

GENERAL CHARACTERISTICS OF POPULAR SCIENCE DISOURSE

Problems related to popular science (PSD) discourse typology in two languages (English and Ukrainian) are considered in the article: structure, linguistic means of sense presenting, communicative and pragmatic features. PSD relevant phonetic peculiarities are described for the first time.

Key words: popular science discourse, typology, general signs, relevant phonetic characteristics.

В роботі розглянуто проблеми типології науково-популярного дискурсу (НПД) на прикладі двох неблизькопоріднених мов (англійської та української): структура, лінгвістичні засоби передавання змісту, комунікативно-прагматичні особливості. Вперше описано фонетичні характеристики, що є релевантними в оформленні НПД в обох мовах.

Ключові слова: науково-популярний дискурс, типологічно спільні ознаки, релевантні фонетичні характеристики.

В работе рассмотрены проблемы, связанные с типологией научно-популярного дискурса (НПД) в неблизкородственных языках (английском и украинском): структура, лингвистические способы выражения смысла, коммуникативно-прагматические особенности. Впервые описаны фонетические характеристики, релевантные для оформления НПД в двух языках.

Ключевые слова: научно-популярный дискурс, типологически общие признаки, релевантные фонетические характеристики.

The work is devoted to the problem of popular science discourse structure and composing. In the research the functional and taxonomic aspects of the linguistic means in popular science discourse (PSD) are studied. One of the reasons that makes popular science discourse so popular is its ability to treat global topics of social interest involving multiple styles. It should be noticed that PSD deals with the information of two sorts: the one belonging

to scientific facts and the other referring to the events of every-day life that are to be combined with scientific evidence.

The purpose of popular science broadcasts, publications is to introduce some information of certain events and facts to the listeners or readers. One of the characteristic features of popular science style is its ability to comprise a wide variety of entities: popular science magazines and books, children's encyclopedia, the reports of "scientific nature" in the media. This kind of a sub style is aimed at informing the addressee of some technical, economic, scientific ideas in a simplified manner with the aim to make the information easier and understandable for all social groups. The use of lexemes, morphological and syntactic structures belonging to different styles of speech, such as conversation, art, business and academic styles is one of principal differential characters of PSD.

In modern society, all kinds of media (radio, television, newspapers) are pragmatic; the main purpose of mass media is to influence the audience while informing it. Taking into consideration the fact that the pragmatic function of modern media is the basic one the researchers point out the problems of integrity of the text on the one hand and variety of techniques that are used to persuade the addressee on the other hand. One should notice that linguistic forms demonstrate the general idea of the text aimed at getting a certain result (e.g. legitimize certain social problems). Taking into consideration PSD comprehensive presentation while making emphasis on the information key points, the following should be mentioned: in a popular essay every single thought must be described in detail so that the reader's mind could manage to see the further way towards the logical consequence of the idea. If you bore your reader's mind with too quick transitions, the reader will go crazy and lose sight of the general connection of the thoughts. Popular presentation should avoid abstraction; each position must be confirmed by tactile facts and illustrated [1].

It should be mentioned that the linguistic structure of scientific texts in different languages employs various means of rendering confidence, doubt and hesitation of what is being reported; these structures form the language grounds of the PSD. The above mentioned tools are determinative or cognitive markers of the subject of speech, i.e. popular science text author's treatment of the problem. Speakers explore actual phenomena — linguistic exclusion or hedging and stick to various ways of representing this phenomenon in modern English and Ukrainian languages; "to screen off" — the

communicant's desire to be "fenced off" one way or another from the allegations of other speakers. One could say that the language hedging is a type of modality, widely represented in communicative linguistics.

The analysis of popular science discourse shows that it presents all kinds of subjective interpersonal modality. This is explained by the intention of the author who pursues the following: firstly, to change the mentality of the recipient; it is exercised with the help of orders, appeals, guidance and suggestions (i.e. by means of various forms of deontic modality in speech). Secondly, this type of a discourse provides statements qualification from the point of view of necessity – eventuality or possibility – impossibility (aleatic modality). Thirdly, a mandatory component of the scientific popular discourse is a microconcept of axiological modality, where the author brings a subjective assessment, either positive or negative, to the recipient. Finally, the popular science discourse provides a recipient with certain information of various degrees of credibility, and that is achieved by means of epistemic modality.

One of the distinctive features of popular science discourse is reference to the authoritative sources, well known authors who are involved in such phenomena as "hedging" or "personality of someone else", "stranger". The use of statements, opinions, judgments and empirical data of "a stranger" are the foundation of upon which knowledge the information is reviewed in popular science discourse [2].

Very often in scientific popular programs and articles one can find statements that are not supported by the facts or the research and the author in this case sounds rather categorical. Such statements demonstrate a declarative modality, with a touch of being flat.

Relying on previous experience, the speaker, when putting his opinion into words, uses tools that manifest his belief that the judgment is true assumption, cannot express hypothesis and confidence. Some aspects of judgment can be relied on only when a speaker's certainty is taken for granted though his knowledge is incomplete and does not reflect facts. Thus the sender's confidence in the reliability of the information reported, is not the result of logical reasoning, and can be influenced by all sorts of factors that arise spontaneously. These factors are often of an unconscious personal nature, such as personal interests or inclinations of the speaker, membership in a particular domination, intention to get some benefit. In this case, the speaker deliberately gives personal for desired, puts forward his own inter-

ests. Judgments built on this principle may have a status of subjective truth to each individual. Of course, it can be challenged, but it is impossible to refute these statements.

It should be noted that the above — mentioned statements are full of declarative modality, common in popular programs. The following factors give rise to declarative modality being actualized in speech:

- unsuccessful attempt to transfer scientific ideas, without subjecting them to a critical analysis;
- conscious (or unconscious) desire to promote a scientific problem;
- insufficient attention to the form the scientific ideas are presented (lack of knowledge about discourse structure on the whole).

The study of metadiscourse functional particularities allowed to consider it in terms of impact of its structure and the author's characteristics of speech, on the one hand, and the user's, on the other. According to the degree of author and the user's participation in shaping and interpreting the content of the text the two types of metadiscourse are revealed; a two-dimensional interaction of the author either with the text or the user is regarded [3: p. 59]. This approach brings to light the fact of an indirect nature of the author's interaction with the reader; thus only a reader's direct contact with the product of the author's work (with a text) results in a certain interpretation of linguistic devices that convey the content of the author's intention.

It is well known that a dialogical form of communication, common in popular science discourse, is one of the widespread techniques to gain knowledge, focusing on the rhematic part of a sentence structure, enforcing the expressive character of presentation in general. The above mentioned facilitates to populate the scientific knowledge; thus the extensive use of dialogue complexes in popular science discourse proves it. The question-answer complexes and dialogical unities, containing imperative elements, can be also observed. Of course, dialogic character of a popular science discourse increases the degree of its expressiveness which, in its turn, positively affects the efficiency of perceiving some new information and keeping it in mind.

Thus, the conducted study has proved that popular scientific discourse is characterized by a number of communicative properties that are typologically common for the two languages under analysis:

- 1) dynamic development of structural units and communicative parameters, which make it possible to achieve the tasks that a communicative act is aimed at;

2) main objectives of the popular science discourse should be summarized as follows:

a) establishing contact with recipients (to achieve this goal it is necessary to possess certain information about the social status of the listeners, their education, outlook, the stock of knowledge and ability to interpret whatever is heard or read);

b) producing the intended impact on the audience (it is achieved by the presence of such factors in speech of the author as the adequate linguistic means, logical harmony, argumentation, emotionality, etc.);

3) presence of all kinds of subjective modality: deontic (pursues to change the outlook of the recipient; it is carried out by means of using orders, appeals, guidelines and suggestions), aleatic (provides the qualification of utterances from the grounds of necessity / eventuality or possibility / impossibility), axiological (delivers a positive or negative evaluation to a recipient), epistemic (provides certain information to a recipient that includes a varying degree of reliability); it should be noted that, as a rule, the mentioned modality types interact with one another;

4) application of pragmatic tactics that should be classified as "activation" of the thought — presentation, a thought delivering some knowledge is to be embodied into the stylistic characteristics of the scientific style. Such scientific style features as consistency, objectivity, lack of emotions, objective modality, talkative markers of the author's personality are realized with the help of different linguistic means;

5) communicative peculiarities are evident in the materials of popular science presentation which is focused directly on the object of the research (in contrast to scientific papers focused on the research process).

The specific impact on the addressee in a popular science discourse is actualized by means of some linguistic tools: presence of logical harmony in presentation, existence of argumentation and speech emotionality. A characteristic feature of the popular science discourse is the use of statements based on facts that are scientifically proved by an empirical or theoretical way.

The universal character of various linguistic devices (explicit and implicit) is demonstrated by the PSD semantics in various lingual cultures. At the same time, it should be noted that the forms of linguistic means combination in the languages under analysis are quite different. The specific linguistic peculiarity is revealed in certain aspects, which are connected with the following:

a) analytical structure of English and synthetic structure of the Ukrainian language:

– in the Ukrainian language the most frequent are such expressions as: що до мене, на мій погляд; напевно, мабуть, цілком імовірно, ніби, наче, очевидно and others that show the degree of uncertainty in expressing subjective opinion of the author. In the English language, more often than in Ukrainian, modal verbs, modal constructions are actualizing subjective attitude of a speaker;

b) divergency of intonation, formed in the historical development of the compared languages:

– the predominant use of a temporal component in Ukrainian sentence stress and melody contrasts in the English language; greater significance of duration in prosodic structures of Ukrainian in contrast to English, where the temporal component is a relevant character of phoneme distinguishing [4];

c) complex realization of multi-level means of communication such as: lexical level (public vocabulary, slang), syntactic (the use of questions-answers' systems instead of narrative sentences, rhetorical questions), phonetic level (segmentation, accentuation, phrase accent), stylistic (paraphrase, assonants, parallel structures), which provides popular science discourse the effect of a dialogue and emotionality.

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