

The Ringing Gorge: On the Etymology of the Toponym Zangezur in the Light of Sasanian Sigillography, and the Historical Onomastics of Historical Armenia and Adjacent Regions

Eduard Khurshudian

Abstract: This article presents a comprehensive reconstruction of the origin of the toponym Zangezur, based on evidence from Sasanian sigillography, Armenian toponymy, historical hydronymy, and comparative-historical linguistics. The point of departure is a Sasanian administrative bulla of the sixth century CE, in which the toponym Marz-ī Zangāvan is attested for the first time as an independent Sasanian administrative-territorial unit. This form constitutes the earliest known written attestation of the component Zang- in the South Caucasus region.

The article proposes a new interpretation of the toponym Marz-ī Zangāvan. On the basis of historical-geographical and toponymic evidence, it is argued that Zangāvan originally functioned as a hydronym—the name of the largest river of historical Zangezur, known in the Armenian tradition as the Vorotan. Historical sources attest several names for this river system (Vorotan, Vorot, Orot, Barkuṣat (var. Barguṣad), Bazarçay (*Basarçay), Rut, Urud, etc.), testifying to the long coexistence of diverse linguistic traditions in the naming of this waterway. Among the Iranian parallels, particular significance attaches to the hydronym Āb-e Zangāvan (also known as Rūdkhāneh-ye Čam Zangavān or Rūd-e Pīvanān) in Ilam Province, Western Iran, demonstrating that the form Zangāvan genuinely functioned in the Iranian tradition as a river name.

The second part of the study is devoted to the reconstruction of the Armenian proto-form Zang-i jor (“the gorge of sound”/“ringing gorge”) and the analysis of its subsequent Persian administrative adaptation *Zang-e zūr, as well as the later Turkic adaptation Zəngəzur (var.

Zangazur-which is a Persian distorted or reinterpreted form!). The proposed reconstruction is the first to unite evidence from sigillography, historical hydronymy, Armenian word-formation patterns, and Persian and Turkic administrative traditions into a unified explanatory system for the origin of the toponym.

Keywords: Zangezur, Zangāvan, Marz-ī Zangāvan, Vorotan, Barkuṣat, Āb-e Zangāvan, Sassanian Iran, Siwnik

Introduction

The historical region of Zangezur occupies a distinctive place in the historical geography of the South Caucasus. For more than a thousand years, this name has been preserved in Armenian, Persian, Ottoman, and Russian written traditions; yet its origin has to this day received no generally accepted explanation.

The majority of existing etymological hypotheses have relied either on folk explanations or on the analysis of individual components of the toponym without recourse to historical-geographical sources. The most recent contribution to this topic is that of H. Martirosyan, who proposes to derive the toponym Zangezur from Arm. *jagejor, “valley of birds” (Martirosyan 2022). However, this reconstruction faces a serious source-critical objection: a recently published Sasanian administrative bulla of the sixth century CE (Fig. 1), pertaining to the region of Zangezur, sets against it the form Marz-ī Zangāvan, which contains the component *zang-*, a Persian loanword in Armenian, thereby demonstrating that the toponyms Zangāvan and Zangezur share the same root *zang*, “sound, bell”, in their first element (Khurshudian 2024: 267).

The second component of the toponym (*-zur*) corresponds to Armenian *jor/dzor*, “gorge, mountain valley”, as was convincingly demonstrated already by Eduard M. Murzaev in his *Dictionary of Folk Geographic Terms* (Murzaev 1984, 181), where the Zangezur range is explicitly listed among toponyms bearing this formant.

The methodological basis of this study is the comparison of three independent groups of sources: (1) Sasanian sigillographic monuments of the sixth century CE; (2) Armenian, Persian, and Turkic historical onomastics (toponymy and hydronymy); (3) the Persian imperial administrative tradition from the Sasanian period through the nineteenth century CE. It is precisely the combination of these bodies of evidence that makes possible a new reconstruction of the origin of the toponym Zangezur.

Marz-ī Zangāvan: The Sasanian Bulla as Primary Source

The key source for this study is a Sasanian administrative bulla of the sixth century CE, first published by Rika Gyselen and subsequently re-read by the present author (Gyselen

1989; Khurshudian 2024; Figs. 1 and 2). The bulla belonged to an official bearing the title *zarrbed*, lit. “head of gold” (from MP *zarr* “gold” + *bed* “head, chief”)—the director of the state organ responsible for the extraction and accounting of precious metals, gold in particular.



FIGURE 1. Bulla ATb367 and drawing of seal impression ATb367a (© Rika Gyselen)



FIGURE 2. Fragment of the Middle Persian Legend on the Bulla ATb367a: Marz-i Zangāvan (Khurshudian 2024, 266)

The inscription lists the administrative-territorial units falling within his sphere of competence. These include Armen (Armenia), Ardān (Caucasian Albania), Wērōzān (Georgia), Sīsagān (Sisakān/Siwnik), and Marz-ī Zangāvan (the border region (*marz*; see Khurshudian 2015, 76) of Zangāvan (= Zangezur)).

The last name is of particular significance. Unlike the other administrative units, which are well attested in other Sasanian sources, Marz-ī Zangāvan appears here for the first time in Sasanian sphragistics. Yet it is precisely this name that constitutes the earliest known attestation of the component *zang-* in the Middle Persian language¹, a component that would subsequently enter the composition of the toponym Zangezur.

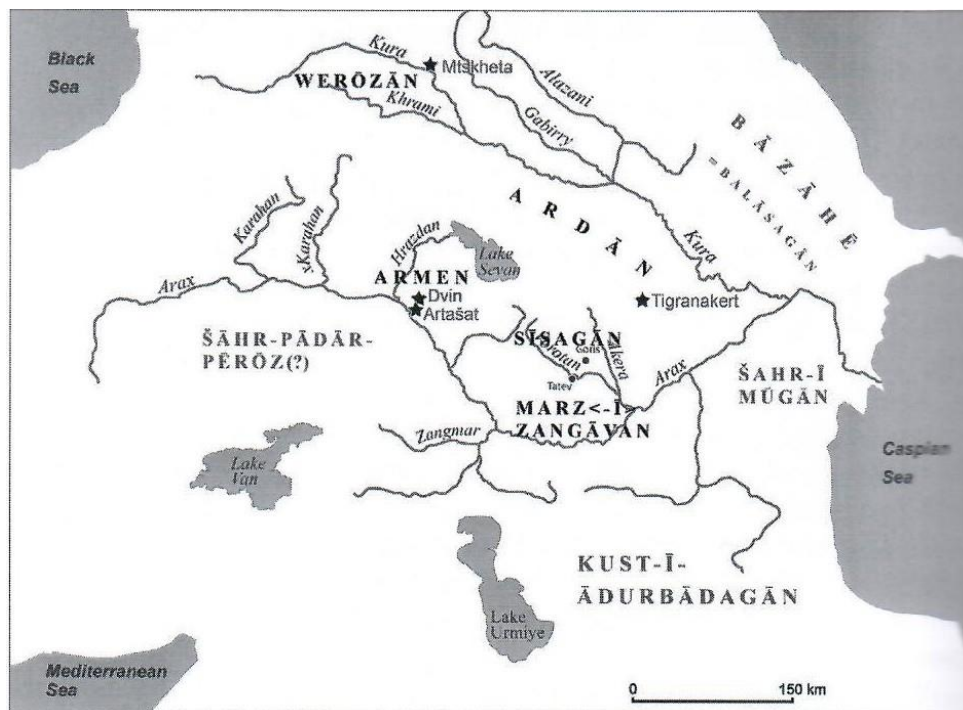


FIGURE 3. Map of the Administrative Jurisdiction of the *zarrbed* (Khurshudian 2024, 266)

The Historical Hydronymy of the River Vorotan

A correct interpretation of the toponym Marz-ī Zangāvan is impossible without an analysis of the historical hydronymy of the largest river of Zangezur, i.e., the Vorotan. It is at this stage, as will be argued, that the origin of the administrative name recorded on the Sasanian bulla becomes clear.

In the historical toponymy of the South Caucasus, it is well established that the names of major administrative regions were frequently derived from the most significant natural features, above all rivers and other geographical landmarks. These determined the

¹ The word *zang* in the meaning of “bell, sound” is not attested in Middle Persian sources, nor does it appear in Old Armenian sources of the 5th century (Khurshudian 2024, 270n78). It first appears in New Persian (*zang*: 1) bell; 2) ring, buzz; *zang zadan* “to ring”), as well as in parallel forms in Armenian (*zangak*, *zangakatun* “bell tower”), Syriac (*zagga*, *zanga* “sound”), Kurdish (*zeng*, *zenk*), Udi, Ossetic (*zhangarak*), and Georgian (*zangalaki*). The presence of *zang-* in the sixth-century bulla (Marz-i Zangavān) thus represents one of the earliest known attestations of this word in administrative usage.

direction of communication routes, the structure of settlement, economic life, and the natural boundaries of administrative districts. The derivation of a regional name from a hydronym is therefore a typical phenomenon in both Iranian and Armenian historical geography.

The largest river of historical Zangezur is the Vorotan, “the thundering, the resounding” (from Arm. verb *vorotal* “to thunder, to rumble”; Galstyan 1984, 536), which cuts across the region from northeast to southwest, forming a deep mountain gorge that has served for centuries as the main natural artery of the region.

Of particular interest is the fact that historical sources attest not one but several names for this river system. According to the relevant entry in the *Armenian Dictionary of Toponyms* (HayTeghBař, p. 185), alongside the modern hydronym Vorotan, the forms Vorot, Orot, Vorotna get, Čłuki get, Čłko get, Barkuřat (var. Barguřad), Bazarçay (*Basarçay²), as well as the forms *rut* and *urud*, reminiscent of the Persian term *rūd* “river”, (HayTeghBař, p. 185) are all attested. All these forms belong to the same river system and reflect different linguistic and historical traditions of naming this waterway.

Such variation is characteristic of the major rivers of the Near East and the Caucasus, which have functioned for centuries in a multi-ethnic and multilingual environment. Different administrative systems, literary traditions, and spoken languages could preserve their own names for the same watercourse, without fully displacing one another.

Modern reference sources explicitly record the Vorotan river under a triple name: “The Vorotan (Arm.: Որոտան), or Barguřad (Arm.: Բարգուշադ, Azer.: Bərgüřad) or Bazarçay (Azer.: Bazarçay)” (Wikipedia’s “Vorotan (river)” entry). The hydronym Barguřad/Bərgüřad³ is also preserved in the modern geographical nomenclature of the lower reaches of the river in the Qubadli District of Qarabagh (Republic of Azerbaijan).

Particular attention is due to the Turkic hydronyms Bazarçay and Barkuřat (var. Barguřad), both belonging to the same river system. The hydronym *Basarçay derives from

² The form Bazarçay is secondary and developed from the original *Basarçay either through folk-etymological reinterpretation (replacement of the little-known participle *basar* with the more familiar word *bazar* “market”) or as a result of phonetic assimilation toward euphony (*bas-* > *baz-*); both mechanisms are not mutually exclusive.

³ The etymology of the hydronym Barguřat is explicable by the means of Iranian historical lexicology. The first component, *bar-*, derives from the Iranian verbal root *bar* “to move swiftly, to surge, to rush” (cf. Av. *bar* “to move swiftly, to rush”; Rastorgueva and Edelman 2003, 2:106). The second component, *guřat*, is regularly traced to the Persian verb *gořudan/guřadan* “to open, to widen, to clear a path” (cf. Pers. *gořad* “wide, open”; New Persian-English Dictionary, s.v. *gořad*). The model *bar-gořad* proves to be a productive toponymic formula of the Iranian world: villages named Bargořad are attested in both Kurdistan Province and West Azerbaijan Province of Iran; in Azerbaijan, the toponyms Berguřad (Ujar District) and Barguřad (Barda District) derive from the same model. The distribution of this model partly overlaps with areas of historical Kurdish settlement, attesting to its use in both Persian and Kurdish (also Northwest Iranian) linguistic traditions (Rastorgueva and Edelman 2000-2007, 2:108-111); New Persian-English Dictionary, s.v. *gořad*; HayTeřBař 1986, 4:185).

the Turkic participle *basar*, “flooding, inundating” (from the verb *basmaq* “to press, to flood, to overflow”) + Turk. *çay* (< Persian *jāy* “river, mountain stream”), and literally means “the flooding stream”, i.e., “a river that overflows its banks”. The mountain rivers of Zangezur are characterized by pronounced spring flooding: during the snowmelt season, they overflow sharply onto the surrounding terrain.

The forms *rut* and *urud*, whose origin is connected with the Persian *rūd* “river”, demonstrate that the Persian administrative tradition had already applied its own designations to this river system. The appearance in Sasanian documentation of yet another Middle Persian hydronym—Zangāvan—therefore fits naturally into an already established practice of Persian naming for the region’s principal river.

Further confirmation of this practice is found within the Iranian hydronymic tradition itself. In Ilam Province of Iran, the hydronym Āb-e Zangāvan is attested, also known as Rūdkhāneh-ye Āb-e Zangāvan “the river of Zangāvan” and Āb Zangī “babbling/ringing water” (Khurshudian 2024, 269); an analogous hydronym Ab Zangi is attested in Afghanistan (Maidan Wardak Province) and in Iran (Shiraz, Fars Province) (Khurshudian 2024, 269). The presence of hydronyms with a similar structure (*zang-* + *-āvan/-ī*) on the territory of Iran and Afghanistan proper serves as independent typological confirmation of the hydronymic nature of MP *zangāvan*.

If this pattern extended to the Sasanian administrative nomenclature, then the form Marz-ī Zangāvan receives a natural explanation as “the border region of the river Zangāvan”—a territory organized around the principal river system of historical Zangezur. In this case, Zangāvan ceases to appear as an isolated toponym accidentally recorded in a single sixth-century CE document, and becomes instead another link in the historical system of naming the region’s principal river.

Zangāvan and the Vorotan: Four Traditions of Naming One River

The proposed interpretation of Marz-ī Zangāvan as an administrative region named after the river of the same name inevitably raises the following question: can the hydronym Zangāvan be identified with the Armenian Vorotan?

Before addressing this question directly, it is worth clarifying the meaning of the toponym Zangāvan itself. The formant *-āvan* derives from the Old Iranian root **hwah* “to dwell, to remain” (cf. OP and Av. *āvahanam* “settlement, dwelling”, MP *āwahan* “fortified settlement”, OArm. *awan* “small town, settlement”) (Hübschmann 1879, 112). Zangāvan therefore literally means “the region/settlement of the ringing river”, or more fully, “the place where a ringing river flows”. Accordingly, Marz-ī Zangāvan means “the border region of the ringing river”—an administrative unit named after the acoustic character of the region’s principal waterway. Notably, this interpretation elegantly bridges both parts of the present study: Zangāvan (“the place of the ringing river”) and Zang-i jor (“the ringing gorge”) describe the same acoustic phenomenon from different perspectives.

At first glance, the identification of Zangāvan with the Arm. Vorotan may seem unexpected, since the two names differ substantially in their phonetic form. However, the historical hydronymy of the major rivers of the Near East demonstrates that a change of linguistic environment was frequently accompanied by the emergence of new names for the same watercourse, with different linguistic traditions highlighting different prominent features of the river's natural character.

This is clearly illustrated by the full set of historical hydronyms for the Vorotan, each of which reflects a distinct characteristic of the same natural object. Arm. Vorotan (Որոտան, “the thundering, the resounding”) emphasizes the low, powerful sound of the turbulent current. MP *Zangāvan* (“the place of the ringing river”) reflects the high, clear sound of the water on rocky shallows. The Iranian/Kurdish hydronym Barguṣat/Barguṣad (*bar* “to surge” + *guṣād* “to open a path” > “the river that forcefully carves its way”) describes the dynamic characteristic of the river as it forces its channel through the rocky massif. The Turkic *Basarçay > Bazarçay (*basar* “flooding” + *çay* “river”) captures the hydrological characteristic of the river's flood behavior (see Wikipedia's “Bargoshad (disambiguation) entry”).

The Armenian and Iranian traditions do not contradict each other: they describe different acoustic characteristics of the same river. All four naming traditions thus constitute complementary, rather than competing, denominations of the same natural object.

If this reconstruction is accepted, the phrase Marz-ī Zangāvan receives a natural explanation as “the border region of the river Zangāvan”. This interpretation is best supported by the combined evidence of Sasanian sigillography, historical hydronymy, and the historical geography of the South Caucasus.

Zang-i jor: Reconstruction of the Armenian Proto-Form

The interpretation of Marz-ī Zangāvan proposed above allows us to proceed to an explanation of the toponym Zangezur itself. If the Sasanian bulla of the sixth century CE records the earliest known use of the component *zang-*, the subsequent Armenian toponymic tradition makes it possible to reconstruct the form that immediately preceded the modern name of the historical region.

In our view, that proto-form was Zang-i jor, lit. “the ringing gorge”. This reconstruction rests not on superficial phonetic resemblance but on a regular word-formation pattern of the Classical Armenian language.

The first component—*zang* (Arm. զաղկ)—is a Persian loanword meaning “sound, bell, ring” (Khurshudian 2024, 270). Although the word is absent from surviving Middle Persian texts and is not attested in Old Armenian sources of the fifth century, it is widely represented in New Persian, Armenian, Kurdish, Syriac, Georgian, Ossetic, and other languages of the region. Of particular importance is the fact that already in the sixth

century the component *zang-* appears in an official Sasanian document as part of the toponym Marz-ī Zangāvan (Khurshudian 2024, 268-270).

The second component—/i/—is the genitive case marker of Classical Armenian. As Eteri. G. Tumanian has shown, in a number of compound formations the genitive marker is gradually reinterpreted as a word-formative element and becomes an established constituent of the toponymic pattern (Tumanian 1971: 136).

The third component—*jor* (Arm. ձոր)—is one of the most productive elements of Armenian historical toponymy and denotes a deep mountain gorge or narrow valley (Murzaev 1984, 181). Thus:

$$zang + i + jor = \text{“sound”} + \text{genitive marker} + \text{“gorge”} < \text{“the ringing gorge”}$$

The genitive relation in such formations expresses not possession but the presence of a specific feature within a given space. Zang-i jor therefore means “the gorge in which sound rings out”—a place whose defining characteristic is a particular acoustic effect produced by wind, water, or other natural phenomena.

The proposed reconstruction receives further confirmation from the system of Armenian toponymy. The pattern noun + genitive + *jor* is widely attested in Armenian geographical names: Aghawnajor (“the gorge of doves”), Kak‘awajor (“the gorge of partridges”), and numerous other toponyms in which the first component denotes the most characteristic feature of a given locality.

Of particular interest is the historical toponym Kornjor/Kornijor, “the sunny gorge” (Arm. *korn* from MP *xwar* “sun”; MacKenzie 1971: 95), whose first component likewise derives from an Iranian loanword, while the second is represented by Armenian *jor*. In the Turco-Persian tradition, this toponym is known in the forms Gerinzor, Kerenzur, Gorunzur, and others, clearly demonstrating the regularity of the transition from Armenian *jor* to forms in *-zur* in a foreign-language environment. It is precisely this pattern that was realized in the development Zang-i jor → Zang-e zur → Zangezur.

Zang-e Zūr and Zəngəzur: Persian and Turkic Adaptations of the Armenian Toponym

The reconstruction of the Armenian proto-form Zang-i jor makes it possible to explain the origin of the historical form Zangezur, attested in written sources from the fourteenth century onward. In our view, this form passed through three successive stages: (1) the primary Armenian form Zang-i jor; (2) its adaptation in the Persian administrative environment as Zang-e zūr; and (3) the subsequent Turkic (= Azerbaijani) adaptation Zəngəzur (var. Zangazur—the form officially used in the Republic of Azerbaijan).

It should be emphasized that for more than a thousand years the territory of historical Zangezur fell within the sphere of Iranian political and cultural influence. From the late Sasanian period through the nineteenth century, the Persian language remained the primary language of state administration. Even dynasties of non-Iranian origin—the Seljuks, Qara

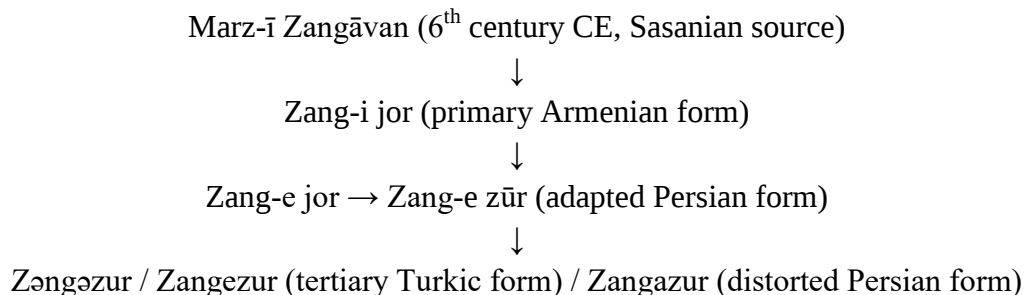
Qoyunlu, Aq Qoyunlu—continued to use Persian as the universal language of administration and diplomacy, a tradition maintained through the Safavids, Afsharids, Zands, and Qajars.

The first change (stage 2) affected the genitive linking marker. The Armenian marker /-i/ is functionally equivalent to the Persian *ezāfe* /-e/, which links the governing word to the dependent. The Armenian construction Zang-i jor therefore received, in the Persian administrative tradition, its natural counterpart Zang-e jor.

The second change concerns the rendering of Armenian jor. The sound ǰ /j/ had no precise equivalent in the Persian or Turkic phonological systems and was rendered in adaptation by means of /z/ (compare Kornjor → Gerinzur). As a result, the form *jor* regularly acquired the shape *zur*: Zang-e zur.

The third and final stage involves Turkic phonological adaptation. In Azerbaijani, the unstressed vowel /a/ in the first syllable regularly reduces to /ə/ (schwa), accounting for the transition Zang-e zūr → Zəngəzur. The form Zangazur deserves a separate comment. It most probably represents a distorted Persian form of Zang-e-zur. Its emergence may be explained by two mechanisms. First, the Persian *ezāfe* /-e-/ may have been reinterpreted by Turkic speakers as a connecting vowel /-a/-, yielding Zang-e-zur → Zangazur instead of the expected Zəngəzur. Second, the influence of Turkic hydronyms containing the component *zanga-* (cf. the river Zanga, now the Hrazdan, in Armenia) cannot be excluded: by analogy with such forms, the first element may have been reinterpreted as *zanga-*, producing Zanga-zur → Zangazur. Both mechanisms are not mutually exclusive.

The reconstructed sequence of development is thus as follows:



Each stage of this evolution is explained by regular grammatical and phonological processes. The Armenian, Persian, and Turkic forms do not stand in opposition to one another; rather, they represent three successive linguistic realizations of the same underlying pattern. Over the centuries, the semantic structure of the toponym was preserved, while changes affected only the grammatical and phonological means of its expression in different linguistic traditions.

This reconstruction makes it possible to view the chrononym Zangezur in a new light: rather than being an independent coinage of the late medieval period, it emerges as the culminating stage of a lengthy three-step evolution whose beginnings are traceable already in the Sasanian administrative name Marz-ī Zangāvan.

The stability of the form Zang-e zūr is explained by the continuity of the Persian administrative tradition in the region. After the Arab conquest, this tradition did not disappear: from the eleventh century, under the Seljuks, Persian once again became the primary language of chancery and state governance. This system was fully adopted by the subsequent states of the region—the Ilkhanids, Timurids, Qara Qoyunlu, Aq Qoyunlu, Safavids, Afsharids, Zands, and Qajars—through the nineteenth century. Despite the varying ethnic origins of the ruling dynasties, the administrative language remained predominantly Persian, and with it the established norms of geographical nomenclature were preserved.

Conclusion

This study proposes a new reconstruction of the origin of the toponym Zangezur, based on a comprehensive analysis of Sasanian sigillography, historical hydronymy, Armenian toponymy, and the Persian and Turkic administrative traditions.

Of central importance is the Sasanian administrative bulla of the sixth century, recording the form Marz-ī Zangāvan—the earliest known written attestation of the component *zang-*, shifting the documented history of this element several centuries earlier than the first medieval references to Zangezur itself.

An analysis of the historical hydronymy of the region suggests that Zangāvan originally served as the name of the largest river of historical Zangezur—the Vorotan. Four historical hydronyms for this one river—MP Zangāvan, Arm. Vorotan, Iranian/Kurdish Barguṣat, and Turkic *Basarçay (> Bazarçay)—reflect different characteristics of the same turbulent mountain stream: acoustic, dynamic, and hydrological. All of them constitute complementary, rather than competing, designations of the same natural object.

The proposed reconstruction of the Armenian proto-form Zang-i jor (“the ringing gorge”) fully conforms to the word-formation model of Classical Armenian. Its subsequent adaptation passed through the Persian administrative form Zang-e zūr to the tertiary Turkic form Zəngəzur, regularly explained by the reduction of the vowel in the first syllable characteristic of the Turkic languages of the region.

Zangezur should thus be understood not as an isolated toponym but as the final link in the centuries-long history of naming the principal river system of historical Siwnik, in which the Armenian vernacular, Iranian administrative, and Turkic phonological traditions are successively reflected. It is precisely the interaction of these cultural-linguistic systems, traceable from the Sasanian era to the modern period, that most consistently explains the origin and historical development of one of the most significant toponyms of the South Caucasus.

Abbreviations

Arm.: Armenian

Av.: Avestan

Azer.: Azerbaijani

HayTelBar: *Dictionary of Toponyms of Armenia and Adjacent Regions* edited by T. Kh. Hakobyan, St. T. Melik-Bakhshyan, and H. Kh. Barseghyan, 1986-2001. In V vols. Yerevan State University Press.

MP: Middle Persian

OArm.: Old Armenian

OP: Old Persian

Turk.: Turkic

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