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GERMAN AS A LANGUAGE OF SCIENCE: PROBLEMS AND PERSPECTIVES

Abstract: In the course of analyzing the situation in the field of modern scientific discourse in national languages, it becomes obvious the importance of detailed descriptions of the real language situation not only for establishing normative values, but also for predicting development trends. The article attempts to describe and analyze some of the features of modern professional scientific communication that have a direct impact on the development of both the language of German science in general and the language of German linguistics in particular.

Key words: language of science, language of linguistics, scientific discourse, globalization, lingua franca, professional communication.

Language: English

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Introduction

1. "Universal" language of science: possible / impossible (underline the necessary)

The author's outlook on the problem of globalization of modern science and its language fundamentally contradicts the romantic opinion of a number of linguists and representatives of other humanities, widespread in the last century, about the inevitable merger of languages, when the term "globalization" had not yet been coined and widely used. In the absence of such in the second half of the twentieth century, the processes of the "linguistic brotherhood" predicted in the near future and the subsequent fusion of languages were commonly called internationalization or integration (V.V. Akulenko and others). Internationalization was considered as a kind of indicator, which was intended to reveal the possibilities of languages belonging to different types and cultural-historical linguistic regions, to synthesize and merge.

Modern trends recorded in the development and functioning of the "universal" language of scientific communication allow us to make a cautious conclusion that the hopes for the synthesis or integration of languages belonging to different types and different cultural and historical linguistic regions

have not yet come true. In any case, at this stage in the development of society. Rather, it is justified by the thesis repeatedly confirmed by the historical practice of mankind that "first of all, it depends on political and economic relations whether the language will disappear or remain" [1].

Taking into account the globalization trend in science in general and in linguistic science in particular, attempts made from time to time to develop general approaches to the analysis and synthesis of the studied phenomena of objective reality (including language), the constant qualitative and quantitative growth of scientific ties, a tolerant approach of scientists to the possible proclamation one of the existing natural languages as the universal language of science, at first glance, may seem quite justified. At the root of the disagreements between scientists and researchers from different countries and scientific schools, both in the past and now, lie the principles and criteria for assessing objective facts that they apply, in other words, scientific methodology. The methodology is opposed to the ontological unity of the ways and forms of human thinking. The plurality of languages of the world and the potential ability of each of them to act as a scientific lingua franca by no means contradicts this unity, since through the seemingly



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endless variety of languages emerges a "common model" (V.N. Yartseva).

The general model, which VN Yartseva wrote about almost forty years ago, has actually been implemented in the modern science of language on the basis of the English language, to the detriment of other developed national languages. At the same time, despite widespread loyalty to English as the language of science and advanced technology, the reaction of non-native English linguists varies unconditional support for the current language situation in the field of scientific communication to its extreme rejection. The lack of unity on this issue among linguists, on the one hand, explains partly the delayed and delayed reaction of the scientific linguistic community to the problem of the unprecedented strengthening of the role of the English language in science [2], on the other hand, it prevents the organization of a broad scientific discussion, the subject of which could would become the problem of preserving national languages as a means of communication between scientists and researchers.

2. English vs. native language

The author of studies on the stated topic notes that the German language in the newest period of its existence is developing in the conditions of the exoglossal language situation formed against the background of the invasive influence of the English language [3]. Exploring tendencies of an exoglossic character in various functional styles, they pay attention to the peculiarities of the functioning of subsystems of the German literary language in the context of global Anglo-Americanization. Within the framework of a diafunctional analysis of the linguistic situation in Germany, researchers record a general trend: the decline in the prestige of the German language as the language of science. Time will show how stable it is, but it is indisputable, for example, as a manifestation of this tendency, the fact of reorientation of many German scientific journals into English (for more details, see below). There is a hope that this trend is short-lived and is associated with an underestimation of the significance achievements of German scientists in various fields of science, some, albeit not unfounded, overestimation of the importance of the Anglo-Saxon role in solving urgent scientific problems, the prestige (partly artificially cultivated) of the English language as the language of science.

One of the external reasons that contributed to the fact that the German, French and Russian languages are now rapidly losing their position as the leading languages of European science, is the growing role of the English language in almost all areas of human activity. According to D. Graddall, who in 1997 described the future of the English language in a work of the same name, twelve domains were clearly identified, in which the English language occupied a dominant position. Among them are the activities of

international organizations, the main working language of which is English, the organization of various kinds of conferences, the field of scientific publications, higher education (tertiary education), translation, in which English acts as the main intermediary language into which texts are translated from languages small nations and nationalities (relay language), processes of transfer and implementation of new technologies (technology transfer), Internet communication [4]. The list can be significantly expanded, since only those activities are mentioned above that are in one way or another related to the sphere of social and humanitarian sciences.

There are a number of factors that have driven the English language to a dominant position in science and education. The main ones (ranked in the order of formation) can be recognized as follows.

1. Historically conditioned growth of economic, political, scientific and technical dominance of countries belonging to the so-called Anglo-Saxon world. Even taking into account the current scientific and technological achievements of Germany and other countries, this dominance in the modern world is obvious, and it is largely due to both the colonial past of the English-speaking countries and the difficult geopolitical situation in which Germany found itself throughout the entire twentieth century. The German language as the universally recognized language of science and technology began to lose ground when Germany was defeated in World War I and lost its overseas territories. In the post-war period, the German language, according to U. Ammon, gradually ceased to be the language of international conferences. The scope of its application, especially in the part where it acted as the language of international scientific communication, sharply narrowed, and the language could not restore its positions in the previously existing volume [5].

The defeat of Germany in World War II further narrowed the scope of the German language on an international scale, but the German "economic miracle" helped in part to restore the position of German science in the world, even though the main beneficiary of the last war was the United States, in which it concentrated the main world scientific potential. The emergence of such a situation was partly facilitated by Germany itself, from which the best scientists were expelled during the Nazi era, for the most part forced to emigrate overseas.

At present, attempts to regain the lost influence are being made by inviting German students and schoolchildren studying to Germany, lecturing by German scientists abroad, allocating huge subsidies for publishing books in German, developing software for educational institutions that are engaged in teaching German (in In practice, this often means excellent technical equipment of small centers for the study of the German language, created on the basis of



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universities in the countries of the so-called "third world").

The countries of Eastern Europe (Serbia, Montenegro, Czech Republic, Slovakia, Hungary, Poland, Ukraine), in which the German language has traditionally and historically aroused interest, are involved in the sphere of German influence, caused. among other things, by geopolitical reasons. As for Northern Europe, in the countries of this region, the German language has rapidly lost its once strong position, giving way to the English language. The reason is that the grammatical structure of the German language is considered to be more difficult in comparison with English, which entails more difficulties both in the field of teaching and in the field of translation. In this regard, some researchers predict in the future an even more significant narrowing of the sphere of influence of the German language, which, however, is unlikely to entail its complete disappearance from university curricula [6].

- 2. Expansionary language policy of English-speaking countries, leading to an increasingly obvious division of spheres of influence between languages [7].
- 3. Strengthening the role of the English language as a language of international communication, a kind of lingua franca, which is used by representatives of different nationalities; Wed: "As a means of communication, English today is ahead of French, which, in turn, leaves far behind Spanish, Uzbek, Portuguese, German and Arabic" [8].
- 4. The progressive expansion of the areas of application of the English language (including the dominance of the English language in the field of mass media and document flow) [9].
- 5. The growth of the social prestige of the English language in the world (against the background of a general decline in the quality of education); Wed: "Knowledge of the English language in many countries is still a prerequisite for a successful climb up the social ladder" [10].
- 6. An unprecedented increase in the number of non-native English speakers (the increase in the number of English speakers is not least due to a targeted migration policy).
- 7. Objective simplification of the grammatical structure of the English language used by non-native speakers, both under the influence of intra-lingual tendencies (striving for analyticism), and formed in a variety of regional varieties and pidgin, which are based on the English language (external factor of influence); cf.: "The English language itself is a grammatically simplified language and ... has almost reached the extreme degree of the so-called" analyticism "(from a linguo-typological point of view, second only to the Chinese language)" [11].

"English is different ... In countries where English is used as the official language (the language of office work), its regional variety allows the formation of forms that differ from the normative ones, and includes many words borrowed from local national languages. In addition to this, often surprising, from our point of view, the diversity of forms of the language of world significance, there are also its national variants - British, Australian and American English. So what language do we really speak?" [12].

- 8. Strengthening processes of self-reproduction of pidgin as a result of the simplication and pidginization of the English language.
- 9. Globalization processes, which resulted in a change in scientific paradigms and total internationalization of scientific, cultural, educational and technological spheres of society [13].

As a first approximation, the reasons listed above can be divided into groups: socio-historical, political and economic, information technology and linguistic. Their emergence and complex (at some stages of the development of society) interaction led to the dominance of the English language in the modern world.

Most of these factors are historically determined, politically and economically motivated, which allows them to be classified as "natural". That is why they are not associated in the minds of many linguists with the threat to their own language, in which they think and in which they write the bulk of their scientific works, which they themselves subsequently translate into English.

- 3. Globalization trends in science: arguments "for" and "against"
- 3.1. Restrictions in the field of publication activity of research scientists.

Success in science today largely depends on the citation index of the works of researchers, formed on the basis of information provided by scientometric databases (data banks). A significant part of these data banks are focused on English-language publications. For example, the Thomson Reuters media company publishes the Web of Science Social Sciences Citation Index (SSCI) Journal List, which contains a list of scientific journals included in the WoS database.

The use of English as a "universal" language of science, which has incorporated the Anglo-Saxon code, obviously creates undeniable advantages for its speakers. The latter actively, and not always in good faith, use these advantages. Thus, the leading Anglo-American journals often refuse foreign scholars to publish their articles on the pretext that the texts they submitted were written in insufficiently good English. If we add to this the pronounced orientation of the scientometric bases towards English-language publications, then one can imagine what the citation index will be for the author who writes in his native (not English) language.

In practice, the discriminatory costs of publishing policies lead to the fact that journals de facto often compel scientists to publish their research



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results in English. Some researchers disagree with the fact of coercion, believing that it is impossible to force a scientist to publish articles in a universal scientific language, the role of which is now being played on by the English language. Of course, we are not talking about direct coercion, since science, in principle, should be free from any dictate, including the linguistic one. It is about creating conditions or formulating rules, outside of which the chances of a scientist to publish an article will be minimized. In the light of the above, it seems logical that the conclusion made almost thirty years ago by D. Crystal that more than two-thirds of the world's scientists write their works in English.

For the sake of fairness, however, it should be said that the results of a survey conducted by the German Institute for the Development of Higher Education are determined not only by the pursuit of the citation index or the impact factor, but also by other reasons. They are revealed by F. Rabe, who took part in a large-scale study, the purpose of which was to find out the attitude of German biologists, historians and Germanists to English and German as languages in which they could publish their works. The empirical base of F. Rabe's research was 24 polls-interviews taken from informants within the framework of the project "Publish in English or Perish in German?". The main reason that determined the choice of English as the language of publications by informants was the need to feel like a full-fledged participant in international scientific exchange, within framework of which multilingualism in science ("wissenschaftliche Mehrsprachigkeit"), that is, the publication of the results of scientific activity in several languages, is perceived as hindrance or obstacle. In favor of the German language as the language of scientific publications, they speak out in cases when the publication of a large volume of work is planned, or the publication is intended for Germanspeaking readers or young researchers.

It is important, however, to clearly understand that the need to feel like a participant in an international scientific exchange is itself secondary, since it is a derivative of the rules that researchers are forced to follow in order to make the results of their research the property of their colleagues. If the rules were different, the results of the survey undertaken by F. Rabe would also be different.

It is curious that among the reasons for choosing English as the language of publications, none of the informants indicated a decline in the quality of scientific publications in the national language. Meanwhile, it is this thesis that is actively disseminated and supported by supporters of the lingua franca in science based on the English language, not only in Germany, but also in other European countries, including Uzbekistan. For example, K. Way does not see any problem in the fact that it is English that is chosen as the universal

scientific language, since this choice is natural. The natural choice is due to the low quality of scientific publications in German ("Der Kern des Problems ist nicht die verwendete Sprache, sondern die Qualität der Forschung am Standort Deutschland").

The thesis seems extremely dubious, if only because practically no evidence is given in its favor. Their absence is not surprising, because, indeed, it is difficult to identify qualitative differences between an article by the same author, published in German in Germany, and its English translation, which was published in an American journal.

Many linguists have serious concerns about the fate of German as a language of science, because they do not regard English as a neutral language that mediates between a researcher who thinks in his native language and a text created by that researcher in a translating language. At one time it was possible to talk about neutrality in relation to the ancient Greek or Latin languages, since these are dead languages (is it not for this reason that they suited scientists from different countries as a means of communication in the Middle Ages and at the dawn of modern times?). Meanwhile, English, being the native language of more than half a billion people, together with its inherent communication norms and speech models, is an integral part of Anglophone cultures. Compare: "To speak means to be able to use certain syntactic means, to master the morphology of a particular language, but first of all it means to assimilate cultural values, to bear the burden of civilization".

These words should be understood in such a way that culture as a multidimensional phenomenon in the life of society cannot be closed on itself and cannot be understood as a "thing in itself" or as a kind of store of values ("container"), but as a system directed outside and based on the communicative interaction of members of society.

Extraversion as one of the basic qualities of modern culture determines the influence of this culture on the linguistic code it serves. Hence, fears arise that with the loss of the status of the language of science by the national language under the influence of the expansive foreign linguocultural code, the original linguistic basis of scientific thinking will be lost, which cannot be thought out of connection with national scientific and cultural traditions, and the free exchange of knowledge both between scientists themselves and between scientists and society. This, in turn, is fraught with a loss of continuity and independence, which are still characteristic of German science, and a regression of the national scientific language.

This position, in the part that concerns the exchange of knowledge, is disputed by a number of researchers who believe that the exchange of knowledge does not depend on which language is chosen as the scientific lingua franca, since the effectiveness of communication between scientists



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and society is determined, on the one hand, the subject of communication, and on the other, the specificity of the communication itself, due to the complexity and depth of the transmitted meanings, which are not always available to the general public due to its unpreparedness.

The flaw in this point of view seems obvious for at least two reasons. First, no matter how difficult a serious scientific study is, its results cannot but arouse public interest, since no discovery in science is made for the sake of this very discovery.

Secondly, any scientific project, as a rule, is implemented at the expense of taxpayers, who at any time may ask for what purposes the taxes collected from them are spent. Society has the right to know what highbrow intellectuals are doing, since it holds shares in any scientific enterprise. Otherwise, scientists, satisfying their own professional curiosity, would lose contact with those who are the final consumer of a scientific product.

Speaking about the peculiarities of communication within the scientific community, taking into account the total dominance of the English language in the field of science, one has to put up with an unnatural situation when the results of scientific research of one German scientist can become known to another German scientist only after he has translated his colleague's English-language article into German.

As for the gradual loss of the primordial linguistic basis of scientific thinking, the supporters of the lingua franca in science generally take this problem out of the discussion, since it is declared an assumption devoid of any empiricism. In fact,

statements in favor of preserving the national scientific language as a means of forming and materializing scientific thought do not need additional argumentation due to their obviousness: the tree of thought, materialized in the language, turns magnificently green only if it maintains a connection with the soil that raised it. And in this sense, the words of Gottfried Wilhelm Leibniz that "language is the mirror of the mind" ("ein Spiegel des Verstandes") seem to be more relevant than ever.

Conclusion

Acquaintance with numerous publications discussing the problems arising in connection with the gradual disappearance of multilingualism in the world scientific discourse against the background of the dominance of the English language, raises the question: should the excessive orientation of modern German scientific discourse towards its Englishlanguage analogue be considered as corresponding to the basic interests and values of German? scientific community? In the current situation, it is more likely no than yes. The wide and unregulated use of the lingua franca based on the English language in the field of international scientific communication objectively minimizes the functionality of the language of German science and narrows the scope of these possibilities. Moreover, it obviously, if not stops, then hinders its development. At this stage of its development, the German language, as one of the recognized languages of world science, has all the necessary set of tools sufficient to solve not only actual, but also potential problems in almost all areas of modern scientific discourse.

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