has only one meaning).
- False nonverbal interpretations (because nonverbal behaviour is the majority of communicative messages).
- Prejudices and stereotypes (biased perception of another subject of communicative interaction through established psychological barriers).
• Willingness to evaluate (differences in values can lead to conflict and misunderstanding).
• Increased anxiety or tension (because times of cultural dialogue are often associated with stress before ignorance).

Notably there are two phenomena that disrupt the communication process. Leontovich (2017) refers to the following:

• barriers (factors that prevent communication - lack of knowledge of a foreign language; physiological factors – deafness or muteness of one of the interlocutors);
• interference (factors that reduce the quality of communication processes and lead to distortion of information – asymmetry, stereotypical reactions, language errors, etc.)

**Materials and Methods**

Socio-cultural activities arising from the needs of society until the third millennium as a field of scientific knowledge and social practice should provide:

• scientific and methodological comprehension of socio-cultural understanding and phenomena;
• implementation of state cultural policy and adoption of scientifically reasonable management decisions in the socio-cultural sphere;
• effective forecasting, design and regulation of social and cultural processes;
• development of technologies for preservation of historical and cultural monuments, national and cultural traditions;
• transferring and expanded reproduction of socio-cultural experience;
• substantiation of the technology of implementation of the corresponding cultural scenarios of social practice.

The methodological basis for the study of socio-cultural activities is the integration of historical, philosophical, cultural, sociological, structural and operational trends. The interdisciplinary nature of the study of socio-cultural activities requires considering philosophical, cultural, psychological, social psychology, anthropological and sociological perspectives. Symbolic interactivity is a theoretical and methodological approach in sociology and social psychology, which focuses on the symbolic content of social interactions. Since the language of any voluntary interactivity is the main symbolic means of interaction, communication in this area is emphasized (Diez-Vial & Montoro-Sánchez, 2020; Iniesta-Arandia et al., 2014). The study of social interactions at the level of microprocess allows determining the dynamics of personality development, its socialisation, to establish the social relationship with social roles of communication and social norms of communication, to show the relationship between means of communication (words, gestures, etc.) and common symbolic structures. However, relativism in the interpretation of the social life in this area in particular complicates the development of the theory of social communication.
The phenomenological approach is closely connected with the previous approach. Studying the problems of communication due to linguistic socialisation, semantic differentiation and non-linguistic factors, the phenomenological approach interprets communication as a result of mutual understanding between people. Structural functionalism (structural functional analysis) is one of the types of systematic analysis of the studied phenomenon. The structural functionalism reflects the duality of approaches to the study of the means that ensures the stability of the social system. The structural approach involves the analysis of different structures to identify certain functions. Since structures do not depend on consciousness, their analysis does not allow for subjectivity. Objectivity in society is compared to the objectivity of language as a functioning system, the structures of which is developed independently from the will and desires of people. The functional approach assumes the presence of certain functions, which implies the choice of the appropriate structures, according to which there is an analogy between society and the organism that performs certain functions. Since the times of Ancient Greece dialectics as a special way of thinking that allows seeking truth in disputes, arguing opposing views, overcoming contradictions, has eventually gained the status of a scientific method to study the most general laws of nature and society. Society began to be understood as a changing social reality, which must be considered as an entity, despite the contradictions developed by its social factors (Loosemore & Muslmani, 1999; Ochieng & Price, 2010).

Assuming that the subject of sociology does not show itself as indeterminate in the sense of cognitive activity but manifests as a concrete existence, the author concludes that the starting point of sociological analysis should be not a basic principle but a factuality, which is not derived from the principles. There are numerous discussions between proponents of deduction (from Latin - inference), which states that the beginning of the analysis are axioms or hypotheses, and proponents of induction (from Latin – leadership), for whom general and specific conclusions are drawn from details. The basic principle of the hypothesis cannot cover the actual material in all of its manifestations and contradictions. Generalisations and a holistic idea of the study of the subject matter are legitimate but are effective only at a certain level. Their costs can be offset by the basic method of scientific knowledge, i.e., a dialectic based on historical materialism. Social analysis and philosophy of the problem indicate the use of methods that include research methods and techniques. In particular, determining the correct sequence of key research questions and their emergence required compliance with the requirements of a systematic review. The main method of comparison is a comparative analysis of the basic concepts of conventional communication. In this study, the authors also used general scientific methods such as generalisation, analysis and integration of elements of the concept of conventional communication (Wang, 2006; Weiss, 2005; Gao, 2006). The structure and development of this concept are studied using the historical principle.

Results and Discussion

Notably, the development of communication means and the consequences of social and personal changes have led to the understanding of communicative culture as a sociocultural phenomenon in many sciences, including philosophy,
culturology, sociology, psychology, pedagogy, linguistics, ideology, political science. Thus, the problems of its preparation have always been studied from different perspectives (culture of communication, behaviour, interpersonal relationships, language culture, etc.). With the development of technology, social, political and economic changes, the transformation of the system of cultural values change the specifics of the essence of communication, its formal and technical aspects, which update new tasks and areas of research in the field of communication culture.

The study revealed that there are many definitions of communicative culture: from very simple (communicative culture is the ability to listen and understand) (Leontovich, 2017) to extremely complex (communicative culture is internalised on the verbal and nonverbal level of reporting on personal presentation, pattern of interactions) (Rieger, 2020). Thus, Taratorkin (2019), notes that the culture of communication is a human position that demonstrates the need to communicate with others, integrity and individuality, human creativity and ability to maintain communication, friendly communication with surrounding subprojects. Scholar Maslova (2010), is convinced that communicative culture should be considered as a system of internal resources that is necessary to create effective communication in certain personal situations. Thus, according to her, communicative culture is a set of special communicative characteristics of personality, abilities, knowledge, skills, which prevents a person from encountering certain difficulties and predicts the effectiveness of interpersonal and professional communication in professions, which determines the identity of the individual. Ukrainian expert in pedagogy Korniyaka (2016), notes that modern literature is considered as a communicative culture a morally oriented means of communication that spreads influential information between people, mediates their communication, and enables the perception and communication among people, more or less perfect readiness, individual ability to communicate. Ukrainian philosopher Šarnovska (2010), defines the importance of communicative culture as a specific feature of social culture, defined by the human dimension of social and intersubjective relations and pursuing the goal of mutual enrichment of individuals through information exchange, spread of knowledge and positive life experiences.

This study (Ribeiro & Ferro, 2020) defines a communication culture as the ability to integrate and coordinate people’s actions with others, receiving the response from others, choosing a contradictory proposal, give further comments, speak with difficulty, understand and respect the opinion of others and manage relationships to create a common goal, activity; the need for something, by expanding the boundaries of communication, comparing points of view, the ability to take the position of a partner; availability of flexible interactions with others, demonstrative performance, the development of communication skills and their use in new contexts. The concept of communication culture is relatively structurally complex and has an integrative nature. Scholars have identified a framework of concepts that are essential for understanding the essence of communication culture:

- communication, verbal communication, verbal and nonverbal communication;
• language and speech, functions of language and speech (informational, agitational, emotional, metalanguage);
• speech and thinking, internal and external speech;
• language situation, motive of expression;
• act of speech (communicative act) and its stages: speech preparation, speech structuring, transition to external speech;
• language perception and its stage: transition from acoustic or graphic code to internal speech code; deciphering syntactic structures, grammatical forms; understanding of the general plan; understanding the purpose and motives of the statement; evaluation of the received information; understanding the choice of form and language tools;
• understanding, feedback, context (explicit – verbal and implicit – non-verbal);
• forms of speech (oral and written), types of speech communication, types of language activities (conversation, listening, reading, correspondence);
• model of speech communication and its components: addressee, addressee, message (Ribeiro & Ferro, 2020).

Accordingly, the authors formulate such derivative concepts as the culture of productive speech actions, culture of receptive speech actions, culture of understanding and culture of feedback. With regard to internal speech (linguistic formulation of thought without utterance, oral or written) and external speech (speech process, including various mechanisms of encoding and decoding information), researchers managed to identify relevant structural components of communication culture, which are external speech culture and internal speech culture. Based on these theoretical provisions, the concept of communicative culture is distinguished for a systematic presentation:

• by form of language communication: oral and written culture;
• by types;
• by culture of direct and indirect communication;
• by cultural monologue, dialogue, polylogue (conversations of several people);
• by culture of information, beliefs and entertainment in communication;
• by organisational culture and internal communication.

Scholars that study the culture of communication also consider the linguistic and pragmatic laws of modern rhetoric, which are:

• the law of dialogue, which harmonises both fundamental and subordinate rights;
• promotion and audience orientation;
• emotional speech;
• pleasure from communication.

As a result, such aspect as linguistic and pragmatic culture can be distinguished, i.e., the culture of conscious harmonising influence on the recipient of the statement (Ribeiro & Ferro, 2020). According to the authors of the study, different interpretations of the concept of communication culture reflect the its study approach. Thus, the concept of communication culture is defined as a
special system of emotional, rational type, voluntary reactions of individuals in communication, and real social characteristics (economic, political, spiritual, ideological) in the context of the culture of communication. Refers to the culture of communication and emphasises its moral and spiritual content, including education, spiritual wealth, developed thinking, ability to understand phenomena in various aspects of life, variety of forms, types, channels of communication and its emotional and aesthetic changes: moral basis, mutual trust of the subjects of communication, its results in the form of mastering the truth, stimulating activity, its clear organisation. There are such indicators as the adequacy of communicators’ reactions to actions and deeds, the timing of joint activities; emotional and cognitive activity, the atmosphere of creative search and cooperation; respect for moral and ethical norms in business and interpersonal communication.

Considering the personal communicative culture as a system of its qualities, which includes its structure, the following elements are distinguished: creative thinking, speech culture, culture of self-adaptation to communication, culture of gestures and flexible movements in communication, culture of communication partners, culture of emotions, culture of communication skills. Within the framework of communicative culture there are such elements as psychological characteristics of a person, including sociability, empathy, reflection of communicative activity, self-regulation; characteristics of thinking, which are reflected in openness, flexibility, non-standard associative series and internal action plan; social attitudes that stimulate interest in the process of communication and cooperation rather than in the result. Communication is important not only to find oneself but also to give to others. Learning communication skills is also an important task (Triwardhani et al., 2020). Given the role of communicative culture in professional culture, there are two substructures: values, knowledge, skills, personal characteristics important for effective professional activity and values, knowledge, skills, personal characteristics important for effective professional communication (communicative).

But these two substructures cannot be represented as two separate components of professional culture, or two sides of the same phenomenon. On the contrary, they interact and overlap. The communication element plays an important role. This allows showing the elements of the action component, i.e., knowledge, skills, personal qualities, apply them in practice, transfer them to another person, visualise them. It allows distinguishing three components of communication culture: invariant (axiological), which represents the basic values of communication culture, technological, which reflects the operational side of communication, and variables that contain features of communication. The axiological field includes personal status interest in people general professional culture, ethical component. The last scientific category includes general knowledge about education, including the basics of interpersonal communication, theories of personality, psychological characteristics of another person and knowledge of their individual-typological characteristics. This section also includes important communication skills, the ability to understand and recognise, interpersonal skills, communication skills and an innovative type of process that enables power and the development of vocational training.
The last component of the structure of communication culture are human communicative qualities such as reflection of communicative activity, flexibility (creative operational thinking that allows navigating in unprepared communication situations), empathy, sociability, self-regulation, emotional, psychological, and personal attraction. These components interact closely, creating a holistic and dynamic structure of communicative culture. The individual choses communicative values, which influence the choice of communicative knowledge and skills and determine one’s style. In its turn, knowledge of communication influences the choice of communicative values and the development of the personality of the specialist, which stimulates the further development of the values of communication culture. Thus, the culture of communication is a dynamic system in which the individual promotes development and self-development, which is revealed in the creative nature of designing the best examples of communicative activities (Rieger, 2020).

Notably, the inclusion of communication skills in the structure of professional skills is common phenomenon evidenced by the analysis of the positions of both foreign and Ukrainian scholars. Based on different approaches to the interpretation of the professional culture, humanistic professional culture is developed by interpreting examples of practice of human culture as a dynamic system of professional values, creative ways of working and personal achievements. This approach to defining the essence of the studied phenomenon and understanding of professional culture as part of public culture allows identifying such structural components of professional culture as value, personal, active elements. Given that the concept of professional culture as a general culture of society is always discussed by scholars in the field of philosophical thinking, it could be concluded that the culture of communication as part of professional culture can also be considered in this regard. Thus, the culture of communication is a system of values-regulators of professional activity (axiological approach); precondition, purpose, method, tool of professional activity, degree of self-fulfilment, its result and evaluation criteria (approach through action); purposeful expression of the specialist’s personality (individual approach).

The current stage has developed a different approach to defining the main functions of socio-cultural activities. It solves the essential problem of all existing socio-cultural activity, which is its ability to satisfy the phenomena of humanity, society and its culture, as from independent social life. As a result, the authors proposed the initial vector: socio-cultural activity – culture, socio-cultural activity – society, socio-cultural activity – people whose derivatives are creative, socio-organisational and personal development functions. The creative function in this system reflects the position and role of socio-cultural activities in the process of cultural reconstruction through practical and spiritual-psychological values. The justification for the inclusion of such function is that the leisure becomes a cultural factor in the acquisition of cultural values. It happens at the level of folklore, amateur art and other forms, combined with the general concept of folk art. The semantic dominance of another function of socio-cultural activity, which in this context is often called a social organisation, is a holistic set of influences on the system of social relations at all possible levels. Interestingly enough, it has recently undergone many transformations associated with the active development
of social pedagogy and social work. The experience of historical development convincingly testifies to the constantly growing role of cultural leisure in the spiritual inclusion of a person in society, in the socialisation and social adaptation of the individual, in strengthening social ties between people. Finally, the third function of modern socio-cultural activities is the educational function of personal development. In the process of people's participation in leisure, the system of cultural values consciously develops basic personal potentials, including cognitive (what a person knows), value-oriented (what a person values), creative (what a person creates), and communicative potentials (with whom and how a person communicates).

Thus, analysing and synthesising the listed definitions, it could be concluded that the culture of communication in modern times is the goal of communication processes (cultural dialogue), its basis (mutual understanding) and its regulatory tool (culture of professional and everyday communication). According to the authors, the term communicative culture logically connects to the definition of the essence of communication (interactions, relationships, contacts, exchanges, etc.) in a particular system, defining communication as a holistic social and spiritual phenomenon, including psychological and moral education. Moreover, the definition of communication through the category of culture significantly distinguishes its modern meaning from the technocratic one, according to which communication is considered only as a network of channels for transmission of certain information. In this context, the content of communicative culture is close to communicative ethics, a system of moral principles, norms and values, which is designed to give a humanistic meaning to interpersonal relationships. According to the above definitions, the term culture of communication is understood and used as enrichment, improvement of intangible life, a high degree of development of the act of transmission, the message of this life, based on mutual understanding, which is easy to understand for determination.

Within the culture of communication, the authors understand the system of principles of communication as a necessary condition for the effectiveness of professional activity, the established order of communication in the field of expanded social and professional relations and contacts (Maslova, 2010). In addition, the culture of communication is a system of knowledge about universal and professional morality, its history and practice, human relations, aimed at regulating, encouraging or limiting the behaviour of the subjects of these relations, reducing communication and regulating the interests of the general public. The main task of the culture of communication can be defined in the development of such rules for the organisation of the communication process, which will promote mutual understanding of things (Taratorkin, 2019).

Conclusion

Thus, communicative culture is a set of norms, methods and forms of interaction and carries the best patterns and values of behaviour. The cultural component of communication is related to the system of standards and ideas of the individual, who participates in interaction with other subjects. According to the concept focused on the individual, which is characterised by the predominance of the cultural component, general and professional cultures are represented by general
concepts related to the culture of communication. As their subsystem, the culture of communication retains its integrity and relative autonomy. Communicative culture as a professionally important quality of personality includes knowledge, skills and experience of communication and determines the ways of organising value interaction in the professional activity. Thus, the culture of communication is seen, on the one hand, as part of the professional culture, and, on the other hand, as an integral part of the communication process.

Thus, in the modern academia, the culture of communication is considered as an integral part of the general culture of human behaviour, the system of values, norms, and patterns of behaviour adopted in society, the ability of the individual to organise communicative activities. Thus, communicative culture is one of the components of general culture; it improves in the process of human interaction with others; the culture of communication is formed by the external environment, microsocial environment, social relations; it should be considered as an established personal education that affects the quality of activities and communication that evolve in the process of human participation in it. The culture of communication is a complex spiritual and practical education of the individual, which includes the mastered social norms and requirements of communication and develops mechanisms of communicative interaction between people, gains practical experience in communicative activities. Communicative culture is developed under the influence of social, psychological and cultural conditions based on the norms and requirements that society offers at a certain stage of its development. Finally, the authors of the study found that such complex phenomenon as the "culture of communication" requires objectively in-depth theoretical and methodological study of the problems of its design and maintenance.

References


