# ABOUT LANGUAGE OF SCIENTIFIC MODELS IN CULTURAL SCIENCE

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The article reveals the idea of forming cultural models. Language plays the most important role in this process. For elementary models, as scientific research models, the most important thing is an unambiguous usage of signs (the logic of conclusions, the requirement of explication).

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According to the hypothesis of the linguistic relativity, any language represents the world in its own way.. Under E. Sapir's (Сепир 1993: 193, 231) statement, it mediates the structure of reality. The hypothesis speaks about an important role of language in the formation of economy, social structure of a society and cultural traditions. This scientist believes that the worlds of native speakers of languages are differential. People, speaking languages differing in grammatical system, live in different worlds. They perceive the world diversely. The person of a certain culture uses the models of consciousness of the reality, which are given by the native language. Considering language as the notion of experience, many researchers mark that in many respects the linguistic laws unconsciously define a conceptual opinion about the world. The events of the real world are not described mechanically. They are selected and interpreted. Laws of language determine these procedures. "All, what we called culture, its essence, image of life, development and even sense - no more than a hypothesis basing on other hypotheses. The hypothesis supervenes from interpretation of the summarized information about its parts.... Any statement about culture as such

or one of its epochs represents the result of repeatedly repeated multirunning interpretation, which is directed on its components and their interaction" (Аймермахер 1998: 16).

The concept of model gets a special place in the theory of knowledge in the 20th century. Philosophers perceived, that any model is only the invention of its author. Social and cultural information is modeled with the help of a generalized linguistic-semiologic model which is constructed as reflection of cultural universe. One model cannot reflect the entire real complexity of the device of an object. In the foreground there is a search of preconditions of generation of sense and its interpretation. Essentially, it means that the understanding of sense depends on identification of its components and how they are formed and transformed. It prompts the way, consisting in considering of investigated subjects not only within the framework of the conception, produced by separate sciences, but we can also choose such a meta-language, which possesses a higher degree of generality and for this reason would enable to mate diverse phenomena. Roland Barthes in the article "The bases of semiology" asserts that culture builds its structure through the force of symbolizing

function of consciousness, it is realized in language and consequently can be investigated as a language (Bapt 1975: 114–115). Solution of the problem of communicational opportunity follows from the understanding of culture as a language. The consequence of this is the transfer of models and terms from the theory of communication to the sphere of culture. The model itself directly acts as a communicative means of cultural science. Each model reflects a certain field of reality and human activity submitted in certain senses. Actually, it is also a sign system.

A question arises how scientific models should be arranged representing culture or its segment through statements, and whether the representation of a model is adequate to reality. The qualitative characteristics of generalizing statements in the models of cultural studies depend on many factors. They are caused by systematization of research activity, are frequently inadequate to the study object and consequently are not absolutely unequivocal. Certainly, they are insufficient even if we realize that it is the consequence of the inevitable contradiction discretion of language and its claim for completeness of display.

Modeling in cultural studies is directly connected with the "linguistic" figuration of the investigated object. Generalizing the materials of anthropological linguistics, Kluckhohn K. wrote: "Each language is also a special way of view and the interpretation of the experience. In the structure of any language there is a whole assortment of not realized representations about it. The anthropological linguists consider, that the general representations of the person about an event outside him "are not set" by entirely external events. It will be better to formulate the problem by next way. The person sees and hears this, to what he is sensitive by the grammatical system of his language; that he is accustomed to wait from the perception" (Клакхон 1998: 190).

The native language functions as the "base" language of the cultural model of culture, which

is the base for continuous generation and reproduction of the bearing. The combination or creation of derivative languages allows presenting the information model of culture as a semantic field of all cultural events, processes, situations, etc. In the given key the special value gets the studying of the character and relations of such global sign systems which make language - object and the meta-language. The processes of formation of these systems, which have some similar features, in some cases can also be characterized by significant distinctions. As the normative of the scientific model of culture acts the formalization of the criteria, but thus subjectivist normative reduces the theoretical value of the submitted results. It assumes the creation of an adequate meta-language which would possess a higher degree of the generality and for this reason would enable to compare diverse phenomena. The chosen parameters of studying inevitably conduct to "manipulation". The "naturalness" of the investigated material turns through that to an "artificial" object of investigation which lost a part of its specific properties. Investigations with the help of rigidly limited meta-language categories of a specialized sphere of knowledge give less chances of reception of new knowledge.

Actually, we encounter with the struggle of two tendencies. What is it more important in the models of cultural studies – the formalization or semantization of language statements? Besides, some prominent features, determining for them an opportunity of representation of reality and cognitive value, are discovered in both tendencies:

- When the models have a more elementary character, the degree of unambiguity in display of the phenomena of reality is higher, and their cognitive value is more limited;
- Complex models represent reality in a multivalued view. They provide the process of an increment or loss of knowledge, which in detail not always precisely gives definition, but is opened and constantly occurring in time and during the work of consciousness.

In the case of such simple, elementary models, as scientific-research models, the most importanting is the unambiguity of using signs (the logic of a conclusion, the requirement of explication). First, this property interferes with scientific unequivocal description and interpretation of more complex sign models like cultures. Second, insufficiently exact will be the description of the properties which unite the models of the given sort with other complex models. For example, it can be the cultural structures of a higher order which belong to a number of general properties of human consciousness.

A question arises how to compensate the absence in scientific cognitive models of an openness of cultural phenomena (texts), which creates new cognitive opportunities for optimization of these models.

The scientific models of cultural science should not have an extremely analytical character and should seize as many aspects as possible of the investigated object. It is necessary that cultural models of an analytical function prefer descriptive categories and methods of interpretation which appreciate an opened and dynamic character of language as an object. Cultural models are distinct from strictly analytical scientific models based on metalanguage statements and can belong to the area of language as an object. Thus it is impossible to exclude the opportunity of transformation of the given models into a simple description of culture. The indemnification of defects of scientific descriptive models finally is directed towards the development of effective receptions of a description and interpretation. But the mixture of language-object and meta-language should be excluded. The formal similarity of corresponding receptions of a description and procedures of interpretation should guarantee their functional diversity. The adequacy of scientific meta-language would assume the partial structural analogy of languages-objects and meta-languages. It is clear that approaching each other of the substantially incompatible

systems of language-object and meta-language is possible only with the help of two operations. Scientific meta-language should to a certain degree give up claims on accuracy and explication, and in regard to language-object, it is necessary to leave the idea of its absolute adequate description.

The specificity of cultural models depends on a subject sphere they replace (or image they create) and on executable function. According to this base, researchers allocate the following types of models:

- The models of reality or its fragments are the so-called "secondary sign systems". The "natural language" is the material for creation of these models:
- The models of cultural studies comparing with the models of culture have the status of a special meta-language;
- The models used for designing the theory of models. The analysis goes through the intermediate step of the models of cultural studies, received on the basis of cultural models of reality.

Some functions of models are:

- 1) The idealizing schematization of the object which is understood as structural accentuation that provides an opportunity for reception of new knowledge;
- 2) The presentation as display of properties of the modeled object and interests of the researcher.

The named functions form the final system relations, regardless of the degree of the abstractness of models. On account of a universal character, scientific models are especially effective for definition (restriction) of the study object and create an opportunity for analysing the segmentation of complex objects. It is necessary to take into account that any restriction and division of the complex object of studying into corresponding fragments, and also the differentiation of problems and the purposes of investigation direct influence towards the character and sphere of the importance of corresponding statements.

Till now the most complex social systems are described by so inconsistent complex of models that sometimes it seems, that we speak about completely different objects. Different researchers offer completely various models. The already known or new information, received with the help of a model, arises only as a result of conscious or unconscious actualization of a certain system of coordinates.

The collectively caused mental, psychological and social-psychological installations of perception play an essential role during the process of understanding. They also have an influence on constantly varying combination of interpretational parameters.

In communication there inevitably exists a certain inadequacy of understanding, caused by distinction of individual experience, the degree of acquaintance with a certain culture, which is reflected through a model, the moment of interpretation deforms an initial sense. The perceiving subject always possesses certain notions; he expects a certain sense and interprets the model according to these representations.

Basically, the attempts of interpretation are based on different – depending on a choice – parameters of explanation. Uncertainty of the interpretation of "complex situations" can be quite connected with ontological features of investigated objects, so the structural ambiguity results in semantic imposing (a semantic duality).

To concretize the methodological problem, it is necessary to make mention of three similar factors of uncertainty:

- Till now it is not clear how the investigated object parts from the variety of cultural phenomena. It is difficult to say how its fragments or parts can be selected from culture so that the received results will be comparable and could be reduced to something as a whole.
- The features of the research concept with specific starting positions and purposes are another factor, allocating the study object from the array in which it exists.

– The following factor is connected with "language" figuration of the investigated object. It assumes the creation of adequate meta-language. The elected parameters of study inevitably conduct to "manipulation". The "naturalness" of the investigated material thus turns into an "artificial" object of study losing a part of its specific properties.

Incomplete rationality of the objects of cultural research obviously demands an openness of complex research to prevent it from being unilateral and inadequate. It can be regarded as the weakness of scientific research in the field of culture, but at the same time this is a certain advantage of humanitarian disciplines against the so-called exact natural sciences. It is necessary to note that the use of modeling procedure in cultural research allows to expand essentially the notion of language activity in local aspects of culture.

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## APIE MOKSLO MODELIŲ KALBĄ KULTŪROLOGIJOJE

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Straipsnyje plėtojama kultūros modelių formavimo idėja. Šiame procese kalba turi esminę reikšmę. Mokslo tiriamiesiems modeliams svarbiausia yra vartojamų ženklų nedviprasmiškumas (išvadų logiškumas, aiškinamasis pobūdis).

**Reikšminiai žodžiai:** kultūrologija, kultūros modeliai, semantika, metakalba, tyrimo objekto "dirbtinumas".

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