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DEVELOPMENT OF GEOLOGICAL TERMINOLOGY IN THE XVIII-XX CENTURIES

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ABSTRACT

In the given article, it was observed the stages of development of units related to geology in the English and Uzbek languages, which are linked with the period and system in both languages. In the XVII–XX centuries, most of the field terms came from the English language; they entered the Uzbek language through the intermediate Russian language, adapting to the phonetic and grammatical rules. During this period, word acquisition is also important in the development of the geological terminology of the Uzbek language.

KEYWORDS

Terminology, mining, minerals, foreign term, word acquisition, terminological units, scientists.

INTRODUCTION

Geology as an independent branch of natural science was formed in the middle of the 18th century. The first attempts to create scientific geology are associated with the names of three prominent scientists of that time, namely M.V. Lomonosov (in Russia), A.G. Werner

(in Saxony), and D. Hatton (in Scotland). It is no exaggeration to say that the role of these scientists in the formation of geological terminology is incomparable. Because the research of these scientists proved that geology is a separate science [1]

"The transition of geological terminology to a separate system of terminology corresponds to the heyday of mining terminology and production in Central Europe (from the XI-XII centuries to the end of the XVI century). During this period, a system of mining geological terminology in German appeared in Europe. The discovery of the printing press in Germany and the publication of books on mining greatly influenced its spread. One of the first works on geology and mining terminology in Europe is G. Agricola's book "About Mines and Mines in Old and New Eras," written in 1546 . In this work, the creation of mining geological terms was carried out on the basis of three languages: Latin (this language is distinguished by its wide possibilities for describing the phenomenon and object in more detail), ancient Greek, and modern Agricola , that is, the professional speech of Saxon miners. It is worth noting that during this time period, the English, French, Italian, and Spanish languages developed mining geological terminology with the root of Latin "mine" (mine-mine), and they formed terminological nests related to mineral exploration and extraction. The formation of the system of mining geological terminology in the Russian language dates back to the 18th and 19th centuries [2]. Therefore, it is important to note that most of the geological terms in the Uzbek language came from the English language through the intermediary of the Russian language. Therefore, we believe that it is appropriate to study the research of Russian scientists in geological terms.

METHODS

The Russian scientist M.V. Lomonosov developed a group of geological terms and a terminological system following the following scientific rules in his work "About the Layers of the Earth." They are as follows: a) foreign scientific words and terms must be translated into Russian; b) untranslated words should be left unchanged only when it is impossible to find a complete equivalent of a Russian word or when it has become widely popular as a word borrowed from a foreign language; c) in this case, it is correct to give the foreign term a form specific to the Russian language [1]. Based on these rules, the scientist created various field terminologies consisting of scientific terms, and most of them serve many specific sciences to this day.

At this point, based on the opinion of the above-mentioned scientist, we considered it permissible to mention the following theoretical conclusions that we should attach importance to in the formation of the geological terminology of the Uzbek language.

1. Foreign scientific words and terms must be fully translated into Uzbek.
2. It is appropriate to leave the untranslated words unchanged only if it is impossible to find a complete alternative (equivalent) of the Uzbek word or if it becomes widely popular as a word borrowed from a foreign language.

3. In this case, it is correct to give the foreign term a form specific to the Uzbek language.

RESULTS AND DISCUSSION

Furthermore, when developing new terms, it is critical to pick words from new lexical units with the right meaning using the literary language's national vocabulary. For example, in English: observation, phenomenon, acid, fire glass, earth's axis, air pump, experience, motion, particle, fire-breathing mountain, laws of motion, refraction of rays, balance of bodies, slaked and quicklime, specific gravity, magnetic needle, etc.

In Uzbek: observation, event, acid, stained glass, earth bullet, air pump, experiment, motion, particle, fiery mountain, laws of motion, refraction of rays, balance of bodies, slaked and unslaked lime, specific gravity, magnetic needle, etc.

Acid and a magnetic needle in the Uzbek examples given above can be examples of our second theoretical conclusion. In the 19th century, geology as a separate science developed rapidly. In turn, the number of lexical units that make up geological terminology has increased and improved. During this time, terms like bank, reef, underwater plateau, young platform, anthropogenic relief, asymmetry of the relief, buried relief, river terrace, fossil relief, coral structure, coral reef, channel, border, reef dunes appeared in the geological terminology of the Uzbek language. At the

same time, in the systematization of the terminology of mining and geology, it was important to use the term in accordance with the content of a certain concept and to create special explanatory dictionaries that show the functional-semantic boundaries. As a result, the first "Mining Dictionary" in Russian was published in Russia in 1841. This dictionary included about 3,800 terms related to geology, metallurgy, chemistry, physics, mechanics, and construction. Thus, the publication of this dictionary contributed to the creation of the first complete system of mining and geological terminology [2] in Russia at that time, organized alphabetically in Russian.

The following period of rapid development of geological terminology corresponds to the final quarter of the nineteenth century. This period can be considered an important stage in the origin and subsequent development of earth sciences, specifically geology. The terms of this period indicate the development of all scientific and technical ideas in the geological industry and the systematic and progressive organization of terminology. As a result, the geological terminology is as follows: crack hole, cracklayer, crack, bogrelief, accumulative terrace, accumulative terrace, steppe accumulative plains, orogen - orogeny (formation of a mountain), denudation - denudation (emergence of rocks on the surface of the earth), plateaus denudation, abrasion platform - abrasive (peak-shaped) coasts, abrasive platform, anticline -

anticlinal structure (a ridge-shaped fold of layered rocks, in which the layers slope down from the peak), the valley of the U-shaped - U-shaped valley, estuary - estuary (of the river confluence), couloir - gorge (steep, narrow ravine on the mountainside), mesorelief - mesorelief (relief forms, the height amplitude of which is usually not more than a few tens of meters between macrorelief and microrelief forms of medium size (valleys of small rivers, ravines, secondary ridges of ridges, moraines hills, dunes, mud volcanoes, etc.), mountainous terrain, blocky mountains, accumulative shore - filled with accumulative shore and other field terms [3].

During this period, word acquisition is also important in the development of the geological terminology of the Uzbek language. Therefore, we found that although most of the field terms came from the English language, they entered the Uzbek language through the intermediate Russian language, adapting to the phonetic and grammatical rules. Below, we consider it necessary to give an example of these borrowed terms. For example: Uzbek minus, plus, diameter, radius, formula, barometer, horizon, ecliptic, microscope, meteorology, optics, horizontal, vertical, periphery; Russian minus, plus, diameter, radius, formula, barometer, horizon, ecliptic, microscope, meteorology, optics, horizontal, vertical, periphery; visual minus, plus, diameter, radius, formula,

barometer, horizon, ecliptic, microscope, meteorology, optics, horizontally, vertically, etc.

If the above-mentioned geological terms were formed in the English language in the 18th century, we can observe that they were widely used in the terminology of various fields in the Russian and Uzbek languages at the end of the 19th century and the beginning of the 20th century.

The number of lexical units in geological terminology is proportional to the amount of knowledge and skills acquired in the historical stages of the development of the field. After all, the need for new words and terms expands with the increase of field knowledge. In most cases, this need is covered by the acquisition of words and terms from different fields, and the creation of new words and terms. The numerical growth of geological terminology in English and Uzbek is closely related to the general development of the lexical fund of the literary language in both languages .

It was observed that the stages of development of units related to geology in English and Uzbek languages are inextricably linked with the period and system in both languages. Although geological lexical units have been used in Uzbek and English for a long time, some of them became international terms in the 19th and 20th centuries.

CONCLUSION

It should be noted that new periodical publications, educational and scientific literature, the emergence of new fields, and the rapid development of science and technology ensure that the process of term formation is somewhat disorganized and disorderly. Therefore, as a result of our analysis, we put forward three scientific views directly related to the formation of geological terms: 1) Field terminological units formed on the basis of current English and Uzbek literary languages; 2) terminology of other languages firmly embedded in and mastered by the people; and 3) using terminology of other languages to create new terms in both languages, indicating that word acquisition is effective in forming geological terminology.

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