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### Topical Issues of Linguistics and Teaching Methods in Business and Professional Communication

## LINGUISTIC MEANS OF ECONOMY IN THE ENGLISH MASS MEDIA MEDICAL DISCOURSE

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### *Abstract*

Some common universal trends and trends in the sphere of linguistic economy at the lexical and syntactic levels are considered in the present article based on modern English mass media medical discourse affiliated to the TED Conference video materials embracing a wide range of expert speakers' opinions on global medical issues. Both globalization and language economy tendency accompanied by medicalization of the society and medical innovations providing a great number of medical terms for everyday usage contribute a lot to integration of mass media discourse into professional communication. All these factors taken together motivated the present research. Medical discursive markers providing the adequate interpretation of linguistic economy means and ways are discussed in view of the vital necessity to communicate effectively with minimum speech efforts in the epoch of globalization. The research shows that the most popular means of the language economy within the medical professional discourse at the lexical level include: abbreviation, word compression, compounding, and clipping. The syntactic level of the language system in mass media medical discourse is characterized by the frequent usage of various clauses, noun phrases, secondary predicative constructions, as well as homogeneous parts of a sentence. The succinctness and conciseness, expressiveness and persuasiveness of the language economy within medical linguistic markers help to save time and efforts in the process of professional communication and announcing of novel scientific achievements in the sphere of medicine, providing people with essential medical information and stimulating their participation in a particular medical research, aimed at medical products advertising on a wide scale.

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**Keywords:** Language economy, language medical markers, MEDICINE concept, English medical discourse, mass media discourse, mass media professional communication.



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## 1. Introduction

The beginning of the 21st century is accompanied by the creation of global information space and formation of a new world outlook that are actually supported by all sorts of mass media communication channels. Modern mass media have created new mechanisms responsible for content controlling and information expansion with a certain focus upon efficiency of its application. Mass media discourse, to a greater extent than all other discourses, is sensitive to changes in the society, since mass communication is a significant force in modern culture that reaches a large audience, whether it is written, broadcasted, or spoken. It aims at persuading people through specific channels or media to bring a change in their beliefs, opinions, attitudes, and thinking on numerous issues. Actually, the primary goal of modern mass media is to disseminate messages to a large number of heterogeneous audiences through some forms of technology with reduced speech effort and using as little time as possible. It is due to the fact that time has been a scarce resource, especially in the contemporary world of mass media, that people follow this principle consciously in communicating with others. The reasons are as follows: first and foremost, people's memory is limited; besides, concise expressions are able to convey human ideas and feelings more rapidly than redundant ones; and what is more, language as a reliable tool of communication, and correspondingly persuasion, should be easy to integrate into communicative practice.

In the present research we decided to consider the language economy in terms of the concept MEDICINE, since human health, as well as time, is of paramount importance for everyone nowadays. Our life is inextricably bound up with medicine, and global health problems make people think about health and well-being once again and focus on the concept MEDICINE as the key topic under discussion in modern English mass media discourse. That is why there are so many articles, video clips, TV and video-commercials on medical issues. TED Conference videos provided by the Internet, one of the most powerful channels for communication and knowledge translation, also give people food for thought in terms of health and medicine, and provide us with new medical terms created by language economy means. These new medical linguistic markers appear to be an outcome of modern improving medical technologies and novel diseases nominations, and other innovative products related to the medical sphere. It is due to the relevance of the forecited aspects that the detailed research of language economy with reference to the concept MEDICINE is of great importance nowadays.

## 2. Problem Statement

The significance of the study is based on the need to turn to linguistic means of language economy in the English mass media discourse for medical professional communication as effective methods of modelling a powerful conversation. Means of linguistic economy have a considerable impact on the realization of effective communication in the contemporary world, since they tend towards the application of a minimum amount of efforts necessary for achieving the maximum results, so that nothing is wasted. The topic we touched on has not yet been studied: in particular, we were not able to find any special research projects devoted to the study of this language phenomenon in the framework of actualization of the concept MEDICINE in mass media communication. Moreover, at the present stage, there have not yet been any

studies conducted with the aim of systematizing specific linguistic means of economy in a particular type of discourse.

### **3. Research Questions**

This article presents the results of a qualitative linguistic study, which included the following research questions:

- What is the role of the linguistic economy in the medical mass media discourse?
- Which means of linguistic economy are most in demand by participants in the English-language communication represented by medical mass media discourse?
- What are the functional characteristics of the medical terminological linguistic markers in terms of linguistic economy?

### **4. Purpose of the Study**

The purpose of the study is to select the means of linguistic economy in the framework of the English-language communication represented by medical mass media discourse; to analyse the significance of the language economy principle in the modern mass media communication within the medical discourse; to reveal the nuances of the medical terminological linguistic markers in terms of linguistic economy.

### **5. Research Methods**

The research has been carried out on the material including three hundred and fifty patterns, containing various means of linguistic economy; all the examples have been selected by the method of continuous sampling from forty TED Conference performances in medical fields delivered by proficient speakers. In the present study, the following general scientific methods of research are used: descriptive method, method of observation, quantification and classification methods accompanied by such special methods as systematic approach to linguistic and semantic analysis, and elements of discourse analysis. The means of language economy were identified, their role in medical mass media discourse was determined, and systemic classification with view of the language level and hierarchy markers was introduced.

### **6. Findings**

The theoretical background of the study is founded on the research projects fulfilled by Russian and foreign scholars in the field of Linguistics whose scientific interests are concentrating upon the study of the key aspects of linguistic economy (Martinet, 1955; Samboruk, 2019; Sweet, 1888; Whitney, 1877), mass media discourse (Kajda, 2006; Klushina, 2008; Mikhail'kova, 2009; Ponomarenko, 2013; Solganik, 2003; Vattimo, 2003), medical discourse (Kharkovskaya & Golubykh, 2019; Vishnyakova et al., 2019) and professional discourse organization (Antyufeeva & Bulaeva, 2019; Kharkovskaya & Starostina, 2019; Khranchenko, 2019).

Linguistic economy is extremely valuable and meaningful and can be considered and studied from a diversity of viewpoints. The concept of economy tends towards the minimum amount of effort that is necessary to achieve the maximum result, so that nothing is wasted. That is, the maximum benefit and utility are achieved with the least possible input. The principle of economy is also called the principle of the least effort, which is pursued by a person in various activities due to the innate indolence. People follow and pursue the economy principle in performing different activities with the same objective: all activities are carried out most efficiently with the least possible cost in terms of energy.

In addition to being a biological principle, this principle also functions in language behaviour at the very core of language evolution. Whitney (1877), an American linguist, philologist, and lexicographer, emphasized the role of economy principle in language changes and underlined that a human being is always controlling “to make things easy to our organs of speech, to economize time and effort in the work of expression” (p. 345). An English philologist, phonetician and grammarian Sweet (1888) further noted two phonological principles of economy: “(a) dropping of superfluous sounds; (b) ease of transition from one sound to another, which leads to convergence and assimilation... ” (p. 156) This is due to inertia and indolence of the speech organs. In the present-day world the first coherent definition of linguistic economy was given by Martinet (1955), who studied and analyzed the principle of economy in linguistics, testing its diverse applications in both phonology and syntax. He described it as two essential forces contributing to the optimization of the linguistic system: the unstable balance between the needs of communication – which are always changing – and natural human inertia.

The concept of linguistic economy is the common feature of all languages and displays itself in various forms. This principle in mass communication plays a vital role, as it contributes to thrift and sparing of language.

Since different ways of linguistic economy are considered in the context of the English mass media discourse of medical professional communication, it is instructive to dwell on the specific features of both mass media and professional discourse.

In the modern world of globalization, our society becomes the centre of universal communication, a society of mass media (Vattimo, 2003). Consequently, mass media discourse becomes the key powerful discourse initiating and controlling the movement of social thought and forms a conceptual picture of the human world (Ponomarenko, 2013). This type of discourse aims at influencing society, and its crucial property is the tendency to manipulate people’s consciousness, their thoughts, feelings, and actions (Mikhal'kova, 2009). This principal aim of mass media discourse characterizes the main features of this type of discursive space, emphasized by many authoritative linguists: social evaluativity (Solganik, 2003), openness of the author’s position (Kajda, 2006), ‘political and ideological mode of text formation’ (Klushina, 2008, p. 36).

Particular research of linguistic economy concerning the concept MEDICINE in mass media discourse acquires some additional research of discourse of professional communication, which tends to be “one of the most widely spread types of social interaction” (Khranchenko, 2019, p. 9). Khranchenko (2019) states that participants of professional communication tend to “facilitate constructive and fruitful cooperation, find ways to collectively solve emerging problems and eliminate barriers, influence the decision-making of interlocutors, adapt the speaker’s point of view as far as the discussed issue is

concerned” (p. 11). The concept MEDICINE itself can be described as professionally oriented as soon as it comprises communication in the sphere of medicine and verbalization of medical terms used by both medical professionals and just average people (Kharkovskaya & Golubykh, 2019). Medical discourse specializes in communicative activities associated with life, health and wealth pretending to be the most essential human values influencing in this way the opinion of the society (Golubykh, 2019). The above-mentioned type of discourse ‘deserves special attention in terms of anthropocentric and functional linguistic approaches’ as far as it involves “both professional communication between specialists, and the interaction of the specialist and the patient” (Vishnyakova et al., 2019, p. 55).

This paper is designed to analyse various means of language economy in view of professionally oriented concept MEDICINE in the modern English-language mass media discourse in terms of lexis and syntax.

### 6.1. Lexical means of language economy in terms of medical linguistic markers

The analysis of modern English medical discursive markers at the lexical level has shown that *abbreviation*, *word compression*, *compounding*, and *clipping* are the most expressive and popular means of linguistic economy frequently used in TED Conference videos concerning the sphere of medicine.

**Word compression** is the most widespread way of linguistic economy in mass media discourse under discussion (50% of patterns). Compressives serve as complex words consisting of two, three and even more components created by the process of compression of phrases and sentences without changing their component composition. Subordinating word-groups functioning as prepositive attributes are of particular interest: *person-to-person transmission*, *SARS-one vaccine*, *point-of-care testing*, *gene-editing technology*. We distinguished them into bicomponent and multicomponent linguistic constructions: 1) *virus-specific antibodies*, *long-term immunity*, *zero-symptom cases*; 2) *once-in-a-century pandemic*, *human-to-human-transmissible respiratory viruses*, *"ignore the disease" strategy*, *30,000-some-odd-isolated coronaviruses*, *never-before-seen virus*. Interestingly, compressive words are specific within the modern English language communication, and these individual authors’ formations have no equivalents in the Russian language.

**Abbreviation** is also popular and includes 25% of the lexical means of language economy in the view of the concept MEDICINE. Abbreviation is usually hard to understand in medical professional discourse, that is why such terms need abbreviation expansion: *SARS* = Severe Acute Respiratory Syndrome, *MERS* = Middle Eastern Respiratory Syndrome, *PCR* = Polymerase Chain Reaction, *CEPI* = Coalition for Epidemic Preparedness Innovations, *FDA* = Food and Drug Administration.

**Compounding** accounts for 12,5% of medical discursive markers under analysis: *immunoassays*, *xenophobia*, *agoraphobia*, *coronavirus*, *pathogens*, *mycobacterium*, *headaches*. This type of linguistic economy enriches the concept MEDICINE with the nominations of various diseases, diagnostic methods, and microorganisms.

The last but not least way of medical linguistic economy in the focus of mass media discourse is **clipping** (8,9% of patterns). Within the conditions of COVID-19 occurrence and coronavirus disease dissemination such clipping word as *Corona* (also *Rona*) – informal shortening of coronavirus – becomes quite popular with TED speakers. Other medical examples of clipping are: *flu* <= influenza, *lab* <= laboratory, *med* <= medicine.

The above-mentioned methods of linguistic economy within the medical discourse provide professional mass media communication with the following essential features: brevity; conciseness, emotivity, expressivity, and original style contributing to speech economy as well as pragmatic function and persuasion of the opponents.

## 6.2. Syntactic means of linguistic economy in the context of medical discourse

Succinctness is a distinctive feature of the English language. In English, lower levels of syntactic structures are preferable, which means that, wherever it possible, words are used to replace phrases, and that phrases - instead of clauses and that clauses may be used in lieu of sentences.

Obviously, English is rich in abstract nouns. Therefore, especially in the medical language, it is common that noun phrases are used to express the meaning of clauses. For example: (1) "*As we continue to encroach on other animals' habitats, some scientists say a new coronavirus jumping to humans is inevitable— but if we investigate these unknowns, it doesn't have to be devastating*". (Instead of a sentence: *As we continue to encroach on other places where organisms live,..*).

What is more, words are used instead of phrases. The language of mass media medical discourse is highly lexicalized, so it is common that words, rather than phrases, are used: (1) "*To develop a PCR test for a never-before-seen virus, researchers first sequence its genetic material, or genome, and identify regions that are unique to that specific virus*". (Instead of the sentence: *To develop a PCR test for a virus which has never been seen before*).

(2) "*I'm afraid at least one of the tumours is malignant*". (Instead of the sentence: *I'm afraid at least one of the tumours is expected to grow and get much worse*).

Moreover, in the English language relative pronouns and relative adverbs are quite active in introducing various clauses, such as attributive clauses, adverbial clauses, appositive clauses and so on. Certainly, simple sentences may be used instead, but clauses are more preferable in terms of linguistic economy. E.g.: (1) "*Unfortunately, there are billions of people who don't have access to clean drinking water, which is a huge problem at any time but especially during an outbreak*". (Instead of two sentences: *Unfortunately, there are billions of people who don't have access to clean drinking water. It is a huge problem at any time but especially during an outbreak.*).

(2) "*The immune system relies on millions of defensive white blood cells, also known as leukocytes, that originate in our bone marrow*". (Instead of two sentences: *The immune system relies on millions of defensive white blood cells, also known as leukocytes. The leukocytes originate in our bone marrow.*). Relatively, the first sentence is more authentic and most likely used by native speakers.

Another peculiarity of the English syntax in mass media medical discourse is a wide range of secondary predicative constructions, which are usually built up with the help of verbals and are used in different syntactical functions. The whole complex of relations between the subject and the predicate expressed grammatically in a sentence is called predication. The secondary predicative constructions are built on the basis of non-personal verb forms and are able to minimize subordinate clauses: I insist on your coming (instead of: I insist that you should come.). Secondary predicative constructions contribute to language economy, expressing ideas in a more compact way than a subordinate clause without reducing the amount of information transmitted. They are characterized by a rich composition in the English language and, in accordance with the present research, are frequent in the mass media medical

communication. In these cases, the most popular one becomes the object-infinitive construction, which provides dynamism of information exchange, emphasizing the result of the action: (1) *"And in our own lab, we could show that you could take those 106 records, we could train **computers to predict** the prognosis for Ebola patients to near 100 percent accuracy"*.

(2) *"And there's a lot of bad but appealing options for dealing with it: panic, xenophobia, agoraphobia, authoritarianism, oversimplified lies that make **us think** that hate and fury and loneliness are the solution to outbreaks"*.

The infinitive construction, the verbal component of which has the characteristic of limiting and non-limiting action (terminative/non-terminative verbs), can represent the action either as a process (to carry, to go), or as a result (to bring, to come). This ability, realized at the lexical level, explains the leading role of infinitive constructions in the language of mass media medical discourse, where event dynamics and results are of great importance (Samboruk, 2018).

What is more, it was indicated that the usage of homogeneous infinitives in secondary predicative constructions has a beneficial effect on the linguistic economy, therefore, increases the persuasiveness of the mass media communication: *"...that's what coronaviruses do -- they go for your lungs. They don't make **you puke**, they don't make **you bleed** from the eyeballs, they don't make **you hemorrhage**. They head for your lungs"*.

## 7. Conclusion

The following conclusions were drawn as a result of the present research:

- the compression in the modern English language is a highly efficient means of linguistic economy. Mass media medical communication abounds in various types of language units, the purpose of using which is to save effort at all levels of the language system;
- at the lexical level, the greatest tendency to save language resources is expressed in the processes of abbreviation, word compression, compounding, as well as clipping intensifying a pragmatic function within the modern English communication;
- at the syntactical level of the linguistic system, the concept of economy is implemented in the common usage of diverse clauses, noun phrases, secondary predicative constructions, and homogeneous parts of a sentence. These tools contribute to a more economical and rapid implementation of the act of communication;
- the concept MEDICINE is characterized by coherent and logical actualization of linguistic markers explaining both the fundamentals of medicine and medical advancement, drawing attention to the life of English-speaking society from the perspective of language economy tendency specific to modern communicative aspects of mass media professional discourse.
- medical discursive markers available to the appropriate equivalent of linguistic economy means and ways are outlined for the purpose of facilitating speech efforts in the era of globalization;
- the principle of linguistic economy serves as a tool of concise communication and persuasion in the mass media professional sphere;
- the description of language economy means and ways in the English mass media medical discourse in the present research paper accompanied by textual illustrative samples from the TED Conference videos

contribute to a fair presentation of the concept MEDICINE in modern English worldview. The research materials provide a wide field for further investigation on the linguistic economy in constantly changing mass media medical communication.

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