



HISTORY OF WASTEWATER TERMS

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ABSTRACT

In the article, comments are made about the expression and structural use of waste water and the lexical units related to it, which continue to be used to a certain extent in the lexical treasure of the Uzbek language or have completely gone out of use today. There are pipelines and structures that remove waste water from our houses, and they are expressed by different words, such as obrez, hanik, tazar, toshnov (dashnov). These words meant the name of a device or structure built in cities to collect and remove underground, rain and polluted water. These words used in the history of sewage and treatment system were taken and analyzed as an object of research.

KEYWORDS

Hanik, obrez, waste water, water, water science, sewage, water treatment, tazar, waste water.

INTRODUCTION

Everything and event in nature and society has its history of development and origin. When the researcher chooses a specific topic and tries to study it from a linguistic point of view, he tries to start by studying the history and origin of his research source. Based on this, as we begin the scientific analysis of the

terminology of waste water and its treatment system, which is the object of our research, we consider it necessary to first look at the lexeme of water and the history of its formation.

Water is one of the most unique, rare and priceless resources of nature. It is the source of life and



sustenance for all living creatures, humans, flora and fauna. When talking about water, it is important to remember that water is the most precious treasure in nature, a miracle and discovery of nature. Famous natural scientist, academician V.I.Vernadsky: "Natural water creates and covers the whole life of a person. "There is probably no other natural body that can define its place in society, marriage, and human existence to such an extent " he wrote. The importance of water in agriculture and industry is also proved by the following facts. For example, 1500 tons for each ton of wheat crop, 1-2 tons for making 1 ton of bricks, 3 tons for 1 ton of coal mining, and 1 ton for steel or paper production. 250-300 tons of water will be needed. During the production of 1 ton of synthetic fiber, up to 4000 tons of water is required. It takes 10 tons of water to make 1 ton of yarn, while 3,000 tons of water are needed to make 1 ton of some synthetic fibers. In our nation, where water is equal to life, knowledge about rivers and springs has been preserved in the memory of the people for centuries.

METHODS

Central Asian scientists have made significant contributions to the development of water science - hydrology from ancient times to the present day and recognition as a separate science. Researcher F.Hikmatov divided the formation and development of the first ideas about water science in Central Asia into the following stages:

1. The period from antiquity to the 9th century of the new era.
2. The period from the 9th century to the beginning of the 13th century, that is, before the Mongol invasion, is the period of the Eastern Renaissance.
3. The period from the middle of the 14th century to the first half of the 16th century is the period of the Timurids.
4. The period from the second half of the 16th century to the second half of the 19th century.
5. The period until the beginning of the 20th century.
6. The era of the Soviets.
7. The period of independence.

Waterways used in water science was a widely used concept by encyclopedists.

Ahmad al-Farg'niy has created the manual "Miqyosi jadid", which consists of a set of tables, instructions, recommendations on the practical use of the instant water measuring device – "Nilometer". He applied the achievements of mathematics and geodesy to hydrology.

The work "History of Bukhara" by Narshakhi, a historian who lived in the 10th century, is also noteworthy from the point of view of water science.



The 10th century, the author of unknown "Kitobi hudud al-alam minal mashriq ilal maghrib" (Book of the boundaries of the world from east to west) shows that water has a special value in the lives of the peoples of Central Asia. we can also know through thoughts. "There are two types of rivers, one is a natural river and the other is an artificial river. The water of natural rivers is produced by the melting of snow and water that flows from the surface of the earth from springs in the mountains. or flows until it reaches a swamp. Artificial rivers are rivers whose beds have been excavated and whose water is intended for the development of cities or for irrigating the crops of the region is conducted. This work is distinguished by the wealth of information related to hydrology and hydrography.

Of Abu Rayhan Beruniy, such as "Remembrance of Past Generations", "India", "At-Tafqim", "Kanuni Mas'udi", "Geodesia", "Minerology" valuable ideas for science are presented. Scientific views on oceans, seas, bays, inland waters, rivers, streams, springs, lakes, glaciers, wetlands, and even groundwater are covered. "India" contains valuable information on "Oceanology". Pacific (Eastern Sea or Eastern Environment) and Indian (Great Sea) oceans, Bontus (Black Sea), Sham (Mediterranean Sea), Khazarian (Caspian) Sea, Khorezm (Aral) Sea, Issyk-Kul, Etil (Volga), Nile, Jayhun, Oksart rivers are described. Beruni's contribution to the science of oceans and seas was called "Beruni's theory of the seas" by European scientists.

In the work "Baburnoma" you can also find information about the hydrography of our country - description of rivers and streams, springs, lakes. It describes in detail water sources, river depth, freezing, flow mode, flow rate (how many mills flow). The work compares running water and black water. "Lexemes expressing relativeness are of different types: okar aq is the root of the verb, and the suffix -ar is a form forming an adjective, that is, a lexeme denoting action, and black is a word denoting color in modern Uzbek. However, these lexemes slightly differ from their meaning in the appellative lexical set and acquire a new meaning: flowing water is the speed and volume of flow, small amount of water, flowing water is water formed by melting snow; black water is underground water far from the mountain, far from the snowy place. That is, running water is river water, black water is spring water.

RESULTS AND DISCUSSION

It is known from the researches of linguists that language units directly related to human life and daily activities are ancient they are distinguished by their stable nature, they are very little subject to various linguistic changes. Among these are the lexical knowledge representing tools of production, household items, natural phenomena, kinship, names of things, etc. Undoubtedly, water and related terms are one of such layers. Because the formation of man as a human being is as old as the terms related to



water. Water, its composition, physico-chemical properties, as an existing materiality, has been seriously studied in the natural sciences while in linguistics, based on a number of methods and methods, studies aimed at determining the various properties of the linguistic object at the level of the concept of water and the lexeme have also been carried out.

In the lexical treasury of modern sister Turkic languages, including Uzbek which continues to be used to a certain extent or from consumption today lexical units belonging to the old Turkic language, which have completely disappeared with the fact that the terminological lexicon also occupies a significant place in its structure is characteristic.

Accordingly, the changes that took place in the runic inscriptions and the first ancient Turkic monuments of the lexeme of water, its structural structure, and the structure of its creation analyzed based on examples. For example, *suzuk* water means "clear, blue-blue water", *tarkin* water means "muddy water", *et yer* means "soft land"; soft soil ", *tatyrlig* land "hard land", *kargag* "a place without grass and water, *kaqrakok*", *sargan* land "salty land", *sagiz topraq* "ealthy land", *acuq kok* "open air".

In the "Old Turkic dictionary" water [sub≈sug≈cuw≈] s has its own "water", "moisture", "liquid"; from the word *suva* "to water", "to moisten" (*kuru* ≈*jerig* *suvaju*

– to water the dry land), from the word *suval* "watered" (*tari* ≈*suvaldi* – the millet was watered), from the word *suv* ≈*ar* "drink water", "give water"; of the word *suvs* "to be thirsty", "thirst"; "thirsty" of the word *suvsaliq*; It is noted that the word *suvsat* means "to make thirsty" (*ol an* ≈*suvsatti* – he made him thirsty for water).

Studying the words in "Devonu lug'otit-Turk" allows you to find out that there are more than 1200 hydrological terms in it. There are 218 words in Volume 1, 447 in Volume 2, and 562 in Volume 3 for hydrological events and processes. 22 water-based lexemes are recorded. For example: *ališ* – 29 place (place) where water is poured into the pool; *flow* – flood; *syzyk syw* – clear water; *munduz akin* – a sudden flood; *ring* – water that has slipped out of the ground and turned into a pool, *sizot* water; *üzük* – a place where water is collected; *qızığ* – sea, stream, valley bank, sand - water wave, *akindi syw* – running water (I,158), *batruş syw* – muddy water (I,428), *s g w qaqaldi* – water collected (II, 299), *qaq syw* – water collection, collection, *syw qoğuşlandi* – the water stirred . Also in "Devon" water and water component terms, concepts the meaning is covered, water and aquaculture, and a large one related to agriculture volume information, more than 100 names of water sources are also available.

In Ahmad Yugnaki's work "Hibatul-haqoyiq" *su(v)* – sw water



(хилимлық су(в)ын сач ол отны өчүр – gently sprinkle water and put out the fire).

Yusuf Khos Hajib's work "Kutadgu Bilig" suvsamishka – when thirsty, green water - blue water, drink water – drink water, eye water – shame, worry, aliveness – obi Thank you units are used.

Alisher Navoi skillfully used the words water, water year, Khizr suyi, suvor, without water, suva, suy, suvol, suvar, sugurok, suvor, suchi in his works.

In the dictionary of V. Radlov, it is said that the word cy, cy ≈ cyy, cyr cyн ≈ cyб ≈ cyw "water", "river", "moisture", "liquid", "juice".

This point, it is worth mentioning the works of L.Danilova, D.Aytbayev, H. Jabborov, T.Mirzayev. For example, L.V.Danilova tried to reveal the lexical-semantic features of words such as dol, kiriv, bulduruk in her work on the metrological properties of water, but in her research, she did not have any thoughts about the ecological aspects of the above terms. There are no comments. D.Aytbayev talks about water-related terms and hydrographic information in the work "Devonu lug'otit turk", and emphasizes that they are important in clarifying the language of that time.

However, the author did not approach the above lexemes as ecological terms. As a matter of fact, the water-related names included in the dictionary by Mahmud Kashgari indicate that this layer has been active in Turkic languages, including Uzbek.

Linguist A.P.Madvaliyev in his candidacy thesis entitled "Uzbek chemical terminology and issues of its standardization" mentions the following about the use of water as a chemical term combined with other words to form a word combination: "Water so'zi is used in a broad sense in our literary language. But since it was discovered that this term is water - H₂O, i.e. water in the technical and chemical meaning of hydrogen and oxygen, it is a salt-free, transparent liquid (until 1790, this term was not known in the chemical and technical sense edi) this term began to be used as a term meaning distilled, "chemically pure water". It began to be used in a limited sense compared to the general literary language. He even gives the following examples, saying that water compounds created using the lexeme of water differ sharply in terminology and usage in common literary language:

<i>In terminology</i>	<i>in universal language</i>
heavy water	cold water
hard water	clear water



soft water	salt water
water gas	water flow ¹

Water with dependent lexicon of units synchronous study regarding X.Jabbarov scientific research there is. He is "Uzbek of the language watering lexicon candidacy work and" Uzbek in the language water of the lexeme Lug'aviy- meaning noviy features in his monograph water basis with 468 made lexeme and 60 of phrasing Lug' aviy - meaning noviy and grammar features about in detail thought conducted Water lexeme studied more than 700 proverbs, sayings and expressions. One can fully agree with the opinion of the researcher that the water stain branched and formed more than 30 new meaningful words. In addition, scientist Alisher Navoi analyzed the use of the word water in his works. The semantics of the concept of water is also covered in research related to the analysis of concepts related to it, and geographical concepts related to water are explained in the study of I.Islamov . In T. Mirzayeva's research, the semantic scope of the lexeme of water, the meaning and symbols of the lexeme in mythopoetic (ancient myths about the creation of the world, narratives and other manifestations in folk oral works), folk rituals, the role of the lexeme in the environment of the nobility and the palace, it related themes and philosophical essence

are covered. Some semantic and grammatical aspects of the Uzbek word water A.Sobirov, who analyzed the characteristics of the nominative word stops and says that it consists of three phonemes (s+u+v). Uzbek language is a unit that is actively used in the lexical layer, and is historically phonetic that the variant form (s+u) is the main indicator of the speech style emphasizes. The young researcher M.Muminova studied the linguo-cultural characteristics of the linguistic units with the "Water" component in the Uzbek language.

It is known that in world linguistics, a lot of work has been carried out on the study of water lexemes, conclusions based on comparative and comparative methods have been stated, system-structural studies have been carried out in several directions. Also, in scientific works based on field theory, there are opinions related to water during the research of other fields.

used in world languages, are studied in a comparative aspect, in terms of their integration into common families, the existence of common cultural word forms, the mutual similarity of both phonetic and linguistic



signs of the water lexeme in common language families, and their opinions were expressed that the linguistic-linguistic structure originates from the same root. It is noted that the Russian [voda] and English [water] lexemes of universal character originate from the common root - [wetV]. In the process of migration to large language families, it underwent structural and grammatical changes. These views are interpretations based on the Nostratic hypothesis, which recognizes similarities in a number of languages.

G.M.Telejko cited the manifestations of the lexeme "water" characteristic of common languages and analyzed the lexeme on the basis of the Nostratic hypothesis: in the Indo-European family: dō(w)-; in the Altaï family: t`uja; in the Dravidian family: ta; in the Ural family: toye . The linguist also says that in ancient times, the stem meaning "water" and "rain" had the meanings of "to give" and "gift" in its semantic structure.

studied the voda "water" paradigm, structural-grammatical changes related to the lexeme, scope of use of hydronyms and non-alternative cases.

Studies aimed at showing the common characteristics of lexemes expressing the concept of water between related languages, the similarity in external (phonetic) and lexical-grammatical signs of the word have also been carried out. A. Borisova compares the Russian

and Polish words voda/woda and unites the correlative themes that unite them into five major groups:

1. Water is a liquid, transparent, clear element chemically composed of hydrogen and oxygen. This sema is the dominant sema in which the main meaning of the word is the basis for the emergence of its derivative semas in both languages.

2. Water – space: the names of places where water accumulates and exists - pond, lake, river, stream, canal, river, sea, ocean, etc. based on its composition, it is divided into main and derivative semes.

3. Water – air: this group is one of the aggregate states of water related to the gas state, and reflects phenomena related to the same state in nature: steam, vapor, fog. Dividing these units into main and derivative semes possible.

4. Water – a solid body: this group represents one of the aggregate states of water in the atmosphere as a solid body: ice, snow, snowflake, sumac, hail. The composition of lexemes can be divided into primary and derived lexemes.

5. Water – drops - phenomena falling from the atmosphere in the form of drops: rain, hail. This classification of A.Borisova is important in the study of different language families in a comparative, cross-sectional aspect.



However, the researches confirm that there are still many undiscovered facets and aspects of water-related words, and the semantic branching of the word water has not yet been completed. For example, its special meanings (ecological, technological, chemical) are neglected. In reality, in the microsystem related to water, two parallel ecological trends have long been dominant: cleanliness, purity, contamination with naturalness, pollution, artificiality.

Since ancient times, the sewage system has played an important role in the life of our people. There were earthen, wooden pipes, and underground waterways that removed used water from houses and urban areas. Specially constructed devices or structures were used to collect and discharge underground, rainwater and polluted water to provide municipal services to the urban population. We can learn from the information given in some historical sources that the water purification system was established in order to keep the water clean and use it wisely without wasting it. According to the information given in the informative brochure "Channels", the people of Khorezm used a device called a steep pipe to clarify water in the irrigation system when using water from streams, canals, and rivers. The length of the vertical pole is from 50-60 sm to 2 m, the diameter is from 5-10 sm to 30 sm. When the water in the dam (channel) increases, the flow increases and the range of movement of heavy particles expands. As a result, these particles

spread to the ditches. At this time, the lower holes of the vertical column are closed, and the upper holes of the device are opened so that the upper part of the flow with less cloudy particles flows. Heavy particles (sand, stones) sank down, and water flowed into the ditches. The method of water purification has been important in the life of our people since ancient times.

Village ruins of the 13th-14th centuries in the area of the Khoja Ravshan monument in the Mubarak district of Kashkadarya region, "Tashnov (dashnov)" or "obrez" is said from the courtyard of Qizbibi house, built in the 30s of the 16th century, with an area of 0,5 hectares, and the yard of the Qilichboy madrasa, built in 1914 in the city of Karshi, located 30 km west of Bukhara. , the remains of a device that served as a special sewage pipe designed to drain water from the house were found. Stone is a word with many meanings, the dictionary defines it as "...a common name for hard, brittle rocks that are impermeable to water and occur in a solid mass or fragment ". In the old Turkish language, this name, which had the same meaning, was pronounced in the form of ta:sh . Later, the sign of longing on the vowel a: disappeared and was replaced by the vowel a : ta:sh-tash-tash . Nov is a Persian word that means a special channel for water to flow. Used in the form of ta:sh-nov-tash-nov-tashnov .

In addition, a number of dastsho'(y), hanik, obbandon, obgoh, obbakhsh, obbandi, obdov, obro'v, obro'ft, related to today's sewage and water treatment system



from ancient times. Our people actively used units such as obeshkhor, obpartov, obrez, obkhona, akindi, tazar, tashnov (dashnov), tik tokurtka, kholob.

Under the floor of a rich nobleman's house excavated at a depth of 3,5 m from Dalvarzintepa, 93-98 sm in length and 42-46 sm in diameter, about twenty tazar devices were found. Also, from Afrosiyab, from the II-III centuries Korgontepa Buddhist temple of Tajikistan, from the Karatepa Buddhist temple in Termiz, from the ruins of Aikhonim city of Afghanistan, from the IV century BC, from the ruins of Abdullakhan shaharkala, the unique "tazar" called "underground water, rain, sewage and sewage" "special devices made of large, thick clay to collect and take out of the city" were found. There are written records of the use of tazar in the construction of arches, hordes, castles, madrasas, residential architecture, and baths dating back to the 11th-16th centuries.

CONCLUSIONS

So, these words listed above have been widely used in the daily life of our people, and even now some of them are found in historical and artistic works. In addition, it is important to collect words related to wastewater and its treatment system, which are widely used in the social life of our people, and to correctly classify them etymologically and morphologically. During the research, it became clear that wastewater, terms related to it, do not have a

history of special study. Terminological system of the field is not regulated and lexicographic interpretation is not developed. There are several sources dedicated to the study of terms of the field: the terms used in the course of wastewater and its treatment in textbooks, training manuals are manifested in different forms and content in different sources. Certain encyclopedic and specialized dictionaries containing terms related to wastewater and its treatment system have some deficiencies and defects. Dictionaries dedicated to studying the interpretation of terms related to the field have not yet been created in Uzbek lexicography. Tazar the word is not included in the explanatory dictionary, and the word khalkob is given in the explanatory dictionaries with the letter x in the form of Khalkob. There is diversity in the definitions of wastewater and its treatment system in explanatory dictionaries of the Uzbek language, and today's lexicography is tasked with conducting serious research and adapting to the requirements of the times. The study of these terminological units related to wastewater and its treatment system will serve as a resource for the vocabularies created and created.

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