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REFLECTION OF RELIEF FORMS IN GEOGRAPHICAL NAMES OF THE ZHAMBYL DISTRICT OF THE ALMATY REGION

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Abstract. The article comprehensively examines orographic terms and names common in the Zhambyl district of the Almaty region. The study is based on the Catalogue of State Geographical Names of the Republic of Kazakhstan, topographic maps, and field materials. A structural-semantic and etymological analysis of about 1,000 geographical names selected within the district was carried out, and their toponymic activity was determined. In the system of oronyms, the proportion of terms denoting positive, negative, and neutral forms of relief was identified, and the patterns of their spatial distribution were established. The semantic features and historical and ethnolinguistic foundations of the indicator terms “tobe” “shoqy” “tau” “say” “qiya” and “asu” were revealed. It has been shown that orographic metaphors, color-denoting components, as well as oronyms associated with the flora and fauna, reflect the landscape features of the territory, natural and geographical conditions, and the traditional nature of the population's economic activities. The results obtained contribute to the scientific systematization of the toponymic system of the Zhambyl region, the preservation of geographical names, and the expansion of the region's tourism potential.
Keywords: oronyms, toponymy, indicator terms, Zhambyl district, relief, orographic metaphor, geographical names, landscape, etymology.

Алматы облысы Жамбыл ауданының географиялық атауларындағы жер бедері пішіндерінің көрінісі

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Аңдатпа. Мақалада Алматы облысының Жамбыл ауданы аумағында таралған оронимиялық терминдер мен атаулар кешенді түрде қарастырылған. Зерттеу Қазақстан Республикасының Мемлекеттік географиялық атауларының каталогы, топографиялық карталар және далалық материалдар негізінде жүргізілді. Аудан аумағынан іріктеліп алынған 1000-ға жуық географиялық атаулардың құрылымдық-семантикалық, этимологиялық және топонимикалық белсенділігі талданды. Оронимдер жүйесінде жер бедерінің көтеріңкі, төмен және бейтарап формаларын білдіретін терминдердің үлесі, олардың таралу заңдылықтары анықталды. «Төбе», «шоқы», «тау», «сай», «қия», «асу» сияқты индикатор терминдердің мағыналық ерекшеліктері мен тарихи-этнолингвистикалық негіздері ашып көрсетілді. Сонымен қатар, орографиялық метафоралар, түс атаулары, өсімдік пен жануарлар дүниесіне байланысты қалыптасқан оронимдер аймақтың ландшафттық сипатын, табиғи-географиялық жағдайын және дәстүрлі шаруашылық ерекшеліктерін бейнелейтіні дәлелденді. Зерттеу нәтижелері Жамбыл ауданының топонимиялық жүйесін ғылыми тұрғыда жүйелеуге, аймақтың географиялық атауларын сақтауға және туристік әлеуетін дамытуға үлес қосады.
Түйін сөздер: оронимдер, топонимика, индикатор терминдер, Жамбыл ауданы, жер бедері, орографиялық метафора, географиялық атаулар, ландшафт, этимология.

Отражение форм рельефа в географических названиях Жамбылского района Алматинской области

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Аннотация. В статье комплексно рассматриваются орографические термины и названия, распространенные на территории Жамбылского района Алматинской области. Исследование выполнено на основе Каталога государственных географических названий Республики Казахстан, топографических карт и полевых материалов. Проведен структурно-семантический и этимологический анализ около 1000 географических названий, отобранных в пределах района, а также определена их топонимическая активность. В системе оронимов выявлена доля терминов, обозначающих положительные, отрицательные и нейтральные формы рельефа, и установлены закономерности их пространственного распространения. Раскрыты семантические особенности и историко-этнолингвистические основы индикаторных терминов «төбе», «шоқы», «тау», «сай», «қия», «асу». Показано, что орографические метафоры, цветообозначающие компоненты, а также оронимы, связанные с растительным и животным миром, отражают ландшафтные особенности территории, природно-географические условия и традиционный характер хозяйственной деятельности населения. Полученные результаты способствуют научной систематизации топонимической системы Жамбылского района, сохранению географических названий и расширению туристического потенциала региона.
Ключевые слова: оронимы, топонимика, индикаторные термины, Жамбылский район, рельеф, орографическая метафора, географические названия, ландшафт, этимология.

Introduction

The terms used in oronyms accurately reflect the nature of the relief classification, and this information is important for natural resource management. The reason for the emergence of oronyms is proof that over the centuries, nomads inhabiting the steppes sought fertile lands, did not simply migrate from place to place, honed their understanding of nature, and managed to turn nature into their spiritual world. Even if in ancient times people could not explain the origin of landforms, they knew how to make appropriate use of different types of landscapes for economic purposes. Taking into account the interrelationships of such deep-rooted factors, the oronym of a region can be viewed as a system clearly determined by the laws of nature [Yeginbayeva A.Ye. et al., 2023: P.63].

Zhambyl district is an administrative unit located in the southwestern part of Almaty region, covering an area of 19,320 km². The district was founded in 1928. The district center is the village of Uzynagas. The district borders the Balkhash district to the north, the Ili and Karasai districts to the east, the Moyinkum, Shusky, and Kordai districts of the Zhambyl region to the west, and Kyrgyzstan to the south. The district is located in the southwestern part of the Zailiyskiy Alatau Range, with the southern part occupied by the Western Zailiyskiy Alatau and the southwestern part by the eastern spur of the Chu-Ili Mountains. To the north, the district transitions into a plain, bordered by the Bozo Plateau and the Karaoy Valley, followed by the plains of Anyrakay and Zhusandala, the sandy fields of Sarytaukum, and the Kurgankum sands of Taikum [Nacional'nyj atlas RK, 2010].

The terrain is characterized by a variety of forms. The diversity of forms and types of terrain creates the conditions for the formation of rich orographic terminology. The natural conditions of the Zhambyl region are favorable for nomadic animal husbandry. Even the organization of this type of farming requires a good understanding of the relief forms and the selection of distinctive landmarks among the special relief forms when moving from place to place. As a result of these factors, the oronymy of this territory is well divided, rich in metaphors, and has formed as a perfect system of names that accurately reflect the features of the local landscape [Kaimuldinova K.D. et al., 2023: P.17].

The forms and types of relief in the Zhambyl region, as structural components of the landscape, are

reflected in the toponyms. The main orographic features are Ushkonyr, Kumbel, Maitobe, Karakia, Asusai, Koktobe, Bulakty, etc. Compared to other natural features, geographical names reflect the physical and geographical conditions of the features. As a result of statistical processing of topographic maps of the district on a scale of 1:100,000, about 1,000 geographical names were grouped, among which the number of orographic features was about 243, which is 19% of the total number of toponyms. The presence of various forms and types of relief indicates a certain number of oronyms [Katalog RK, 2014].

Materials and methods

Kazakh oronyms have been studied from a philological perspective, with orographic terms receiving special attention in the works of G.Konkashbaev, G.Ts.Medoev, E.M.Murzaev, and renowned onomastic scholars T.Zhanuzak and B.N.Biyarov. Until now, there has been no precise taxonomic systematization of the orographic terminology of the Kazakh people. The complexity of this problem is due to the vastness of Kazakhstan's territory, the highly classified nature of the orographic terminology of the Kazakh people, the semantic displacement of relief terms in connection with specific characteristics, and the fact that such systematization can only be carried out by specialist geographers [Yeginbayeva A.Ye., 2025: P.92].

According to G.Konkashbaev, 72% of the geographical names of the Kazakh people reflect natural conditions (relief, climate, etc.), while 28% provide information about the economy and way of life of the people (nomadic animal husbandry, agriculture). “Local geographical terms play an important role in determining the etymology of many geographical names. It is these terms that provide information about the meaning of toponyms, about the natural-geographical and social factors that influence their formation”. When selecting the characteristics of an object that formed the basis for naming a geographical object, it was necessary to identify the distinctive features of the object that would distinguish this toponym from others. To accurately reflect the natural conditions of the geographical environment, folk and local geographical terms that are part of toponyms are used. This group of words, referred to in toponymy as indicator terms, characterizes the types, landscape-zone features, morphological characteristics, and origin (genesis) of physical-geographical objects. In this regard, geographical names that characterize natural conditions reflect the landscape of the area and accumulate the geographical knowledge of the people [Kaimuldinova K. et al., 2025: P.21].

In the course of studying the patterns of geographical names, methods of toponymic research were used. The origin of a toponym is linked to specific historical, geographical, and linguistic patterns. One of the main methods of toponymic research is the geographical method. With the help of this method, the external and internal characteristics of the natural components in the name of the object were determined, and folk terms and concepts that actively participate in the formation of hydronyms were used [Nash J., 2015: P.146].

Historical-comparative method. This method allowed us to determine the historical period that influenced the formation of oronyms, their evolution, transformation, and social environment. Names carry a rich heritage in terms of history. Linguistic method - one of the most important methods in toponymic research. This method uses toponymic background, stratigraphy, and formants. The scientific basis for the correct spelling of toponyms was studied. During the analysis using the linguistic method, various dictionaries, reference books on toponymy and terminology, and the works of well-known linguists were used [Ayubov A.R., 2017: P.48].

Statistical method. Determines the quantitative ratio of linguistic structure, semantic meaning, and grammatical forms of geographical names. Using the statistical method, a comparative analysis was conducted of the percentage ratio of toponyms in the territory by origin and geographical characteristics. Based on this method, it became possible to determine the quantitative characteristics of toponyms and compile maps, tables, and diagrams based on them.

Etymological method. One of the oldest and most important methods for determining the origin and

distribution of words, as well as their semantic meaning. The main “key” to many geographical names is folk geographical terms. There were many difficulties and obstacles in determining the etymology of toponyms, so we used historical and comparative studies, as well as geographical information [Spampinato G. et al., 2022: P.518].

Cartographic method. This method has been used to display models of the distribution of geographical names, areas of distribution of oronyms, and semantic changes in national geographical terminology. Maps are a specific source of geographical nomenclature, so the use of maps in determining the patterns of distribution of toponymic phenomena is very important. Today, the use of GIS achievements in the processing of toponymic maps is considered relevant. With the help of the ArcGIS program, a map of oronyms in the Zhambyl region was compiled [Zhumekenova D.E., Sadikov T.S., 2018: P.162].

Each geographical name must have its own place on the geographical map and in official documents. This requires coordinated efforts to study and restore toponymy. Modern toponymic research uses a variety of research methods. These methods, which overlap with each other, open up great opportunities for the development of toponymic research in conjunction with other branches of science [Dorji K., 2024: P.72].

Results and discussion

Oronyms most often contain terms that characterize the highest part of a territory. The term “tobe” is found among the ancient Turkic peoples and refers specifically to the summit, the highest point of a mountain, and is used to emphasize the geographical features of a hill. This term is used by Azerbaijanis to describe small hills, while in Central Asia and Mongolia, the term “kurghan” is used to describe low-lying lands. The name of the zhaylau “Koktobe” means “a person reaching the summit”. “Konyrtobe” is a hill in the northern part of the Zhusandy Plain, located in the north of the district. Its absolute height is 457 m. The etymology of this name can be explained in two ways. The first refers to the variety of plants and shrubs growing on the hill, i.e., depending on their color, and the second means “a hill suitable for farming”.

Sengir means “stone” in Persian. According to this indicator term, there is a village called ‘Aksengir’ in the area. The word “ak” in the first syllable of the name is pronounced because of the color of the rocks or soil surface, and the meaning in the second syllable may mean that it is rocky ground. According to scientist T.Zhanuzakov, “Aksengir” is synonymous with the direct name “Aktasty” [Saparov Q.T., 2019: P.110].

When analyzing toponyms derived from the word “kara”, various conclusions can be drawn about its meaning. E.M.Murzaev said that in the Kazakh language, the indicator term “kara” means “big, hard, strong”, while Kyrgyz toponymic studies say that it means “there is no snow in the mountains”. E.Koishybaev noted that in addition to the meaning of color, the word “kara” means “earth”. According to G.K.Konkashbaev, the word “kara” refers to orographic objects formed by solid rocks, and at great distances it means “hill” or other relatively large elevations above the earth's surface that stand out in black, while on hydrographic objects they describe lakes or rivers. In addition, in the works of other researchers, R.Yuzbasheva and O.T.Molchanova, “kara” is found in the meaning of “many, great”. The word “kara” in the composition of oronyms in our study corresponds to the description of orographic objects and was used in the description of geographical names. The term “kara” has very low individual toponymic activity, but in this area it became the basis for the creation of such geographical names as Karakia (plain), Karatobe (hill), Karaadyr (settlement), Karakoshoky (mountain), Karashoky (mountains), Karakuduksai (dry canal). The length of Mount Karakya is about 15-20 km. The mountain is a green meadow formed by small sedimentary rocks. The name of the mountain is probably related to the fact that the slopes are uneven (Figure 1) [Yeginbayeva A.Ye., 2025: P.110].

Shoks are mountain peaks characterized by a conical shape or pointed summit. In his works, E.M.Murzaev also compares the Mongolian word “tsokhi” with the word “zhartas”. Kushoky is a

low mountain located south of the Karaoy Valley, 13 km northwest of the village of Matibulak. As for the origin of the name, the hill is simply formed by simple rocks. Describing a feature of nature, it refers to bare barren land, which means a mountain is a barren rocky hill [Zhumekenova D.E., Sadikov T.S., 2018: P.164].

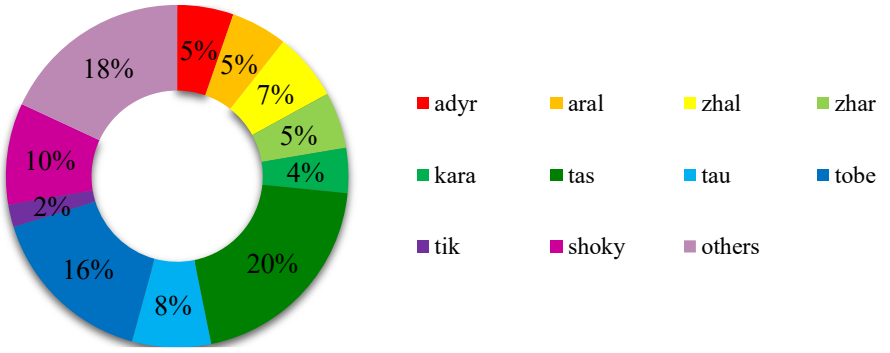


Figure 1. Toponyms characterizing the elevated part of the Earth's surface in the Zhambyl region
Note: compiled based on data [Katalog RK, 2014]

Mount Karakia is a low mountain, about 15-20 km long. The mountain system consists of lowlands such as Kiikkodeli, Kara Shalgindy, and Maida. These hills are located alternately, diverging and dividing into extensions, like tributaries. The grass on the slopes of the hills is barren and low, and small horned cattle graze here all summer long. The grass is not leafy and is bald in places. Cattle breeders graze all four types of cattle here. As soon as spring arrives, they go out to pasture, and in the fall, when the time comes, they migrate to their winter quarters. As for the etymology of the mountain's name, judging by its external forms, the slopes are uneven, divided into ravines and cut. The name “kara” here is given in the meaning of “earth” [Nacional'nyj atlas RK, 2010].

An asu is a low-lying area in a mountain range that can be crossed by people or vehicles. The Kyzylkezan Pass is located on the slopes of Mount Kalmen towards Zhaylau Ulkensaz and Zhaylau Botasaz. The word “kyzyl” in the first syllable of the name refers to the color of dark burgundy stones. The origin of the word “kezhen”, as the name suggests, means “pass”. The first meaning of the indicator term “tas”, which is often found in the area, means “mountain, rock” in the Yakut language, referring to the physical features of the territory, and the second meaning is “forest, low barren mountains without groves”. In accordance with these different meanings, the following toponymic names are used in the area: Tas (river), Sholakhartas (river) [Ayubov A.R., 2021: P.55].

The village of Ungirtas is a small village located 34 km west of the district center of the village of Uzynagas. It is located on the banks of the Kastak River, in a mixed wooded and semi-desert belt. To the east and west of the village is a large cave. This cave may be one of the oldest settlements, which is why the village may be named as such, and it can be noted that the rock formed by the ridges on both sides of the river valley is sandy and rocky [Yeginbayeva A.Ye. et al., 2024: P.670].

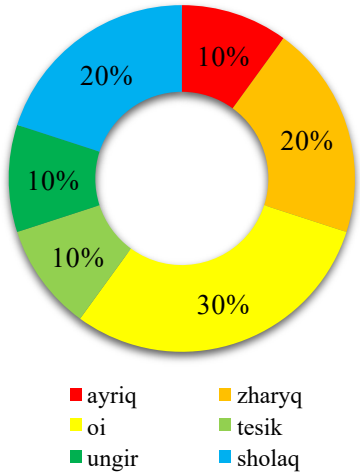
There are about 15 terms describing negative landforms in the geographical nomenclature. Among the most common are: ayriq, zharyq, oi, sholak, ungir (Table 1). In toponymic science, a group of words called indicator terms characterizes the type of physical geography objects, landscape relief features, morphological features, and the origin of earth surface rocks. The names of lands and waters that describe natural conditions in contrast to this place reflect the landscape features of the region and the geographical knowledge of the population (Figure 2) [Oripov O.A., 2021: P.230].

Karaoy is a steppe located in the Kordai district of the Zhambyl region and the Zhambyl district of the Almaty region. It stretches 45-50 km from northwest to southeast, and its current territory reaches 18-20 km, located at an altitude of more than 1000 m above sea level. The western part of the plain of the Kopalysai and Zhynqyldy rivers is used as pasture for livestock.

Table 1

Toponyms characterizing the low-lying part of the Earth's surface in the Zhambyl region

Name of oronyms	Toponymic activity	Geographical location
ayriq	Kyzylayriq (tract)	Southeast of the village of Karabastau, northeast of the village of Espe
zharyq	Karazharyk (river, wintering grounds)	A drainless channel, a left tributary of the Ashysu River, west of Mount Kazbek
oi	Bozoy (tract, village) Oykora (zhailau)	Southwest of Akserek Hill, southeast of the village of Bozoi; Zhambyl district
tesik	Tesik (river)	Northeast of Mount Kushoky formed by the confluence of the Kostobeteris and Tana rivers, drains north of Mount Konyrtobe
ungir	Ungirtas (village)	Zhambyl district
sholaq	Sholak (river, wintering grounds)	Near Mount Yuzhny Degeres, formed by the confluence of the Aktasty and Toimanchol rivers. Mount Konyrtobe stretches across the northeastern salt marshes



Note: compiled based on data [Katalog RK, 2014]

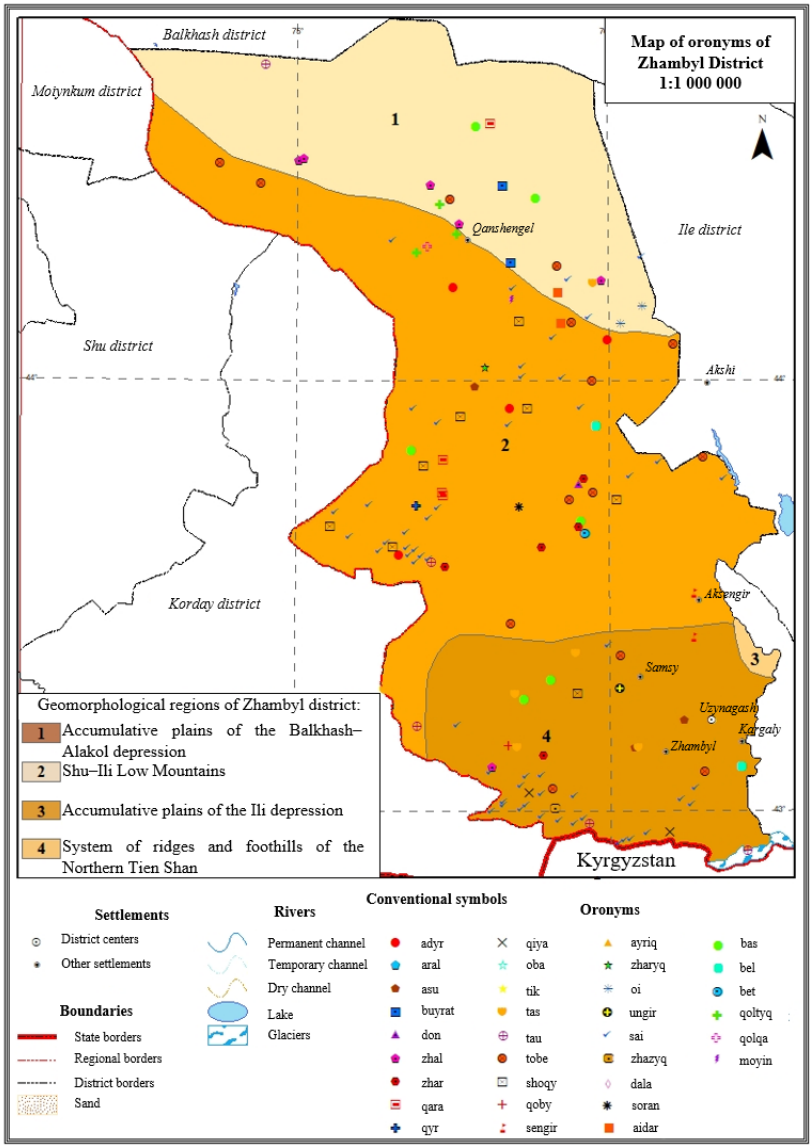


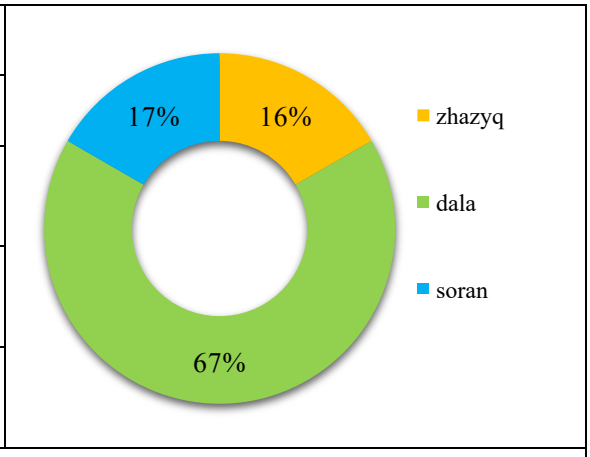
Figure 2. Map of place names in the Zhambyl region
Note: compiled based on data [Nacional'nyj atlas RK, 2010]

Toponyms characterizing flat areas of the Earth's surface: zhazyq, dala, soran. These terms describe the flat surface of the territory (Table 2).

Table 2

Toponyms characterizing the flat terrain of the Zhambyl district

Name of oronyms	Toponymic activity	Geographical location
Zhazyq	Saryzhazyq (settlement)	North of the Kastak ridge, south of Mount Suyktobe
Dala	Akdala (village, settlement)	Southwest of the Symbylsagyl mountain ridge, northwest of the village of Kanshengel
	Kokdala (village, settlement)	Southwest of Mount Kazbek, northwest of the village of Karabastau
Soran	Kyzylsoran (settlement)	Southeast of the village of Karabastau, northeast of the village of Espe



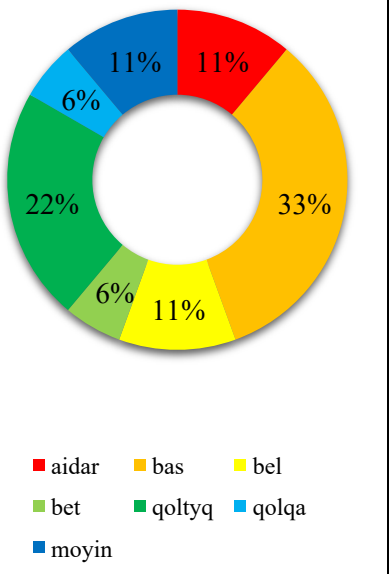
Note: compiled based on data [Katalog RK, 2014]

Toponymic indicator terms often include terms used to exaggerate names, assign names, or equate them with a single object, which in toponymy is called an orographic metaphor. They are clearly expressed in terms related to parts of the human and animal body [Fize J. et al., 2021: P.818]. In the Zhambyl district, the following metaphorical terms are used to describe such features of the earth's surface: aidar, bas, bel, bet, qoltyq, qolqa, moyin (Table 3).

Table 3

Metaphors characterizing the surface of the Zhambyl district

Name of oronyms	Toponymic activity	Geographical location
aidar	Aidarly (village)	Zhambyl district
bas	Yski Aidarly (village)	Zhambyl district
	Basbarmak (mountains)	right bank of the Zhartas River, southeast of the village of Espe
	Basbatyr (spring, mountains)	southwest of Mount Karatopyrak, east of the village of Beriktas
	Baszol (tract)	northeast of the Symbilshagyl mountain range, southeast of the village of Akzhar
	Kolakbas (well)	northeast of the Karaoy Valley, northwest of the village of Karabastau
bel	Belasar (mountains)	west of Mount Daulastyoshky, southeast of Mount Kazbek
	Kumbel (pass)	southeast of the dry bed of the Tikkiya River, southwest of the village of Kaskelen
bet	Baybet (well)	right bank of the Zhartas River, southeast of the village of Espe
qoltyq	Akkoltyk (dry well, tract, wintering ground)	southwest of the Symbilshagyl mountain range, northwest of the Shektibai Zhaly mountain range
qolqa	Ushqolqa (tract)	northeast of the Zhunsandala steppe, southwest of the Shektibai Zhaly hills
moyin	Kokmoyin (tract, wintering ground)	southeast of the Shektibai Zhaly mountain range, northwest of the Kazbek mountain range



Note: compiled based on data [Katalog RK, 2014]

Aidar is a red comb on a bird's head or a tuft of hair that used to be left on the top of boys' heads. This term is used because of the comparison of the height of the hill with a comb, i.e., the terrain is defined as high or hilly. The basis for this indicator term is the village of Aidarly, located 130 km north of the district center of Uzynagas. The etymology of this name is related to the fact that the village is located on a slightly higher place than the neighboring villages [Yeginbayeva A.Ye. et al., 2023: P.65].

Kumbel Pass is located west of the Zailiyskiy Alatau. Its height is 3,518 meters. Tourists heading to the resort area of Issyk-Kul in Kyrgyzstan depart from the village of Kargaly via the Kumbel Pass. The Kumbel Pass connects two large hills east of Karakya, is covered with sand from the top to the middle, and is rocky [Yeginbayeva A.Ye. et al., 2024: P.673].

Among the orographic terms characterizing negative landforms, the term “say” is often repeated. An analysis of names in the region as a whole has shown that there are many names derived from this term. The high toponymic activity of this term can be explained by the predominance of plains in the relief of the territory. According to E.M. Murzaev, “say” is a rocky area formed by volcanoes, a desert plain [Kaimuldinova K.D. et al., 2023: P.18].

In Mongolia, “sai” is often used in its form to describe a dry ravine, a temporary channel filled with melting snow or rain. The ravine is mostly dry, sometimes with long concave sections that fill up due to seasonal changes. This is mainly due to soil erosion. Based on this data, it has been established that in the Zhambyl region, the term “say” is used more frequently and is classified according to its formation. For example, Aschysai means “salty sai”, Sarysai means “color”, Zheldisai means “weather”, and Kamysai means “vegetation” (Figure 3) [Kaimuldinova K. et al., 2025: P.20].

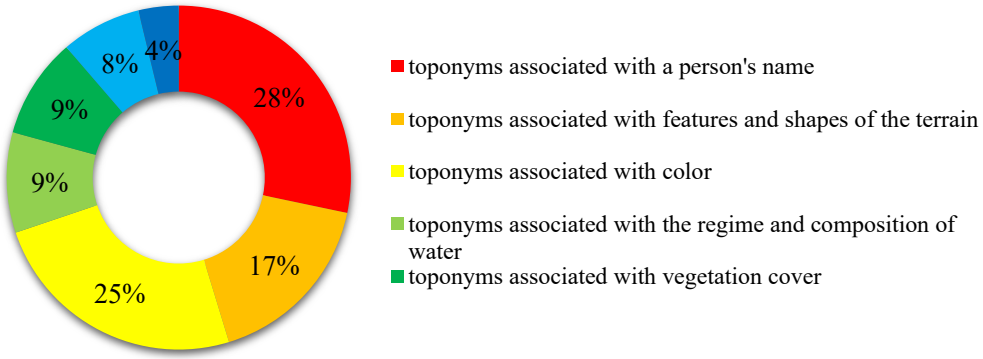


Figure 3. Groups of oronyms based on the term "sai" in Zhambyl region
Note: compiled based on data [Katalog RK, 2014]

Many oronyms reflecting the relief of the Zhambyl region have been identified. These names of geographical objects are reflected in national geographical terminology. Since animal husbandry has been the traditional type of farming for the Kazakhs since ancient times, it has played an important role in the formation of the toponymy of this territory. All the features of the forms and types of relief in the Zhambyl region can be found in the toponyms. Relief features or orographic features are mountains, hills, ravines, elevations, etc. Thus, the geographical names found in Kazakh toponymy accurately reflect the landscape features of the Zhambyl region. The research revealed the geographical basis for the formation and development of all oronyms found in the Zhambyl region. The etymology of the names was fully classified. Oronyms play a significant role in the development of the tourism industry in this region [Light D., 2014: P.143].

Conclusion

The study of the formation and development of place names in the Zhambyl region is of both scientific and practical importance. The natural environment and human economic activity play an

important role in the formation and development of geographical names. When choosing their summer camps (zhailaus), nomads took into account the relief, natural conditions, diversity of vegetation, and availability of water sources. It was important for nomads to accurately identify the types of relief and classify the nomenclature. When determining the details of the relief, nomads formed a system of terms characterizing the nature of the terrain.

It has been established that toponyms reflect the main features of a unique system that combines the constituent parts of landscapes in geographical names characterizing natural conditions. The number of orographic names characterizing the terrain relief amounted to 243 names. Of these, oronyms characterizing the elevated part of the territory account for 41%, the low-lying part - 9%, the flat part of the territory - 5%, metaphors - 11%. During the classification of orographic terms, the most common term was determined to be “say,” which accounted for 33% of the names. A map entitled “Oronyms of the Zhambyl region” was prepared.

In conclusion, it can be noted that Kazakh geographical names not only characterize the features of the vast territory of the Zhambyl region (relief, hydrography, fauna, climate, plants, and soils), but also indicate the smallest details with surprising accuracy, sometimes even the geological structure and mineral resources. These studies have revealed the formation and geographical basis of the development and etymology of the system of oronyms in the Zhambyl region. They reflect the methods of formation of toponyms that reflect physical-geographical, ethnographic, and ecological information, the nature of the relief, and the features of the landscape. Oronyms play a special role in restoring the historical and cultural heritage of the Zhambyl region, in developing the tourist, recreational, and service complex of travel organizations, and in reviving ecological tours and routes.

References

Yeginbayeva A.Ye., Atasoy E., Keikin E.K. (2023) Geographical bases of the formation of toponyms of Saryarka. *BULLETIN of L.N.Gumilyov ENU. Chemistry. Geography. Ecology Series*, 3(144), 63-76. DOI: https://doi.org/10.32523/2616-6771-2023-144-3-63-76 [Electronic resource]: URL: https://bulchmed.enu.kz/index.php/bulchmed/article/view/342 (date of access: 10.12.2025).

Nacional'nyj atlas RK (2010) *Nacional'nyj atlas Respubliki Kazahstan*. Almaty: Vit brand, Tom 1. Prirodnye usloviya i resursy, 150 [Electronic resource]: URL: https://kazneb.kz/ru/bookView/view?brId=1518385&simple=true# (date of access: 10.12.2025).

Kaimuldinova K.D., Shakirova N.D., Shakirova A.D., Wendt J.A. (2023) Traditional ecological knowledge of the Kazakh people as a prerequisite for education for sustainable development. *Pedagogy and Psychology*, 56(3), 16-23. DOI: https://doi.org/10.51889/29601649.2023.15.3.001 [Electronic resource]: URL: https://journalpedpsy.kaznpu.kz/index.php/ped/issue/view/67 (date of access: 15.12.2025).

Katalog (2014) Gosudarstvennyj katalog geograficheskikh nazvanij Respubliki Kazahstan (2014) Tom 4. Almatinskaya oblast. Almaty, 384 [Electronic resource]: URL: https://www.zin.ru/animalia/Coleoptera/rus/kazgeonm.htm (date of access: 15.12.2025).

Yeginbayeva A.Ye. (2025) Toponimika Saryarki. *Monografiya.* Almaty, 328 [Electronic resource]: URL: https://library.enu.kz/MegaViewer/App/Viewer (date of access: 15.12.2025).

Kaimuldinova K., Laiskhanov S., Aliaskarov D., Tobajanov R., Nizamatdinova Z. (2025) Representation of medieval climate fluctuations in Central Asia in the toponymic system: Historical and geographical data. *Journal of the Bulgarian Geographical Society*, 52, 21-36. DOI: https://doi.org/10.3897/jbgs.e143846 [Electronic resource]: URL: https://jbgs.arphahub.com/issue/4997/ (date of access: 20.12.2025).

Nash J. (2015) Island placenaming and insular toponymies. *Names*, 63, 146-157. https://doi.org/10.1080/00277738.2015.1011826 [Electronic resource]: URL: https://www.tandfonline.com/toc/ynam20/63/3 (date of access: 25.12.2025).

Ayubov A.R. (2017) Ethnicheskoe rasselenie, istoricheskaya geografiya i toponimiya yuzhnogo Sogda epokhi drevnosti i rannego srednevekoviya. *Nomai Donishgon. Uchenye zapiski.*

Scientific Notes, 1(50), 5057 [Electronic resource]: URL: https://cyberleninka.ru/article/n/etnicheskoe-rasselenie-istoricheskaya-geografiya-i-toponimiya-yuzhnogo-sogda-epohi-drevnosti-i-rannego-srednevekovya (date of access: 25.12.2025).

Spampinato G., Crisarà R., Cameriere P., Cano-Ortiz A., Musarella C.M. (2022) Analysis of the Forest Landscape and Its Transformations through Phytotoponyms: A Case Study in Calabria (Southern Italy). *Land*, 11(4), 518. DOI: https://doi.org/10.3390/land11040518 [Electronic resource]: URL: https://www.mdpi.com/journal/land (date of access: 29.12.2025).

Zhumekenova D.E., Sadikov T.S. (2018) The maps of the XIX century as a source of historical toponymy of Kazakhstan. *Bulgaria Geographical Journal*, (1), 161-171. DOI: https://doi.org/10.13187/bg.2018.1.161 [Electronic resource]: URL: https://bg.cherkasgu.press/ru/archive.html?number=2018-03-01-19:59:21&journal=51 (date of access: 03.01.2026).

Dorji K. (2024) Storied Toponyms in Bhutan: Affective Landscapes, Spiritual Encounters, and Climate Change. *Himalayan Climes and Multispecies Encounters*. Routledge, London, 71-86 [Electronic resource]: URL: https://doi.org/10.4324/9781003484394-4 (date of access: 05.01.2026).

Saparov Q.T. (2019) Shyǵys Qazaqstan oblysynyń toponimikasy (qazaqtardyń keńistikti igerý tájiribesiniń jer-sý ataýlaryndaǵy kórinisi). *Monografiya*. Almaty: Epigraf, 274 [Electronic resource]: URL: https://library.enu.kz/MegaViewer/App/Viewer (date of access: 05.01.2026).

Oripov O.A. (2021) Analysis and interpretation of toponym identifiers. *International Journal of Innovative Engineering Research and Technology*, 7, 230-232. DOI: https://repo.ijiert.org/index.php/ijiert/article/view/956 [Electronic resource]: URL: https://repo.ijiert.org/index.php/ijiert/issue/view/18 (date of access: 10.01.2026).

Fize J., Moncla L., Martins B. (2021) Deep Learning for Toponym Resolution: Geocoding Based on Pairs of Toponyms. *ISPRS International Journal of Geo-Information*, 10, 818. DOI: https://doi.org/10.3390/ijgi10120818 [Electronic resource]: URL: https://www.mdpi.com/journal/ijgi (date of access: 15.01.2026).

Yeginbayeva A.Ye., Saparov K., Zhensikbayeva N., Nurpeisova A., Shakhantayeva Z., Keikin Y., Atış E. (2024) The role of cave names in the development of tourism in Kazakhstan. *Geojournal of Tourism and Geosites*, Year XVII, 53(2), 668-676. DOI: https://doi.org/10.30892/gtg.53230-1242 [Electronic resource]: URL: https://gtg.webhost.uoradea.ro/2024_2_vol_53.html (date of access: 20.01.2026).

Light D. (2014) Tourism and toponymy: Commodifying and consuming place names. *Tourism Geographies,* 16(1), 141-156. DOI: https://doi.org/10.1080/14616688.2013.868383 [Electronic resource]: URL: https://www.tandfonline.com/toc/rtxg20/16/1 (date of access: 25.01.2026).

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