SYNERGETICS
OF VERBAL-COMMUNICATIVE ACTIVITY:
THE PHILOSOPHY OF SYSTEM DEVELOPMENT
IN DIACHRONY

Bibliographic Description:

Abstract
The first known model of verbal communication was proposed by Aristotle in science, but this direction began to develop actively only in the XX century. During the study of language as a form of the realization of VC researchers have built new and refined already known models: information, code, semiotic, performative, language and others. Thus, they completed the overall picture, but they did not explain the connection of all elements of VC as a single system, which generates an endangered result, as well as they did not take into account the entire composition of elements of VC, which includes consciousness, thinking and experience (knowledge and skills). However, the amount of accumulated scientific knowledge through the isolation and location of research does not give answers to the basic questions of philosophy of language, linguistics and psychology in understanding the connection of consciousness, thinking, experience (knowledge and skills) and language (as the second signalling system). The verbal communicative activity is polydimensional and multidimensional. It means that the presentation and study of it in a linear form is not enough. The proposed review of the models known to science and the reference to the systematic analysis of the components of the VC (linguistic language), psychological, cognitive, intellectual, psychophysical, as well as social aspects of the personality of the communicant) provides the basis for developing a synergistic model of VC as a functional system that would show an interconnected link of the functioning of consciousness, thinking, experience (knowledge and skills) and language (second signalling system).

Keywords: philosophy of language, verbal communication, models of verbal communication, system of verbal communication, language and consciousness, language and thinking, language and experience (knowledge and skills).

1. Introduction.
The twentieth century is marked by a rapid convergence of Philosophy and Linguistics as a result of their close interest in the semantics of natural language. The extension of new ideas in the Philosophy of Language dealing with the sense and meaning of the linguistic sign along with the achievements of Cognitive Psychology and contemporary linguistic studies is of high
informative value. It is due to their ability of interpreting the number and quality of “atomic facts” (after Wittgenstein 1994) “bound” to linguistic signs and extralinguistic procedures (strategies, tactics, methods) implemented.

However, the amount of accumulated scientific knowledge, determined by the isolation and localization of research, does not answer the basic questions of the Philosophy of Language, Linguistics, and Psychology regarding the understanding of the connection between cognition, mentality, experience (skills and knowledge) and a language (the second signal system). The only common thing for all the scientific areas, although in different interpretations, is the recognition of the systematicity and activity as the conditions for the manifestation of the above mentioned “quartet”. It can be easily proved by the existence of such a phenomenon as verbal communication (VC). As a result, in the scientific and educational literature, including works in Communicative Linguistics, or the Theory of Verbal / Speech Communication (TVC), a new and actively developing area of Linguistics, which covers almost all the aspects of linguistic research, it is possible to find only consolidation of various VC aspects (see: F. S. Batsevich, L. V. Volodina & O. K. Karpukhina, M. A. Vasilik, O. Ya. Goykhman & T. M. Nadeina, V. B. Kashkin, Yu. V. Kosenko, V. V. Krasnykh, A. P. Moiseeva, G. G. Pochepstov, Zh. V. Nikolaeva, Ye. A. Selivanova, S. V. Shpakovskaya i V. O. Shpakovsky). Although studying the language as a form of VC realization and trying to present a general picture, the researchers built new and modified already known communication models (information-code, semiotic, performative, speech, etc.), they failed to explain the connection of all VC elements as of a single system, generating an emergent result, neither did they take into account the full set of VC elements, including cognition, mentality, experience (skills and knowledge). As opposed to the aforementioned, the results of our studies provide all the grounds for considering the VC as a performative system uniting all the necessary factors.

The first known to science model (an informative one) was proposed by Aristotle in the fourth century BC (Aristotle 1978), but most actively this issue was worked on only in the twentieth century. In search of a system capable to unite all the elements, we analyzed the dynamics of the VC model development from the standpoint of various contemporary schools, i.e. of the systems theory. Such an approach was determined by the rapid change of the scientific paradigm in the middle of the twentieth century, when the general scientific multiple-theoretic approach gave way to the systemic one, and in Linguistics – to communicative and performative approach. At the present time, systematicity and motion as common properties of matter and the form of its existence (including human practices and thinking) are recognized as the basis of the general scientific paradigm (see: L. von Bertalanffy, J. V. Blauberg, A. A. Bogdanov, E. de Bono, P. Drucker, A. N. Malyuta, L. ia Rush, G. Simon, V. N. Sadovskiy, R. I. Feidzhin, A. D. Hall, A. Chandler, S. A. Chernogor, E. G. Yudin). VC being a type of human activity is not an exception either and is considered a system (Glukhov, Kovshikov 2007). Besides within the framework of the general systems theory, speech communication is recognized as a supercomplex system (Marca 1993).

The system is usually defined as internally and externally coherent, separated from the environment and the target-oriented entity of interacting elements (see: L. von Bertalanffy, P. Senge, E. Akoff, O. Lange, M. Setrov). This definition is quite general and does not reflect the features of the entire variety of systems of different types, but it can be acceptable at the stage of primary data processing.

Here it is important to mention the classification, which is often called the system, whereas it is only linearly ordered by a group of homogeneous phenomena in accordance with some characteristic / characteristics. Both knowledge (facts and rules) and skills (processes and actions) (in terms of Pedagogy and Teaching methods) as parts of the VC system can be also classified, making up the knowledge and skills databases (database and knowledgebase in the terms of Cybernetics, respectively) of verbal-communicative activity (VCA), and being referred to as communicative competence (CC) in Psycholinguistics.
There are a lot of known and used nowadays methods for studying systems (see: S. Optner, C. Gane and T. Sarson, D. Cleland and W. King, F. I. Peregudov, F. P. Tarasenko, B. G. Yudin, S. A. Valuyev, V. A. Gubanov, V. V. Zakharov, A. N. Kovalenko, V. V. Kafarov, I. N. Dorokhov, A. I. Kupryukhin, Yu. A. Dzhagarov, G. I. Dubenchak, V. Ye. Dubenchak), but the major ones are represented by the system analysis and system modelling. It is obvious that only specialists of the relevant specific field of scientific knowledge can make a system analysis. However, verbal communication covers all the aspects of the communicant’s personality, such as linguistic, psychological, cognitive, intellectual, psychophysical, and social ones as constituents of communication, being subjects of study of different sciences. And although much of the research in the above mentioned sciences deals with new areas of Linguistics (Psycholinguistics, Cognitive Science, Sociolinguistics, Pragmatics, Discourse Analysis, etc.), the primary sources must be inevitably taken into account. An extremely high level of knowledge in the areas of science, which are of interest to us, requires comprehending of the accumulated information through abstractions of the systematic methodology.

The components of the system constitute the following formula: \( S = \{W, M, P, R, \alpha, \text{Str} (\text{Org}), \text{iер}, E, G, B, I, C\} \), where the system (S) is an object separated from the environment and existing as a unity with the multitude of constituents, the complex interaction of which leads to the achievement of a certain goal. The most significant feature of the system (S) is its integrity (W), expressed as emergence, meaning a fundamentally new property / characteristics of the unity, wherein the sum of the constituent properties is different from the integral unity existing until the unity itself exists. “It should be noted that the more the properties of the unity differ from the sum of the constituent properties, the higher the organization / ordering of the system is. W. Ashby, a cybernetist, demonstrated that “the higher the degree of agreement in the behaviour of a constituents system”, the more opportunities to choose behaviour the system has” (Zhivitskaya 2005: 78) (emphasis added – A. Z.).

The system includes the following constituents:

- elements (M), i.e. further non-divisible parts, the multiplicity of partitioning of which reveal the aspects of the system;
- properties (P) of elements, subsystems, into which the elements are combined;
- relationships (R) within the system and with other systems;
- communication (α) with other systems;
- structure (organization) \( \text{Str} (\text{Org}) \) of the system;
- (iер) hierarchical structure;
- interaction with the external environment (E) in terms of the matter, energy and information exchange;
- the objectives (G) of the system and its elements as an image of the desired state of the object and the efforts exerted by the system;
- behaviour (B), including the system development, i.e. change of the system itself or its parts determined by the objectives alteration;
- an information aspect (I) that combines databases and knowledge bases;
- management (C) of the system (Sadovskiy 1984).

As a result, VC can be defined as a goal-oriented process of (a) processing and transmitting, or (b) receiving and processing information presented in the verbal form.

2. Prelinguocommunication Period.

As it was already mentioned, the first model of VC is considered to be the model of Aristotle. “Speech consists of three elements: a speaker himself / herself, a subject about which he / she speaks, and a person to whom he / she addresses; it is the final goal of everything” (Aristotle 1978: 24) (emphasis added – A. Z.). In modern interpretation, this model looks as follows:

\[ \text{SPEAKER} \rightarrow \text{SPEECH} \rightarrow \text{LISTENER} \]
This model includes (a) the main “participants” of the VC, (b) their inseparable integrity, (c) isolation from the environment, and (d) the order of “movement” of information from the SPEAKER to the LISTENER. Philologists still call this model the basic one, but for the unexperienced reader, as well as for the System theory, it is a model of the “black box”, or rather, of three equally connected “black boxes”, within which it is impossible to determine the structure and order of functioning of the system constituents in general, since for the whole modelled system neither the goal of its existence, nor the relationship with the environment, nor the nature of the relations between the constituents, nor much else are determined. You can only see the result of the “work” of the hidden (“black box”) system. Therefore, strictly speaking, this model cannot be called a model of the VC system.

Ancient rhetoricians and philosophers in their works tried to present the detailed structural composition of the system which could correlate with the Aristotle’s position of “SPEAKER”, namely, with the VCA and the addressee’s CC (in modern terminology).

Thus, the integrity of the speaker’s VCA system is expressed in the emergent result (Σ), namely, the perlocutive effect demonstrated by the addressee (“LISTENER”, according to Aristotle) under the influence of the perceived and processed written and / or oral speech. It is for the first time when the goal (G) of the addressee’s VCA (SPEAKER’S) is defined, being determined by the Stoics as the finding of an objectified truth in a specific concrete problem (in dialectics, i.e. in the dialogue of the subjects), and by Sophists – as a victory in the favour of the speaker over the listener (in a specific concrete problem irrespective of morality, law, public good and other universal values, because even in the dispute the addressee was regarded as an object of persuasion). Achieving the goal is treated as success. The goal is achieved in the process of verbal communication, that the Stoics considered as a dialogue of subjects seeking for a correct and, eventually, mutually approved solution, by appealing to logic, bringing arguments and stimulating emotions, while the Sophists believed it to be the perfect technology of speech manipulation with the addressee’s consciousness being an object (LISTENER). In either case, the addressee resolves the problem through the persuasion of the persons whom he addresses. It is claimed, for example, that the king of Macedonia, Philip (359 BC – 336 BC, the father of Alexander the Great), reacted to Demosthenes’ speech against Philip’s war (“the Philippics”) as follows: “If I heard these speeches of Demosthenes, I would have voted for the war against myself” (Udalykh 2010: 21).

Elements (M) of SPEAKER’s speeches are considered to be elements of (a) language related to morphology, syntax, and lexicology; (b) logical (argumentation) and compositional structure (poetics), the style of the text of speech in accordance with the speech genres (advisory – to convince or decline, judicial – to blame or justify, epideictic speeches – solemn speeches, encomia – laudatory speeches); (c) cognitive processing of textual information, i.e. the actions of interpreting the meaning of the linguistic sign (Aristotle, V. Z. Demyankov, Ye. A. Selivanova), (d) the activity on pronunciation of a speech, i.e. the technique of speech (Demosthenes). Description of the elements of the speech system characterizes both the properties (P) of the elements mentioned, as well as their grouping into subsystems. But the most known are the declared properties of speech text: logos (force of arguments), ethos (relevance in the situation and compliance with generally accepted customs and standpoints) and pathos (activation of emotions). Important are also the clarity, conciseness, proportionality, elegance, and nobleness of the style of speech.

Special attention was also paid to the subject area of speech texts of different genres, i.e. their connection (α) with knowledge systems in politics, economics, military affairs, international relations, and moral institutions, social area, etc.

The change into the behaviour (B) of the system was made by the Sophists. Having altered the target setting, they changed the whole logic and structure of the speech text as a demagogic system.
The elements of the Aristotle’s three-constituent model, having undergone certain changes, appear in many other subsequent models of VC up to the twentieth century.


In the middle of the twentieth century, they began studying the language sign in action being the basis for new trends development in Linguistics. And “by the 1970s and 1980s […] “the formalizing reduction” of the language, and the ignoring of the human factor, had been perceived as too obvious coarsening” (Demyankov 1995: 48). Including into the determinants the origin and understanding of the forms and meanings of a wide range of extralinguistic conditions for the functioning of verbal communication, which naturally led to the search for a new type of system of relations between form, sense, meaning, and the conditions mentioned, was opposed, in the opinion of most modern linguists, to a taxonomic approach in Linguistics.

However, from our point of view, there was another transition to a qualitatively new level of research in the Philosophy of Language and Linguistics, implying not only a complication of the existing understanding of the language system, but also the inclusion of this system as a subsystem into a larger-scale construction of speech. And this evolution logically took place not as a counterbalance to structuralism, but due to the knowledgebase formed in Linguistics (Susov 1999), giving the opportunity to respond to the challenge of the new time, its new pragmatic and technocratic needs, having combined its efforts with the Philosophy of Language and Psychology.

Since late nineteenth century, in Linguistics, Philosophy, and Psychology there has emerged and begun to develop in parallel the opinion in accordance with which the language is considered as a tool of communication activity and a way of thinking. The idea of “the language as a system of psychological signs used to provide socially communicative, and pragmatically oriented human activity”, initially formulated by I. A. Baudouin de Courtenay, was substantiated in America by Charles Pierce and William James, and in Switzerland – by Ferdinand de Saussure (Leshchak 1997: 40). “Any linguistic fact represents a relation; there is nothing in it but relation” (Saussure 1990: 197). According to Saussure, “The language […] is a grammatical system potentially existing in every brain or, better to say, in the brains of the group of individuals, for the language does not exist in any of them to the full, it exists to the full only in mass” (Saussure 1998: 19).

I. P. Pavlov, a physiologist, creates the theory of the first and second signal systems, explaining the influence of the language as the second signal system (SSS) on the first (FSS), a sensory one, and through it on the physiological, physical, emotional, and mental reactions of a man (Pavlovskiye Sredy 1949).

At the beginning of the twentieth century, in Philosophy, and Linguistics started to spread and grow the idea that senses, formed in the process of speech communication, were not equal to the sum of the meanings of language units, but were of extralinguistic and extra-speech character. There appeared different views and accordingly, the trends of studying the emergent results origin, with the linguists focusing their attention on the speech (Vygotskiy 1956; Glukhov, Kovshikov 2007). There also appeared various theories of verbal communication, as well as a new look of its model.

In 1948 G. Lasswell (Lasswell 1971), an American scholar, proposed an improved model, which looks as follows (cf. with an Aristotelian one).
In such type of interpretation, first and foremost the author introduces the idea of managing (C) all the stages of communication based on the analysis of the context (situation, addressee) (E + a), the content of the message (I), the method of its transmission (P), and also the comparison with the received or the expected results (effect) (G). Moreover, the goal of the addressee became top priority, based on which the optimal text of the message, the channel (a mass media means) and the account of influence on different types of audience were selected.

In 1948, the book of Norbert Wiener, an American mathematician, “Cybernetics: or Control and Communication in the Man and the Animal” (Wiener 1983), was published, where the author presented the concept of feedback (E + B), which significantly influenced Psychology, Sociology, and Linguistics. According to S. Beer (1972) “Feedback is the return of a part of the output information to its input, which will then change. The positive feedback causes an increase in the signal level at the output, and therefore, at the input; the negative feedback with the output signal increase causes a signal decrease at the input, and, as a result, it is stabilizing in principle” (Beer 1993: 408).

The next addition to the model was made by C. E. Shannon and W. Weaver (Shannon & Weaver 1949). Reflecting on interference during communication, they came to the conclusion that “noise” can be not only physically felt, but also perceived in the form of redundant information (I). They determined and mathematically calculated the “optimal” amount of redundancy for the effectiveness of the input information:

Describing various models of communication, G. G. Pocheptsov notes: “The standard communication model, recognized everywhere, consists of the following elements chain: source → coding → message → decoding → recipient” (Pocheptsov 2001: 24). Actually, the whole model is reduced to the well-known formula S → R, where S is a stimulus representing a combination of a set of codes of the second signalling system that causes a certain reaction-R. For this type of model M. L. Makarov gives the following explanation: “The code model can be shortly described as follows: the roles of participants – the sender and the recipient, the message contains information about the state of affairs or "thought" [...] of the speaker, which he intentionally transmits to the listener; they both have a code (a sign language system) that conventionally correlates sounds with meanings. This model is based on the primitive intersubjectivity: the goal of communication is a general thought or, more precisely, a message (a shared message); the process of achieving this goal is possible because of the existence of a shared code. Both of the above mentioned presuppose a greater role of collective experience: identical linguistic knowledge preceding communication (Makarov 2003: 35).

In 1960 R. O. Jacobson (Jacobson 1975) introduces into the VC model the concept of context (E) and code (M).
As for the code model of the VC, Yu. M. Lotman (criticizing R. Jacobson’s model) suggests that in fact the speaker and the listener can possess neither the same knowledge, nor have the same notions of the world and the phenomena in it, and therefore never completely identical codes: “The language is the code plus its history” (Lotman 2000: 15). Otherwise, with the absolute coincidence of the codes’ “history”, there would be no need for communication. VC, according to Yu. M. Lotman, is a kind of “translation” of a text from the addresser’s codes into the addressee’s codes. “The very possibility of such a translation is due to the fact that the codes of both communication participants, though not identical, build overlapping varieties” (Lotman 2000: 563).


In the thirties of the twentieth century in Psychology and Philosophy (in the aspect of the philosophy of language) there appeared scientific works, which initiated the study of the “black box” represented by “SPEECH”. L. S. Vygotskiy, a psychologist, treating speech as a mental and social function of thinking, introduces the notion of speech activity (Vygotskiy 1956). L. Wittgenstein, a philosopher, as a result of reflections on the contact of the language with the inner world of a man and the external world of objects, comes to the conclusion that the “reference system” for understanding the language is neither the world of objects, nor the set of phenomena of the external world (the language functioning environment), but “a common behaviour of people” (Wittgenstein 1994: 164), which makes the use of language signs conventional, giving meaning to these signs and providing an opportunity for success / failure, similar to games (for example, chess or cards). A standard unit of speech (as a move in the game) is called by L. Wittgenstein “the speech act” (SA) (the term is introduced by J. L. Austin and J. R. Searle), the properties of which, but for the standardization of the linguistic system, social standards and conditions of the pragmatic situation, cover purposefulness and co-reference with the speaker’s person. The theory of “language games” was neither clearly described, nor further developed, but played a big role in considering the forms of the language use in action (Susov 1999), and later it was reflected in discourse analysis (Makarov 2003).


Developing the theory of communication, G. G. Pocheptsov gives his idea of the VC as follows: “Communication will be understood by us as processes of recoding the verbal into the nonverbal and nonverbal into the verbal sphere” (Pocheptsov 1996: 16). In Pragmatics, the term “nonverbal sphere” refers to the perlocutive effect (Pocheptsov 1996); i.e. changes in the information state of a particular object (addressee), single or, more often, multiple, and, as a result, his behavior. Research presented in the scientific literature on the theory of communication, primarily deals with the investigation of the dependence of the desired or obtained perlocutive effect upon various aspects of the formation and transmission of information from the pragmatic point of view, recognizing an additional role of cognitive and speech activities for “transcoding”.

“The performative (or actional) principle was introduced into the speech analysis by John Langshaw Austin and John Rogers Searle, the founders of the Philosophy of Language. They developed the so-called standard Theory of Speech Acts, quickly recognized by linguists” (Susov 2009: 34).

The model of the SA of J. L. Austin (1962) is described in three aspects, separated for methodological purposes into discrete acts, and the model of J. R. Searle (1965) – in four, which is presented in Table 1 (after (Susov 1999)).
### Table 1

<table>
<thead>
<tr>
<th>Term</th>
<th>Austin (1962) Term meaning</th>
<th>Searle (1965) Term meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Locutionary Act</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) a phonetic act</td>
<td>realization of a sound structure</td>
<td>realization of a sound structure</td>
</tr>
<tr>
<td>b) a phatic act</td>
<td>realization of a lexical and grammatical structure</td>
<td></td>
</tr>
<tr>
<td>b) a retic act</td>
<td>realization of a semantic structure</td>
<td></td>
</tr>
<tr>
<td><strong>Illocutionary act</strong></td>
<td>A propositional act (proposition – ( p ))</td>
<td>a) a logic form;</td>
</tr>
<tr>
<td></td>
<td>b) state of affairs in the world in past, present, or future</td>
<td>b) state of affairs in the world in past, present, or future</td>
</tr>
<tr>
<td>a) act of reference</td>
<td>reference to a person or an object</td>
<td></td>
</tr>
<tr>
<td>b) act of predication</td>
<td>reference to a token, which is in predication with a referent</td>
<td></td>
</tr>
<tr>
<td><strong>Perlocutionary act</strong></td>
<td>a) intended influence on the addressee;</td>
<td>a) intended influence on the addressee;</td>
</tr>
<tr>
<td></td>
<td>b) conventionality</td>
<td>b) conventionality</td>
</tr>
</tbody>
</table>

The first result of this model demonstrating “the language in use” and action was presented in the form of the list of propositions in which (a) the illocutionary and perlocutive forces coincide due to (b) the presence of performative verbs (for example, *I order*, *I congratulate*, *I swear*, etc.) and / or (c) logical form (*Will you go to the meeting? What kind of sportsman is he? IC\(^1\)-6; What kind of sportsman he is! IC\(^7\)*). And the performatives themselves are already actions.

However, the model of SA implies, but does not include, those many factors (and variants of combinations of these factors), situations and personalities of communicants, that finally form the perlocutive force of the SA and produce one or another perlocutive effect. These issues are considered within the framework of the theory of pragmatic meaning. This theory “is, according to J. Leach, following here J. L. Austin and J. R. Searle, part of the Theory of Activity; meaning is defined in terms of describing what the speakers as the creators of speech acts produce in relation to the listeners” (Susov 2009: 49) (emphasis added – A. Z.).

To the activity models of the VC, considered in the theory of communicative interaction (Linguopragmatics) and in Discourse analysis, it is possible to attribute the interference and interactive cognitive models of VC (Makarov 2003).

The inspirer of one of such models, namely an inferential model, was Herbert Paul Grice (Grice 1967), a linguist and a philosopher who, according to I. P. Susov, “showed that the use of language and the interpretation of linguistic forms are carried out in accordance with certain rules and principles of communication; formulated the postulates (maxims) of the widely known Principle of Cooperation and demonstrated the possibilities of a semantic interpretation of utterances in terms of colloquial (conversational, communicative) implicatures” (Susov 2009: 34).

“The process of communication is initiated not by a person’s desire to convey “thought” or information, but his desire to make his intentions understandable to others. Speech means for

---

1 IC – Intonational construction.
expressing intentions are *utterances*. Their content is not limited (unlike the code model) by representative messages on the state of affairs, they can express, emotions, for instance. Intentions themselves are not propositional at all, they approximate by their nature to settings or motives. But the content of the utterances or the *message* is propositional. Intentions determine how this propositional content should be understood. The code model has taken roots in scientific and everyday consciousness. The interference model appeared not so long ago, but it is adequately perceived at the level of “common sense” (Makarov 2003: 22).

One version of the interference model is the interpretation of all codes as a set of conventions common to the addressee and recipient. Participants in communication **decode a message** based on the knowledge of conventions, signal and context. Obviously, encoding / decoding and inference are different, complementary processes, but, taken separately, they cannot explain the phenomenon of verbal communication.

The third model is the interactive model of communication, the basic feature of which is the interaction of communicants in the socio-cultural situations. It is the communicatively conditioned social practice that explains the formation and transformation of meanings in communication. “Communication does not occur as a translation of information and the manifestation of intention, but as a demonstration of meanings, not necessarily intended for recognition and interpretation by the recipient” (Makarov 2003: 38). The communication considered within the framework of this model, like any form of behavior: action, inaction, speech, silence (for silence see: Bogdanov 1986 Krestinskii 1989, 1990; Tannen, Saville-Troike 1985; Jaworski 1993) – under certain conditions may become communicatively meaningful. Moreover, taking into account all the “demonstrations”, the recipient can **deduce the meanings not laid down by the author of the speech**, as is often encountered in life. According to E. Goffman (Makarov 2003), during communication two types of information are reported: implicit (*information given*), and explicit (*information given-off*). If the primary information is formed by the addressee (selection of meanings, formalization / coding, presentation in accordance with their intentions), then the volume and quality of secondary information (as a secondary text) is formed by the addressee on the basis of information extracted from the received text and depending on a number of intellectual, moral and psychological qualities, as well as the ability to interpret. Thus, the results of interpretation become a measure of the success of communication for both the addressee and the addressee. Accounting for non-verbal aspects of communication, and using the socio-cultural context requires extensive “background knowledge” (presuppositions or presuppositional knowledge) (Makarov 2003: 136), conventional by their nature but not algorithmizable in the same way as language codes.

One of the variants of describing “background knowledge” involved in the interpretation of the text is the list (“questionnaire”) of genre-forming characteristics compiled by T. V. Shmeleva: “a communicative goal; the image of the author; the image of the addressee; dictum; the factor of the past; the factor of the future; the formal organization (later – the language embodiment)” (Shmeleva 1990: 122). The author notes that “the language system, the building of which was so enthusiastically studied by Linguistics during all the twentieth century, is genre-neutral; the speech can be realized only in genres, and outside genres it cannot be understood and studied even on the first review (Shmeleva 1990: 121).

### 4.2. Performative Models.

For the Theory of Communication both the code-information and semiotic, and the psychological and cognitive aspects of verbal communication are equally relevant. However, the psychological processes of speech production and reception were developed thoroughly and consistently no sooner than by the Soviet psycholinguistic school within the framework of the *Theory of Speech Activity* (see: A. N. Leontyev, A. A. Leontyev, Ye. F. Tarasov, N. I. Zhynkin, I. A. Zimmaya, V. P. Zinchenko, A. S. Asmolov and others).

Speech activity means “an active, focused, motivated, objective (informative) process of production and / or reception of a thought (an expression of intention, feelings) formed and
verbalized by the means of a language, and aimed at person’s communicative and cognitive need gratification in the process of communication” (Zimnyaya 2001: 511).

When studying the productive language activities models, a speaking model in particular, Ye. S. Kubyakova (Kubyakova 1991) combines them (models) into linguistic, psycholinguistic and procedural groups. While the speech production linguistic models aim at interpreting the role of linguistic phenomena, units, categories, etc. in speech activity, the procedural models appear “in the context of machine programs or programming methods creation” (Winograd 1983: 124). They are closely related to the Cognitive Science, within which many traditional ideas of Psychology and Linguistics are being reconsidered (see e.g. (Wilensky 1994)), and focused on cognitive processes study, as well as ways of obtaining, storing and using of knowledge structures. Nevertheless, their separation from the psycholinguistic and linguistic models is rather relative, since the latter aim at the detailed description of the specific conditions and characteristics of the speech production processes. At the same time the psycholinguistic models definitely reflect the nature of mental processes in verbal and mental activity, the structure of this activity. It is obvious that due to differences in the presuppositional attitude of modeling, different aspects of speech activity are interpreted in the mentioned patterns, and the results of the analysis are represented in different term and concept systems. However, such a differentiation, which is fully justified for more complete and adequate understanding of the object properties, resulted in a lack of description of the full speech production cycle – from intention to realization – with the single approach. Furthermore, due to the exceptional complexity of such description, all attempts to describe the structure and specificity of the speech production process completely are currently, for obvious reasons, only preliminary (Kubyakova 1991).

I. A. Zimnyaya gives the following brief description of the productive language activities models, offered by the national scientists (Table 2) (Zimnyaya 1985).

<table>
<thead>
<tr>
<th>Author of the model</th>
<th>Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
</tr>
<tr>
<td>L.S. Vygotskiy</td>
<td>motive</td>
</tr>
<tr>
<td>A.A. Leontyev, T.V. Ryabova</td>
<td>motive</td>
</tr>
<tr>
<td>T.V. Akhutina</td>
<td>motive</td>
</tr>
<tr>
<td>A.R. Luriya</td>
<td>motive</td>
</tr>
<tr>
<td>S.D. Katsnelson</td>
<td>motive</td>
</tr>
</tbody>
</table>

Both the mentioned examples and the language activities models developed abroad have a layered, a cyclic or an integrative structure (the levels of production and process phases or stages are specified) (after (Kubyakova 1991)).

Despite a number of differences of the models developed by the mentioned researchers, the phase structural organization of receptive language activities is generally accepted.

1. The phase of perception of external verbal information:
   1.1) optical or acoustic perception of the second signal system signs;
   1.2) discrimination and recognition processes as analytical and synthetic processing of optical / acoustic signal, clustering and template matching.

2. The phase of semantic information processing comes if a recipient has sufficient linguistic knowledge of a particular language and presuppositional knowledge, enabling them to understand the text / discourse traditionally:
   2.1) text compression:
      2.1.1) dividing the text into the parts by its "semantic grouping";
      2.1.2) selection of "semantic reference points" like word combinations, words, parts of the words, bearing the generalized, synthesized meaning of particular parts of the text;
   2.2) replacement of the incoming second signal system signs with cognitive images and their associative links ("equivalent replacement") enabling to consolidate the information received and the information held in mind, and hence to keep it (Smirnov 2005; Zhynkin 1982).

Alongside with the unfolding reception procedure, the probabilistic forecasting of the form and meaning can happen on phonological, lexical, propositional, discourse levels.

Under the decompression of the information through the links appeared in mind on consolidation, some extra link-associated implicit information is often recollected.

In general, the main elements of all productive and receptive language activities models can be structured as follows (see Table 3) (after [Leontyev 1969]).

<table>
<thead>
<tr>
<th>Productive language activities – speaking and writing</th>
<th>Receptive language activities – reading and comprehension</th>
</tr>
</thead>
<tbody>
<tr>
<td>language activities goal actualization;</td>
<td>language activities goal actualization;</td>
</tr>
<tr>
<td>selection and realization of language activities program (strategies and tactics);</td>
<td>selection and realization of text semantic database extraction program (strategies and tactics);</td>
</tr>
<tr>
<td>choice of signs and their combinations with all types of essential meanings;</td>
<td>–psychophysical perception mechanisms (visual, auditory);</td>
</tr>
<tr>
<td>organization (according to linguistic and extra-linguistic rules) of all types of meanings into a speech act in order to derive the necessary sense;</td>
<td>–mechanisms of identification of signs bearing semantics, text semantic database extraction;</td>
</tr>
<tr>
<td>mechanical and physiological actions ensuring the speech act materialization (physical process of ‘speaking’ or ‘writing’).</td>
<td>–interpretation of text semantic database.</td>
</tr>
</tbody>
</table>

Table 3 in general and some its positions in particular require some comments.

1. In every speech activity model at preverbal stages “motivation” which is interpreted as a need, and as a motive, and as a goal at the same time (‘need-motivation-goal’ level after
I. A. Zimnyaya, V. P. Glukhov) is seen as a separate phase. However, according to the motivation theories studies, the needs are just basis for one or another type of activities (Leontyev 1971). In this case, speech activity can activate only the need for the speech process itself. If the need that does not relate to the speech activity directly arises and can be satisfied verbally, the motive of speech activity is formed (Leontyev 1971; Hekhausen 1986).

Therefore, the speech activity motive and goal match only if the speech act is equal to one isosemic isomorphic proposition declaring the motive content directly. This idea can be illustrated with the phrase “Please, open the door” in the situation when you need to leave the room, you keep a pile of books in hand, the door opens inwards, and those present are busy with their own affairs and ignore your problems. Under different conditions, the speech activity motive and goal match for one reason only: there are several goals within the framework of one motive. For example, in the situation when a group of people is in the room, and the window has been opened on a cold day for a long time, and the one who is closer to the window says the phrase “It became cold”. The need for a person in this situation is to warm up, the motive for the phrase is to draw attention of the people to the individual problem, the goal is to get the approval of the people to take off the source of cold or another problem-solving proposal, the form is a polite, non-personalized request to help solve the problem. The same can be applied to the receptive language activities. For example, the passengers read detective stories and popular magazines on a train because they have a need to take their nervous system off stressful waiting on the end of the ride. The motive for choosing reading is its preference to other kinds of pastime available in the circumstances. The goal is to enjoy either the new information or following the intricate storyline without the thinking processes straining.

Furthermore, the need, the motive and the goal are not one-time phenomena. The motive in the verbal method of satisfaction of needs can appear after all other methods have been tried. The goal or even a group of subgoals can appear only as a result of passing the stage of afferent synthesis of all the components of the situation, including the motives and the ways of the activities.

2. In all models of speech activity the stage of selection and realization of the speech activity program is mentioned. The analysis of the scientific literature on this subject demonstrates that this program is usually reduced to the form-semantic associative choice and transformations at the word or propositional level. And the strategies and tactics declared are not offered as they are the organizational forms of the higher level than speech activity, i.e. of the verbal communication level. This is well illustrated on the proposed productive language activities models also.

The similarity in understanding of the first three, i.e. preverbal, stages is obvious. The discrepancy in understanding of the stage following immediately before verbalization indicates the partitioned understanding of preverbal cognitive stages of productive speech. However, despite the general acceptance of the problem, the changeovers from internal to external speech have not received the detailed description yet. For example, beginning with the fourth stage, the level model of productive speech with undifferentiated representation of lexical development and grammar structuring dominate in the models of the majority of authors, and the model by A. R. Luriya contains the scheme typical of generativism – from deep to surface syntax.

5. Verbal-Communicative Activity System.

At first view of the abstracted structure of the system (S), the components of verbal communication are seen clearly in every section (see (Goykhman 1997; Batsevich 2004; Selivanova 2011)). The members (M) include phonetic and phonological units, words, sentences, text (as locutionary capacity of verbal communication) and speech acts. On the one hand, these members are the systems themselves (it must be noted that phonetic and phonological units are the basis for the norm of pronunciation), and on the other hand, they are combined into formal / form-semantic (word, sentence) and semiotic systems (for example, speech act and discourse) which can be qualified as subsystems (subS) within the general verbal communication. Other obvious subsystems (subS) of the general verbal communication system (S) include language
activities (writing, speaking, reading, comprehension) and cognitive activities (verbal communication program building – strategies, tactics; selection of devices and form-semantic means, etc.) with all their specific elements.

Relations (R) with other systems (let us call them R-external) are obvious. Examples can be found in studies on Social Linguistics and Cultural linguistics (for example, the standard language and the ritual speech) (Maslova 2001; Olianich 2004). Another system external to verbal communication is memory, from which the knowledge stored in the process of verbal communication (as frames, scripts, verbal chains, facts, rules, etc.) is extracted. Knowledge (facts and rules) as information consolidated in memory (in cybernetic terms – a database) is a part of the experience (informational aspect – I) (Hergenhahn, Olson 2004). Another part of the experience is the ability to extract knowledge (facts and rules) from the database and use it. In Cybernetics the complex of these skills is called the knowledge database.

In addition to receiving the material signs (oral or written texts), information and / or incentives for verbal-communicative or other activities, the addressee also transmit the material signs (oral or written texts), information and / or incentives with the productive verbal-communicative activities with a goal (G) to influence the consciousness of the addressee and receive a perlocutive verbal-communicative and / or other result planned.

But the obvious relations (R) inside the verbal communication system (let us call them R-internal) are not well understood yet. V. B. Kasevich summarizes the search of the internal connections of the verbal communication elements by linguists as follows: “The question arises: what is the correlation between General Theory of Communication […] and Linguistics as the theory of language?” And as a result of the discussions on the content of the phenomena and concepts of communication, language system and speech activity linking them, the researcher comes to the conclusion that “probably the most appropriate approach to finding the correlation of two spheres and thereafter of two theories will be the functional approach […]” (Kasevich 2001: 73) (emphasis added – A. Z.). Further the author emphasizes the procedural aspect of this concept: “[…] on the basis reasoning from the functions, the theory of language – Linguistics – deals with the language means, the process of their using and the product of this process, and the theory of communication – the goal of language and non-language means using as well as the result achieved with the appropriate processes” (Kasevich 2001: 73).

Citing reflections of V. B. Kasevich, we place focus on the aspect of the concept ‘functional’, highlighted by the author, not without reason1. This concept is derived from the term ‘function’ (from the Lat. functio – execution, performance), used in several meanings2.

---

2 “(philos.), relations of two (a group of) objects, in which a change in one of them leads to a change in the other. F. can be considered in regards to the effects (positive, negative – dysfunctional or neutral – functional), caused by the change of one parameter in another parameters of the object (functionality) or the interrelations of separate parts within a certain whole (functioning)” (Great Soviet Encyclopedia 1978: 138); (from the Lat. functio – execution, performance).
3 (sociol.), “1) the role that a particular social institution or a particular social process takes in regard to public demands, a system of a higher level of organization or the interests of its classes, social groups and individuals (e.g., F. of a state, a family, the arts, etc. relating to society); 2) dependence observed between different components of a single social process when changes in one part of the system are derived from changes in its another part (e.g., changes in urban / rural population ratio as the industry development function)” (Great Soviet Encyclopaedia 1978: 138).
4 (math.), “expressing the dependence of some variables on other variables. If x and y are related so that a certain value of y corresponds to each value of x, then y is called an x (single-valued) inner function. Sometimes x is called an independent, and y – a dependent variable. Such relation between x and y may be expressed as follows: y = f(x)vum y = F(x) etc.” (Great Soviet Encyclopedia 1978: 138);
If we extrapolate the mentioned meanings to the elements of the verbal communication system, we may note that, firstly, from the beginning to the end of verbal communication – it is a series of dependences both in the form of variables and in the form of relations. In particular, verbal communication begins and exists (function 1) only when a need of it emerged and did not end (function 4); and the verbal communication means (for example, a word, a sentence, or a speech act) are the variables (function 3) dependent on the external conditions (see the components of the speech genre model after T. V. Shmeliova) and the communicant’s goals. If one / several external / internal factors (including the system’s goals) change, the means change (function 4), which is considered as behaviour and development (B) in the system theory. And, secondly, verbal communication is procedural as it is realized by the speech and cognitive activities (function 2).

So, we cannot talk only about verbal communication, we can talk about verbal communication as an activity, i.e. the verbal-communicative activity. We must also admit that the verbal-communicative activity is functional in every sense of this concept.

The verbal and verbal-communicative models discussed above can be qualified as the elements of the structure (organization) (Str (Org)). However, like any rational system, the verbal-communicative activity has its own organizational structure. The goal of the verbal-communicative activity has always been considered through the prism of success/failure, i.e. the degree of congruence of perlocutionary effect of the speech act and the addresser’s goal. The ancient philosophers, as is sown above, believed that success depended on elocution, expressiveness, composition, argumentativeness, deep knowledge of the subject, and the audience as a speech receiver. All these positions remain relevant today, but the content and understanding of the mentioned positions have changes, new positions and interpretations have been added.

For example, the situation in today’s society has determined changes not only in the significance of the communicants’ positions – an addressee and an addresser, but also has corrected their goals of verbal communication, hence all components of verbal-communicative activity. The language activities (receptive or productive) or demonstration / interpretation of senses performed by the addressee and the addresser, become tools for achieving the goal – perlocutionary reaction, the price (both literally or figuratively) of correctness / incorrectness of which is rather high for both participants of the communication. In such interaction verbal communication is being built according to the strategic principle in social (including family), as well as public (including political), and every day (including marketing), and any other types of verbal communication. The changes in the verbal-communicative activity structure based on the shift of emphasis in verbal communication cannot be correlated in this article due to the preliminary character of the analysis. Moreover, it stems from the lack of shared understanding of strategic organization of verbal communication in linguistic studies (see: Ye. S. Issers; T. Ye. Yanko; Z. Dörnyei, M. Scott; C. Faerch G. Kasper; E. Kellerman; J. C. Richards; R. Schmidt; E. Bialystok; R. A. Clark, J. A. Daly; J. M. Wiemann; E. Kellerman, T. Paribakht, N. Poulisse and others). However, it can be said with confidence that for successful verbal communication the requirements for the content of the skills and knowledge database – communicative competence – change.

The verbal communication system is controlled (C) through the external and internal feedback (see: V. A. Kovshykov, V. P. Glukhov; L. L. Vvedenskaya; L. T. Pavlova, Ye. Yu. Kashayeva and others), thereby enabling the adaptive verbal-communicative behaviour.

6. Conclusions.

Summarizing the above, it can be said that (a) verbal communication exists only in the process of verbal-communicative activity; (b) verbal-communicative activity begins and is
realized for achieving a certain goal which, in turn, is a system-forming factor combining cognition, mentality, experience (knowledge and skills) and a language (as a signal system); (c) verbal-communicative activity is a functional system controlled through the external and internal feedback.

Verbal-communicative activity is multidimensional, therefore its linear representation and study are insufficient. Therefore, the above-mentioned definitions, the formula and the components of the system structure convey little of the system type, its inner structure and functioning. Only system modeling will allow to analyze, to identify the essential factors of the object studied as a process, a result, a system with its components, and to set the parameters for system control. The construction of such a model which will demonstrate not only the interdependent relationships and mechanisms of cognition, mentality, experience (skills and knowledge) and a language (the second signal system); further research in Philosophy of Language / Communication and Linguistics, but also will allow to prove a number of abstract and applied theories of Linguistics and Linguodidactics, will show the lines of further research.

References


Wiener, N. (1983) *Kibernetika, ili upravleniye i syva' v zhivotnom i mashine* [Cybernetics or control and communication in the animal and the machine]. Moscow: Nauka. 338.


Бібліографічний опис:

Анотація
Першу відому науцю модель вербальної комунікації було запропоновано ще Аристотелем, але активно цей напрям почав розвиватися лише у XX столітті. Протягом винчення мови як форми реалізації ВК дослідники будували нові й уточнювали вже відомі моделі: інформаційно-кодові, семіотичні, перформативні, мовні та ін. — доповнюючи загальну картину, але так і не пояснили зв'язок усіх елементів ВК як одного системи, що породжує емерджентний результат, і не врахували всього складу елементів ВК, який включає свідомість, мислення і досвід (знання і вміння). Однак кількість накопиченого наукового знання через відокремленість і локальність дослідження не дає відповіді на основні питання філософії мови, лінгвістики і психології щодо розуміння зв'язку свідомості, мислення, досвіду (знання і вміння) і мови (як другої сигнальної системи). Вербально комунікативна діяльність — поліаспектна і багатовимірна, але означає, що представлена і досліджена її в лінійному вигляді недостатньо. Запропонований у статті розгляд відомих наук великих моделей і звернення до системного аналізу складових ВК (лінгвістичні, мовні, психологічні, когнітивні, інтелектуальні, психофізичні і соціальні аспекти особистості комунікента) дає підстави для розробки синергетичної моделі ВК як функціональної системи, яка б покращала взаємозумовлений зв'язок свідомості, мислення, досвіду (знань і умінь) і мови (другої сигнальної системи).

Ключові слова: філософія мови, вербальна комунікація, моделі вербальної комунікації, система вербальної комунікації, мова і свідомість, мова і мислення, мова і досвід (знання і вміння).