SARGIS AYVAZYAN

URARTIAN – ARMENIAN

LEXICON

AND

COMPARATIVE - HISTORICAL GRAMMAR

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Translation From Armenian
By
L.Ayvazyan and N.Melkomian

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Sargis Ayvazyan
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This work is the supplemented and amended revision of my previous two books - "Cuneiform Inscriptions of Van Kingdom I, II" (2003) and (2006). It also contains much new evidence and many observations. The section on Phonology is presented in a completely new way.

The book is devoted to the issue of the language of the Van cuneiform inscriptions: Urartian, and its interrelationship with Armenian. The common word roots are thoroughly discussed and the Urartian grammatical and phonetic systems are compared to those of Armenian. An attempt is made to present the historical-comparative grammar of these languages proceeding from the assumption that Urartian has, as its base, the Armenian language.

The book will be useful reading for specialists - Armenologists, Urartologists and those readers who are interested in the Van cuneiform inscriptions.

CONTENTS

INTRODUCTION

1. **General information**. Texts written in Urartian have reached us through the Van cuneiform inscriptions (hereafter - Van inscriptions)[1], which date to the 9-6 centuries BC. The first inscriptions were written in Assyrian; later, following Išpuuine I, mostly only in Urartian. Unfortunately, there are very few bilingual inscriptions. In fact, to date, only two of them[2], which are in a damaged condition and one other, so-called quasi-bilingual inscription, partly in Assyrian and partly in Urartian, are known to us.

There are around 700 Urartian inscriptions known to us, of which a significant part, written on various objects, are mostly recurring one line texts with few words. The repetitions are also considerable in number[3]. For that reason the attested lexicon in the Van inscriptions is limited to 350 words. Of these, only 200-250 words have been more or less convincingly translated. Moreover, for the same reason a great number of words are known only by their broad, general meanings[4].

The script of the inscriptions is a Neo-Assyrian variant of the Assyrian-Babylonian cuneiform script. Forms of earlier periods, as well as those typical only to Urartian, have rarely been used (see I.3 point 3)[5].

2. **History of research.** Historiographer Movses Khorenatsi is the first to mention the cuneiform inscriptions of the Van Kingdom and attribute them to the Assyrian mythical queen Semiramis[6]. In 1827 F.Schulz, working as part of the French archaeological mission in Van, made copies of almost forty inscriptions, launching the scientific investigation of the Van inscriptions, which later on came to be called Urartian. In the early stages, the scholars expressed contradictory opinions. Thus, for example, A.Mordtmann considered that their language was Armenian, while for L. De Rober, their language was Semitic. At the end of XIX century the famous Assyriologists S.Guyard and A.Sayce ascertained that the Van inscriptions were written using Assyrian cuneiform script. The latter by that time was sufficiently comprehensible. It became clear, that the language of a number of those inscriptions was Assyrian, and another significant portion was written in an

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[1] Hieroglyphs were also used in the Van kingdom. See A.Movsisyan, 1998.
[2] These are Kelishin [KUKN 30] and Topzawa [KUKH 387] inscriptions with parallel Assyrian and Urartian texts. Also - duplicates of the Topzawa inscription recently discovered in Movana and Mergeh Karvan.
[3] For instance, on the bronze cups discovered in Karmir Blur in 1949 there are 67 inscriptions with the following text: ^{md}Sar$_5$-du-ri-(e/i) NIG [KUKN 310-376].
[4] See a more complete list of words attested in Van inscriptions in N.Harouthiounyan, 2001:431-476.
[5] About this see also I.Diakonoff, 1963:18-21.
[6] Movses Khorenatsi, 1981:66.

unknown language which was subsequently called "Urartian". Based on the combination method of decipherment, S.Guyard set values for separate units of the unknown language and made approximate translation of some phrases. A.Sayce, continuing Guyard's work, translated and published the Urartian inscriptions known at that time. The Assyrian-Urartian bilingual inscriptions discovered subsequently made the checking and modification of these translations possible[7]. In 1900 J.Sandalgyan attempted to tackle the inscriptions utilizing the Armenian language as a base. He published the most comprehensive collection of Urartian inscriptions of the time - with French and Armenian translations[8]. But A.Sayce and H.Acharyan denied his approach[9], and the opinion that Urartian is a separate language with no connection to Armenian became established in the science. At the same time, the opinion that Urartian is cognate to Hurrian, forming a so-called Hurrian-Urartian language family, become widely accepted. Among Soviet scholars, I.Diakonoff and M.Khachikyan are the more active proponents of this approach[10].

3. **The issue of Urartian-Armenian linguistic connections and the goals of this book.** In addition to A.Mordtmann and J.Sandalgyan, during different periods, many other scholars have studied the linguistic similarities between Armenian and Urartian. Let us just mention G.Ghapantsyan, H.Acharyan, G.Jahukyan, N.Harouthiounyan, M.Israelyan, I.Diakonoff, R.Ishkhanyan, V.Sarkisyan, H.Karagyozyan, M.Khachikyan, J.Greppin and others who, on different occasions have returned in their works to the Armenian-Urartian connections. While pointing to many similarities between these two languages they basically remained within the bounds of the above mentioned conviction which regards Urartian as a separate language. Interpreting the existing similarities as merely loanwords, they place the emphasis on the probable impact of Urartian on the Armenian language.

G.Ghapantsyan held a different position on this question. He argued that Armenian is a hybrid language with an Urartian substratum. He made this argument coming from the point of view of the existence of the so-called "Asianic" language family[11]. To illustrate the grammatical and typological commonalities, G.Ghapantsyan, referred in particular, to the lack of words with an initial *r* in the two languages and the presence of the genitive marker -*i* in Urartian[12], etc.

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[7] For more detail about this see G.Jahukyan, 1988:127-131: About discovering and decipherment of the Van inscriptions see also, G.Ghapantsyan, 1940:5-10 and so on.

[8] J.Sandalgyan, 1900.

[9] See H.Acharyan, 1940, I:172-190.

[10] See I.Diakonoff "Сравнительно-грамматический обзор хурритского и урартского языков,, PS, 1961; "Хуррито-урартский и восточнокавказские языки,, DV, 3, 1978 and other works; M.Khachikyan, 1985.

[11] See G.Ghapantsyan, 1975:212-213.

[12] Due attention has subsequently, unfairly, not been paid to this observation. Apparently this has been fostered by the fact that scholars, together with the Urartian -*i*, also indicate -*e* and -*ei* as morphemes of the genitive case (see in detail V.2.5).

R.Ishkhanyan tried to separate the language spoken by the inhabitants of Van Kingdom from that of the Van inscriptions. He called the latter "Neo-Hurrian" considering it already a dead language by the time of the Van Kingdom[13]. V.Sarkisyan proceeds from the point of view that the ancestors of the Basques, migrating from the Armenian Highland and/or adjacent areas, took the local language material with them which, in many cases, the Basque language has preserved without distortions, especially in proper names. Pointing out that, particularly in its grammar, Armenian is a rapidly changing language, for the reconstruction of the Armenian of the pre-written period he proposes using the internal reconstruction method, collated it with data of Basque and Urartian languages. He considers these to be cognates, making the Urartian-Armenian-Basque trilingual comparison (V.Sarkisyan, 1998). Returning to the investigation of Armenian-Urartian connections, G.Jahukyan (PBH, 2001, 1:125-129) examined the introductory formulae of the Urartian inscriptions and expressed the opinion that the probability that the Armenian language is the base for Urartian should not be excluded.

There is an absence of literature concerning the systematic examination of the similarities in grammatical forms of Urartian and Armenian languages. In fact, to-date scholars have satisfied themselves with scanty comments on the broad similarities and differences in grammar of the two languages and mention of their general typological correspondence. Such attitudes are supported by the entrenched belief in some scientific circles that these languages are completely dissimilar, belong to different families, and, consequently, similarities can only refer to the lexicon, which is conditioned by mutual borrowings. In initiating my research and writing this book, my aim was not merely to refer to the parallel word roots of the two languages and adjacent questions but also to thoroughly discuss the similarities and divergences in grammatical forms of these languages. At the end of this book, as an illustration, we will refer to several Urartian inscriptions and passages, the phonetic transcriptions and translations of which are based on Armenian-Urartian linguistic commonalities and certain rectifications in Urartian, which themselves are based on the former.

The inclusion of these readings in the book is not incidental. It reinforces my view that Urartian is probably a dialect of Ancient Armenian. In any event, we will see that the Armenian-Urartian similarities cannot be determined just by the borrowings and influences.

4. **Sources**. In my analysis, for the most part, I have used the Roman character syllabic transcriptions (transliterations) of Van inscriptions published by scholars at different times which, as a rule, are accompanied by the publisher's translations and

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[13] See R.Ishkhanyan, 1994.

detailed comments[14]. Such transliterations make it possible to restore the original cuneiform inscriptions, when necessary. In some cases, for verification of questionable phrases (due to their being damaged or other reasons) I turned to the photos and/or drawings of the original inscriptions at hand. For clarification of the Urartian grammar, I made use of the works of both traditional scholars and those with new approaches in their research.

5. **Difficulties.** Three main groups of difficulties exist in the comparison of Urartian and Armenian grammar and, in general, in the comparison of these languages:

a) The Assyrian-Babylonian script used for the Urartian cuneiform inscriptions is imperfect. Firstly, it distinguishes only a limited number of phonemes (23-24 in all) and, secondly, it is characterized by polymorphism, that is to say, each cuneiform sign may correspond to several syllabic values and vice-versa.

b) Urartian grammar is distorted because the texts of the inscriptions that have reached us are similar in style and repetitive. This is tangible, in particular, when trying to clarify the verbal morphology.

c) The restoration of many grammatical forms of the primary state of the Armenian language (referring to the probable state during the creation of the Urartian cuneiform script) is impossible and/or unreliable. This is mostly due to the immense difference in time (1000-1300 years) between Urartian and the sources written in Classical Armenian language - "Grabar" (hereafter: Armenian)[15] that have reached us, the substantial changes in Armenian during that period - particularly in the grammar - and the significant number of foreign elements introduced into the language. As a result, to-date, the origin of many Armenian grammatical forms and state(s) in the pre-written period remain obscure or debatable among Armenologists.

6. **Method of comparison.** If we talk about the comparison between the Armenian and Urartian languages as two states (stages) of the same language for different time periods, and if we represent the first state (Urartian) by b and the second (Armenian) by c, then in general, we should take into account the following possible situations: 1) $c=b$, 2) $b \rightarrow c$ and 3) $c \neq b$. But there actually can be deviations from this picture. Here we should take into account the areal (geographic) factor which could cause dialectal differences between c and b. Dialectal divergencies are also present within the boundaries of both b and c[16]. Theoretically, for the comparison we can move both from b to c and vice-versa. Similarly, it is possible to try to go in both directions. Taking into consideration the Indo-European genesis of

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[14] We have basically drawn on more complete corpuses published by N.Harouthiounyan and G.Melikishvili and. in the case of letters and documents, I.Diakonoff's publications. Where necessary, other sources have been utilized.

[15] If Modern Armenian or any one of its dialects is being discussed, then an indication is made to that effect.

[16] G.Melikishvili (1960:82-89) for example explains some differences present in the Urartian texts by the existence of a "Musasir" dialect.

Armenian, we should add to the above mentioned two states of the same language, the third one: the Proto-Indo-European language. If we indicate it by *a,* then the following situations are possible: 1) *a=b=/→c,* 2) *a→b=/→c,* 3) *a→b,* 4) *b→c.* Bearing in mind the stylistic similitude of the attested Urartian texts that have reached us and the sparse and fragmentary grammar (determined by this fact), when I compare Urartian and Armenian, I move from Urartian to Armenian (*b=/→c*) and where possible, partially utilize data of comparative Armenian grammar by also presenting the state of Proto-Indo-European or cognate languages. Separate observations of Urartian as an assumed Indo-European language (*a→/=b*) have not been made. Thus, the methodology I have used in this book follows this scheme:

a) First, a particular Urartian word root, morpheme or grammatical form as represented in scholarly literature is given. When contradictions or disagreements are present, the question is comprehensively analyzed in the context of relevant evidence in the Urartian texts. If necessary, I present my view on the question at hand, with thorough argumentation, explanation and substantiation.

b) The data of the Armenian language is presented. The material under discussion is compared both in form and meaning. Seeing that in the Urartian period many elements of the Armenian language would have been in their early forms, if necessary the primary state of Armenian, reconstructed using comparative linguistics, internal reconstruction of languages, and other methods, is also given.

c) Throughout this book, I have operated with the traditional reconstruction of Proto-Indo-European phonology done by the Neogrammarians.

d) The problem of phonetic correspondence is solved by the comparison of well known Urartian place names and common nouns with the most reliable Armenian parallels (see in detail I.3 and II.4).

e) Comparison is normally made only between Armenian and Urartian. Comparisons with other languages (among them Hurrian, particularly, Old Hurrian with which Urartian has certain similarities) have not done, except in individual cases[17].

f) Finally, a concise conclusion is reached on the material discussed and comparisons made.

7. **Transliteration, conventional and phonetic transcriptions.** To avoid confusion in transcription, the quotations from any phrase or individual words of the Urartian texts are presented with transliteration and translation made by their author (publisher) without any changes. In the case of revision of the material, the format accepted by us is used.

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[17] In specialised literature, the issue of Armenian-Hurrian linguistic connections is also on the whole limited to the analysis of several coincidences. As a rule they are considered to be merely Hurrian word forms which have entered into Armenian via Urartian, whereas the systematic study of the Armenian-Hurrian linguistic connections would not only greatly contribute to the clarification of the Armenian-Urartian relationship, but would also play an important role in Armenology and Hurrian studies.

In general, in this book four types of transcription/transliteration are used: (1) traditional Urartian transliteration (mainly the quotations from the Urartian texts made by other authors/publishers), (2) the alternative transliteration proposed by me (these two types of transliteration are based on the Latin transliteration system accepted for the Assyrian-Babylonian cuneiform script), (3) narrow Urartian transcription, and, finally, (4) phonetic transcription, which reflects the actual pronunciation of the given word, as far as possible. The latter can only be applied to those words/morphemes for which the Armenian parallels and corresponding pronunciation of that period are known. For this reason, in many cases this type of transcription is conventional.

To distinguish these four forms of transliteration / transcription, the second one is presented in parentheses, and for the fourth, I use square brackets.

Table 1 *The Armenian alphabet in parallel with the signs which*
I use for the Urartian phonetic transcription.

Armenian		Urartian phon. tran-scription	Armenian		Urartian phon. tran-scription
Alphabet character	Transcription		Alphabet character	Transcription	
Ա-ա	a	a	Մ-մ	m	m
Բ-բ	b	b	Յ-յ	y	y
Գ-գ	g	g	Ն-ն	n	n
Դ-դ	d	d	Շ-շ	š	š
Ե-ե	e	e	Ո-ո	o	o
Զ-զ	z	z	Չ-չ	č′	ç
Է-է	ē	ē, ei	Պ-պ	p	p
Ը-ը	ə	ə	Ջ-ջ	ǰ	ǰ
Թ-թ	t′	t	Ռ-ռ	ṙ	ṙ
Ժ-ժ	ž	ž	Ս-ս	s	s
Ի-ի	i	i	Վ-վ	v	v
Լ-լ	l	l	Տ-տ	t	ṭ
Խ-խ	x	x	Ր-ր	r	r
Ծ-ծ	c	ṣ	Ց-ց	c′	ċ
Կ-կ	k	k	Ւ-ւ	w	w
Հ-h	h	h	Փ-փ	p′	ṗ
Ձ-ձ	j	j	Ք-ք	k′	q
Ղ-ղ	ł	ł	ՈՒ-ու*	ow	u
Ճ-ճ	č	č	- **	-	p̂

   * Digraph = [u],   ** -/h < PIE. *p

Let us bring an example: Urart. `al-zi/e-na` 'stone, rock' - Arm. *arjan, i-a* 'big stone; statue, idol, (rock) inscription, etc.'.

1) `al-zi-na` - traditional broad syllabic transcription (transliteration)[18],

2) `(al-ze-na)` - the proposed (alternative) broad syllabic transcription (transliteration),

3) `alzena` - narrow transcription,

4) [arjena] - phonetic transcription.

In transliteration of Urartian syllabic cuneiform, single bars (-) are used to separate syllabic symbols, whereas in morphemic transcription - double bars (=).

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[18] Many Urartologists of the new generation also reject traditional transcription and suggest alterative versions. See, for instance, I.Diakonoff, 1971:24-58; DV, 51,988:133-140, etc.

I. SCRIPT

I.1 General Information

The Sumerians were the first to devise and utilize the cuneiform system of writing. Subsequently, the other peoples of the region adopted it and adapted it to the requirements of their own languages. The Urartians began to use this system of writing from the start of IX century BC. Initially, they used the Akkadian (Neo-Assyrian) language; later on, it was replaced by Urartian. The Urartians created their own cuneiform script system basing it upon the Akkadian cuneiform script but simplifying it. This was used until the fall of Urartu (VI century BC). Taking this into consideration, below, I briefly describe the Akkadian cuneiform script.

I.2 The Peculiarities Of The Akkadian (Assyrian-Babylonian) Cuneiform System

As was mentioned before, the Akkadians used the cuneiform system of writing which the Sumerians had devised during the third millennium BC. The latter, when inventing the cuneiform writing system, for each pictogram (henceforth: cuneiform sign) representing an term (idea) or object, understood several terms or phenomena. As a result, each cuneiform sign had several alternative pronunciations. Adopting the script from the Sumerians, the Akkadians added the corresponding variants for terms or objects in their language to many of the cuneiform signs. Thus, for example, the Sumerian transcription of the cuneiform sign for "house" is *é,* whereas in Akkadian it also took the syllabic value *bit* (Akk. *bitum* 'house'). Moreover, by replacing the voiceless consonants with the voiced ones and voiced consonants with the voiceless, they increased the number of phonemic (syllabic) values that corresponded to each cuneiform sign. For example, to the above mentioned *bit* they added also the values *pit, pid* and *bid.* In many cases, the Akkadians replaced vowels. For example, the sign with the value *luḫ* also accepts others - *làḫ, liḫ.* On the other hand, the Sumerian language is marked by the abundance of homonyms. This is why the different signs might have a similar pronunciation. The Akkadian cuneiform system also inherited this characteristic. Sumerians used to specify the semantic class (plant, wooden object, bird, human being, etc.) to which the given logographic word belonged with special attributive signs (determinatives) which they put before or after the word. Akkadian writing, borrowing this feature from Sumerian, went one step further: the logogram is often followed by signs, known as phonetic complements, which usually serve to clarify the Akkadian reading of the logogram by specifying the pronunciation of the last part of the word. Thus, phonetic complements may indicate part of the morphological shape of a given Akkadian logogram. This also

made possible, for example, the definition of the case or verbal form of a particular logographic word. As a result, the Akkadian cuneiform system acquired the following main features:

1. Most of the cuneiform signs can be read as logograms (Sumerograms) and/or determinatives, and also, by their corresponding syllabic values. Each cuneiform sign may have (syllabic) value(s) of either the vowels - *a, i, e, u* and/or the cluster of sounds of *C[onsonant] V[owel], VC, CVC* shape (composed of consonant(s) and vowel).

2. Most of the cuneiform signs are polyvalent: each of them may have several, sometimes, more than ten syllabic values. And vice-versa, the same syllable can be expressed by different cuneiform signs. Similar behavior is inherent to the majority of cuneiform languages. For example, the same cuneiform sign can be pronounced *du* as well as *tù, ṭù, gub, kub, qub …* And, the other way around, beside *du* there are also *dú, dù, du₄…* and so forth (the numeration, numerical subscripts and diacritics over vowels correspond to the frequency of their attestations and serve to identify precisely which sign appears in the text).

3. The final consonant of a closed syllable is alternated by the phonemes of the same subset (for example, *bad=baṭ=bat, ad=aṭ=at* and so on). In other cases, this alternation is not obligatory and depends on the specific sign and period of usage, for example, *tar=ṭar=dar=ṭír=ṭír, ta=dá=ṭá, tur=ṭùr,* etc.

Actually, many consonants are practically impossible to differentiate from each other. Thus, almost always, the signs that represent phonetic clusters (syllables) involving the phoneme *d,* with the same success, instead of *d,* can be read *ṭ* (often also - *t*) and vice-versa. *Š* mainly goes in parallel with *s, b* - with *p, z* - with *s* and *ṣ,* etc.

4. The signs representing the syllables consisted of any consonant and *i* (*iC, Ci*), likewise, have the variant with *e.* For example, *ti=te₉, li=le, ri=re, ir=er, iš=eš₁₅,* and so forth.

5. The closed syllables CVC (for example, *qub*) in the script can be represented also as CV-VC *(qu-ub)* which is read CVC *(qub).*

6. To specify the words written in logograms, special signs (determinatives) were employed which were placed before or after the logogram. To the same end, they were often followed by the phonetic complement[19].

I.3 The Urartian Cuneiform System

The Urartian cuneiform system inherited the main characteristics of the Akkadian (Neo-Assyrian), its prototype. Nevertheless it clearly differs from the Akkadian writing (being simpler). The Urartian cuneiform system has the following main properties/features:

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[19] About the peculiarities of the Assyrian script in detail see, for example, W.Soden, 1948; L.Lipin, 1964:11-20; M.Khachikyan, 1985:23-32; J.Huehnergard, Ch.Woods, WAL(2004):220-230, et al.

1. On the whole, the Urartian cuneiform signs are similar in shape to the Neo-Assyrian. But unlike Akkadian, in the majority of inscriptions the wedges do not intersect (these inscriptions are mainly written on stone). Of the over 600 Akkadian cuneiform signs, around 200 are attested in the Urartian texts (theoretically, of course, the Urartian texts can use any sign).

2. The CV signs (about 60) are prevalent in the syllabary. CVC (as a rule only those which end with the sonorant or *š* are attested) and VC signs are less frequent. VC signs: *Vk, iḫ, uḫ, im, um, en, in, un* and *ut,* common in the Akkadian, are not used at all in the Urartian cuneiforms. The signs used for vowels are: *a, i, e, u* and *ú.*

Polyvalency is intrinsic to the Urartian cuneiform script; likewise in Akkadian (although, to a much lesser degree). Many signs may have more than one value; for example, the sign *ḫi/e* also has the values of *ṭí/é* and *tí/é, gu - qú, ár - ub, ku - šù, ṭuš,* etc. On the other hand, like Akkadian, in the Urartian two or more signs may represent the same vowel or syllable; for example, *tú/tu, ar/ár, šu/šú/šù, ḫe/ḫé, te/te₉, u/ú*, etc.

3. The Urartian inscriptions also have some extremely rare intrinsic features which do not occur in the Akkadian script. For example, the sign TUR also has the phonemic value pu_x which does not occur in any of the other languages.

4. In the Urartian texts the *ze-el-be - ze-le/i-be, ni-ir-be - ni-ri/e-be, ta-ar-ma- - ta-ra-ma-* and other alternations are frequent. Some scholars, based on this and certain other facts, and taking into consideration the rare occurrence of the VC signs in Urartian and the total absence of some others (see above - point 2), suggest that CV signs probably also represent the VC syllables (G.Wilhelm, 2004:120). However if that appears acceptable for the above-mentioned alternations, the same cannot be said for *ar-a-ne/ar-ne, a-šá-ze-e/áš-ze-e, wa(-a)-al-du-/wa-la-du-, al-a-su(-i)-ne/al-su(-i)-ne* and other similar alternations[20]. As to *[KUR]e-ba-ni-ke-di/[KUR]e-ba-ni-ú-ke-di, qi-ra/qi-ú-ra* and analogous examples, then it may be more plausibly explained by phonetic variation (see II.3).

5. In the Urartian inscriptions, as in the Akkadian, special indicating signs (determinatives) and phonetic complements after words are used to make logograms more specific.

6. Hyphenation in the Urartian inscriptions was forbidden and, as a rule, the lines were filled, that is to say, an empty space at the end of a line was not permitted. In order to meet this requirement, vowels in Urartian inscriptions were frequently repeated, irrespective of whether the vowel was double, long or short. For example, `ma-ni-ni/é` and `ma-a-ni-ni/é-e`, `[m]Me/ì-nu-(ú)-a` and `[m]Me/ì-i-nu-a`, etc. This permits us to verify the transcription of many Urartian words and avoid the ambiguity caused by the indistinctness of cuneiform signs. For example, in the

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[20] Such behavior is also peculiar to the other cuneiform scripts. For example, concerning similar occurrences in the Hittite language, see J.Friedrich, 1952:49-50, point 25-26.

case of the above-mentioned words, the presence of the options `ma-a-ni-ni/é-e` and `ᵐMe/ì-i-nu-a` enables their accurate transcription into the forms *manine* and *ᵐMinua* respectively and helps avoid the possible ambiguity caused by the vagueness of the *me/i* and *ni/é* signs. If a phoneme cluster in which all elements are expressed in writing by the same vowel sign is present in the language, then such a cluster is always attested by two or more vowel signs; for example, `su-ú-i-` 'to throw, to move, to deport', `-cu-ú-(ú)-le` (past perfect ending of transitive verbs: first person singular, subject; third person plural, object)[21] etc.

7. In Urartian the *Vi/V* alternation is observed: for example, *-kai/ka* (postposition), *-Ci-i-e/Ci-e* (the dative ending of *i*-declension), *ainei/anei, aišei/ašei, alsuine/alsune* and so on. This process is probably conditioned by the peculiarities of the script. As shown by the Urart. *-ka(i)* - Arm. *-kay*, Urart. *a(i)nei/a(i)šei* - Arm. *ayn/ays* parallels, in such cases *i* reflects the phoneme *[y]*. The fact, that in the later period, the *i*-declension *-Ci-i-e/Ci-e* ending is often written as *-Ci-ge(-e)*, supports this.

8. In Urartian texts, in the word-final position, the vowel is often followed by an extra *e* (e.g. *uie/ui, manae/mana, au(i)e/aui),* the function of which is unclear (see V.2.3 point 2).

9. At present the question of Urartian *i/g* alternation remains unclear. It occurs within a certain time period (variants with *g* appear only after Argišti[22]I). This alternation, apparently, is the manifestation of phonetic change: its reflection in the script. However, it is possible that it could be the result of some reform in spelling, although no other traces of any such reform are detected in the Urartian texts (see II.3 point 6, V.2.6 point 2b, V.2.8 point 2, VI.3 point 2; note 635).

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[21] Apparently, in the examples given, double *u* has to be pronounced as [-uw-] or [-ow-].
[22] Conventionally the name is pronounced as "Argišti" or "Argišťi". I think the more probable version is "Argisti". So "Sharduri", "Rusha", "Ispuwine" (or: "Espuwine").

II. PHONOLOGY

II.1 Phonemic System

As noted above, the Urartian cuneiform script originates from the Akkadian (Neo-Assyrian) prototype and for this reason I start my examination with a brief description of this prototype.

1. **The concise description of the Assyrian phonemic system.**
The Assyrian cuneiform script differentiates 24 phonemes - 4 vowels (*a, i, e, u*), 18 consonants and 2 semivowels (see Table 2). As mentioned above, because of the polyvalency of Akkadian cuneiform signs, in many cases it is impossible to verify their actual phonemic values. In general, Assyrian manifests the alternations of the *d/ṭ/t* (*d* and *ṭ* practically do not differ), *b/p, g/k/q, s/z/ṣ, š/s* and other signs. In some cases, these signs are absolutely not distinguished (see I.2). As to the number of other possible phonemes in Assyrian and their representation in the script, that remains one of the most problematical questions. Judging from the available material, *[h]* is represented by *ḫ* in the Assyrian script, or zero (is not written).

Table 2 *Consonant phonemes reflected in Assyrian cuneiforms*

Manner of articulation / Place of articulation		breathed				sonorant			
		stops		fricatives					
		voiceless	voiced	voiceless	voiced	nasals	Lateral	semivowel	vibrant
Labials		p	b			m		w	
Dentals	common	t	d	s	z	n	l		r
	emphatic	ṭ		ṣ					
Palatalized	mediolingual			ś, š				y	
	backlingual	k	g	ḫ					
	uvular	q							

The phoneme *[o]* in foreign names (separately or with consonant(s)) is rendered by *u*. For the the affricates, on the whole, the same signs *z, s, ṣ* are used. The semivowel *[y]* is rendered by the sign (diphthong) *i̯a* - the juxtaposition of *i* and *a*, that is read *i̯a, i̯u, i̯i, i̯e*. *[W]* is rendered by the special sign, which can be read equally as *wa, wi, we* and *wu* (sometimes, also *iw, ew* and *uw*). In later texts,

because of the disappearance of *[w]* in Assyrian, it is read as *pe/i*, and in foreign names *[w]* is often rendered by *ú*, etc.[23].

2. **General information on the Urartian phonetic system.** The Urartian cuneiform script differentiates as many phonemes as its Assyrian prototype - 24 phonemes, of which 4 are vowels *(a, i, e, u)*, 18[24] consonants and 2 semivowels (see above, point 1). But for many signs, particularly in the case of consonants, the phonemic value they take is not obvious. That is why the accepted pronunciation of Urartian words is strictly conditional. In fact, the availability of written texts is still insufficient for analysis of the phonemic systems of cuneiform languages. Therefore, in parallel with the data received from inscriptions, particular importance is placed on comparing the given language with other cognate languages, either living, or with well known phonetic systems. The Hurrian language which, according to the accepted viewpoint is considered an Urartian cognate, is not useful in this case for various reasons. First, its connection to Urartian as a cognate language is not that obvious, and second, the Hurrian phonemic system is equally not clearly elucidated, and besides, existing evidence shows that these two phonemic systems vary considerably. Under these circumstances, the phonological comparison of Urartian and Armenian parallel (common) words/roots and morphemes becomes crucial.

3. **The Urartian phonemic system in scholastic literature.** W.Bennedict (1958), and I.Diakonoff (1963:18-21, 29-31; 1979:54-58; DV, 5, 1988:135-140, etc.) were the first to attempt to examine the Urartian phonemic system more closely. I.Diakonoff tried to introduce a certain amount of clarification into the Urartian phonetic system, relying mainly on Hurrian facts, and place names and some other words attested in Urartian texts, and parallels present in Armenian and Ancient (Greek and Roman) sources. After that, M.Khachikyan (1985:33-34, etc.), G.Jahukyan (1987:417-445), and G.Wilhelm (2004:121-124) and others also mentioned this issue. Below, I present a concise picture of the Urartian phonetic system based mostly on its description in the above mentioned works of I.Diakonoff and M.Khachikyan.

3.1 **Vowels.**

a) The simple vowels *[a], [i], [e], [o], [u]* and *[ə]* are reconstructed, of which *[a]* in the script is represented as *a*, *[i]* as *i*, *[e]* and *[ə](-Ci/e)* as *e*, *[o]* and *[u]* as *u* (not differentiated in the script). The presence of the double vowels frequently used in the script is explained thus: (1) to mark a long vowel, (2) to fill the empty space in line, (3) to clarify the vowel in the preceding signs with the *Ci/e* shapes, (4) to demonstrate the vowel contraction.

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[23] For more details about the Assyrian phonemic system see L.Lipin 1964:26-43; M.Khachikyan 1985:23-27; J.Huehnergard, Ch.Woods, 2004 (WAL):230-241 and so on.

[24] It is not clear how does Urartian distinguish the Assyrian *š* voiceless fricative.

b) As possible diphthongs G.Wilhelm (2004:122) indicates the following: *[ai], [au], [ei], [eu], [ia], [ie], [iə], [ua], [ue], [uə], [ui]* by separating some of them.

3.2 **Consonants.** It is noted that Urartian has a three level system of consonants, at least, for stops and postdental fricatives. For them, in addition to voiceless and voiced consonants, one more subset is presumed.

a) In Urartian for stops, the signs *b, p, d, t, ṭ, g, k, q* (the cuneiform signs that represent them) are used. It is supposed that 1) bilabial *b* represents *[b]*, *p* - *[p]* and *[p′]* - located in the third subset (in place names it corresponds to Arm. *p′* and Gr. *φ*), 2) similarly, dental *d* represents *[d]*, *t-[t]*, and *ṭ* - corresponds to the phoneme of the third subset *[t′]* (in place names it corresponds to Arm. *t* and Gr. *θ*), 3) velar *g* represents *[g]* (probably, very palatalized) and semivowel *[y]* (see below, point d), *k* represents *[k]*, and *q* - *[k′]* (in the sources of other languages it is attested as *k*).

b) The Urartian fricative system, like the Neo-Assyrian is difficult to reconstruct. The signs *s, š, ṣ, z, ḫ* are used for fricatives and for reconstructed labial fricatives, for which there are no specific Urartian signs, - *b, u* and *p* are also used. It is assumed that 1) labial fricatives *[v]* (corresponds to Arm. *v*) and *[f]* are represented by *b/u* and *p/b* respectively, 2) *š* represents dental *[s]*, *z - [ǰ]* and *[j]* (Arm. *j* and *ǰ*), and *ṣ - [c]* (Arm. *c*), 3) *ḫ* assumes *[ḫ]*, *[ɣ]* and *[h]*, 4) the presence of *[č]*, *[č′]* and *[c′]* affricates is considered plausible.

c) The sonorants exhibit *r/l* fluctuation. Based on Hurrian and Armenian evidence, M.Khachikyan (SMEA, XXXIV, 1994:111-113) assumes the existence of the double *r* and *l* both in Hurrian and Urartian. They correspond to the Armenian *ṙ/r* and *l/ł* respectively, and in Hurrian are represented by *-rr-* and *-ll*.

d) Semivowel *[w]* is represented by *u* and *w (ʼ)*, and *[y]* - by *i, ị (y)* and *g*. In addition in some cases *g* and *y* are alternated.

3.3 **The consonant clusters.** The cuneiform script system proscribes the representation of phoneme clusters with three consonants altogether, and also those with two of them, in the word-initial or word-final positions. But this does not mean such clusters did not exist in the cuneiform languages. It is assumed that in those cases the additional vowel, required to be inserted in the script, was merely not read. In Urartian, in general, consonant clusters with no stops at the initial position are prevalent.

Urartian, like several languages of the region, does not have word-initial *r* ("Rusa" is most probably a foreign personal name).

II.2 Accent

The mobile stress accent on the penultimate syllable is apparently unique to the Urartian language[25]. As a result, the word-final *i* in the post accent position weakens and turns into *[ə]* or drops (in script is represented by *e*); for example, *ulguše - ulgu-*

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[25] For Urartian accent see I.Diakonoff 1979:58; M.Khachikyan 1985:42-43; G.Wilhelm, 2004:123 et al.

ši=ane, alsuiše – alsuiši=nine, gunuše – gunuši=ie, uštipte – uštipti=ne, ^mMinuaḫe –
^mMinuaḫi=nele, ṣue – ṣui=ni- and so on (see also IV.I point 1). Some words with the
final *i* are exceptions, as, for example, *ebani(i), esi(i), armu=zi(i),* etc. In these cases
word-final *i* is often doubled in the script. Therefore, in the cases mentioned we
probably have the long *i* (*[ī]*) which does not weaken. It is noteworthy, that for the
genitives of these words the forms like *-Ci/e-e-i* (with additional *e*) in the script are
lacking (see V.2.5). This does not exclude the possibility that the actual ending of
their genitive might be *[-ī]* (in script *-Ci/e-i*). In general, the Urartian stress is
reminiscent of the Proto-Classic-Armenian penultimate strong accent. It is similarly
movable and falls on the stem vowel of the nominative case of nouns and in the
event of oblique cases - on the ending. As a result, the post accent vowel in the
nominative case drops; for instance **sow'ro > sowr* (nom.), but **sowro'y(o) >*
sowroy (gen.).

II.3 The Phonological Processes

The following phonological processes are discerned in Urartian texts[26].

1. **Anaptyxis.** The attested alternations - *ze-el-be/ze-le/i-be, ni-ir-be/ni-ri/e-be,*
ta-ar-ma-/ta-ra-ma and others are most likely explained by peculiarities in the Urar-
tian cuneiform script and are apparently not related to actual phonological processes
(see 1.3 point 4). The presence or absence of the additional word-final *e* in the direct
forms of some Urartian words, perhaps, was also conditioned by the peculiarity of
the script and in both cases was pronounced similarly: apparently as *[ə]* or *[Ø]* (see
1.3 point 6). As to *e-ba-ni-ú-ke/e-ba-ni-ke, qi-ra/qi-ú-ra* and other alternations of
similar type, here, most likely, vowel anaptyxis or syncope has taken place.

2. **Syncope**. The following instances are seen:

a) Some verbal stems which have a final *d* or *t* before the plural subject suffix
-(i)t of a number of verbal forms, lose the above mentioned *d* or *t* and the successive
vowel: for example, *zat=u- < *zad=(i)t=u-, šidi=št=u- < *šidi=št=(i)t=u-.* These
examples also can be explained by the assimilation of *d* to *t* with the subsequent *t(i)t*
> t changing, or we can merely interpret as *t/d(i)t > t* changing.

b) When the verbal stem has a final *r* then the vowel *u* in the successive ending
-u=li=ie of the conditional mood is lost and we see the assimilation of *r* to *l* with
progressive fusion with it, for instance: *teli=ie < *tel=li=ie < *ter=u=li=ie, tuli=ie <*
*tul=li=ie < *tur=u=li=ie. Conversely, we have the example *ur=u=li=ie* instead of
the expected **uli=ie.*

c) Some stems ending with *-rš* have the variants without *š*, as *ḫarharš-/ḫarhar-,*
qapqarš-/qapqar-. This phenomenon can be presented also as fusion *rš[rs] > r[r/ř]*
(comp. Arm. **rs > rš/ř* phonetic changing, e.g. *t'oř- < t'orš- < *tor-s, t'ař-am- < t'arš-*

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[26] See G.Melikishvili, 1964:22-28; G.Wilhelm, 2004:123-124, etc.

am- < **tr̥s, mar̃-el* < *ma(r)š-em-* 'to thrash wheat' (perhaps, also *mars-em* 'to digest') < **mr̥-s*) and so on.

d) There are some attestations of loss of the (semi)vowel *u[u/o/w]* in the genitive-dative plural ending *-aue.*

e) The *qi-ra/qi-ú-ra, ebaniuke/ebanike* and some analogous alternations can also be recognized as vowel syncope (see also above point 1).

f) G.Wilhelm supposes (2004:123) that when the word roots end with *-lV-,* *-rV-* and *-nV-,* then the vowel *V* is syncopated before *-ne-/-na-* suffix of plurality. He considers that the *n* of that suffix undergoes progressive assimilation and fusion with the *l/r/n* consonants of those roots, as for example: *ebane=le* < **eban=ne=le* < **ebani=ne=le, erele=le* < **erel=le=le* < **erele=ne=le,* etc. I think this explanation is questionable for several reasons (see in detail V.2.2 point 1).

3. **Vowel change.** The Urartian stem-final *i* in declension before the genitive marker *i* and the suffix of appurtenance *-ḫe/ḫi-* is as a rule transformed into *e* (V.2.5 point 2). But it is kept before relational suffixes *-ne-/-na-* (see V.2.11 point 2). See also II.2.

4. **Vowel alternation.** In the Urartian texts there are several words where vowel alternation occurs, for instance: *barzu/i=dibi=du(ne), eguruḫu/e,* etc. In Urartian the *u/w* alternation is also present, for example, *eue/ewe,* ^d*Uarubaine/*^d*Warubaine* and so forth. This is conditioned by the characteristics of the script and, apparently, in both cases was sounded *[w].*

5. **Assimilation:** As an example of assimilation, G.Wilhelm (2004:124) mentions the verbs formed with *-Všt-* suffix, in which the vowel *V* is assimilated to the preceding vowel; for example, *am=ašt-, ul=ušt-, šid=išt-,* etc.[27]. For the other possible cases of assimilation see above, points 2a-b and 2f).

6. **Instances of historical phonological changes**. Several instances of alternation in the Urartian inscriptions are attested only in specific time periods. In other words, this or that phonological change occurs only in the inscriptions of a certain period. The following changes belong to that type:

a) In the Urartian words of *[i]-* and *[o]-*declensions, the alternation *i/g* is detected between the dative and directive endings and participle suffixes *-Vie/-Vge.* This has a clearly time-specific character (variants with *g* occur only after Argišti I). Judging by the Armenian evidence, Urartian dative *-ge* ending has to be read *[ǰ]* - Arm. *ǰ,* which might derive from **y* through **y > ǰ* development peculiar to Armenian. Hence here, it appears, we can register an incidence of phonological change with its reflection in the script, although the possibility that it is a consequence of an orthographic modification should not be ruled out. Thus, we can assume that in the

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[27] If in Urartian texts the frequently met word collocation *bura ašt=u=be* should in fact be read *bura-št=u=be,* as the verb formed by the suffix *-a=št-* (see III.2.4 point 4), then here we have a deviation from the above mentioned rule.

above mentioned positions *i* reflects the phoneme *[j]* or *g* - *[y]* (see also 1.3 point 9, V.2.6 point 2b, V.2.8 point 2 and VI.3. point 2).

b) The *-a(i)di.* plural endings of the directive case occur at a later time, in place of the *-(n)a(i)edi* (*<*(n)a+edi*) endings in the early Urartian texts. This may be regarded as both the vowel drop (syncopation) and simplification of the triphthong (phoneme cluster) *-aie* into the diphthong (see also V.2.8 point 2b).

c) If we suppose that the *-(n)aš-* component of the *-(n)ašte* (*<*(n)aš+edi*) plural ending of the directive case is the ancient form of the Urartian marker of plurality *-(n)a-*, as several scholars assume (see V.2.8 point 2), then this can be the outcome of *aš[as]> a* phonetic development[28] (see V.2.8 point 2d). Therefore, for Urartian we can also suppose the *[sd]> [st/sṭ]* changing: devoicing of voiced consonant after *[s]*.

7. **Metathesis.** Some scholars see metathesis in suffixes indicating location *-ḫali* and *-alḫe/-ulḫe* and in the attested word ^{GIŠ}*ú-du-li* 'vine'. The latter they identify with ^{GIŠ}*ul-de* - which is synonymous. (G.Melikishvili, 1964:27). But the presence of the *-ulḫe* option in the first example is unconvincing, and in the second one ^{GIŠ}*ú-du-li/e-* must obviously be read as ^{GIŠ.Ú}*du-li/e-* (comp. Arm. *toli* 'a sort of wild grape', see note 55, 56).

8. **Other cases of phonetic change.** The Urartian texts involve some unique examples of other phonetic changes, such as *andani/adani*, etc. I will not analyze these examples here.

II.4 Reconstruction Of The Urartian Phonemic System Based On Armenian Language Data

II.4.1 Method Of Reconstruction (Verification)

As was mentioned previously, for the reconstruction of the phonetic system of cuneiform scripts their comparison with closely connected and/or cognate languages (living or well known) is very important. The phonological examination of place names attested in different languages is no less important. Thus, for the clarification of Urartian phonetics, the phonological comparison of these two languages (states of languages) becomes especially important[29]. Particularly, if we take into account the fact that we already have substantial valuable data to elucidate the commonalities of Urartian and Armenian languages. In my efforts to achieve this goal, I have taken the following steps:

1. First, a comparative list of the Urartian words (common nouns, place names) and some morphemes which have the most reliable parallel forms in Armenian, and their variants in Armenian (in case of some place names - also Greek options) is

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[28] Compare with Arm. **s > h/-* development.
[29] For comparison of Urartian and Indo-European protolanguage see G.Jahukyan, 1963; 1967; T.Gamkrelidze, … , 1984. G.Ghapantsyan, 1940:28-30, etc.

drawn up (see Appendix II). In the list, comparisons between the vowels, and also *m, n* sonorants are not made. The classification is made according to the attested phonemes of the Armenian parallel forms.

2. To avoid confusion Urartian words are given in syllabic writing classified according to individual cuneiform signs. Moreover, for the same reason, each sign is only represented by a single (its basic syllabic) value (exceptions and alternation cases are mentioned separately).

3. The reconstructed Proto-Indo-European forms of Armenian indigenous words are also given.

4. The results are compared. A detailed explanation of the comparison of each phonetic set is given. (see below).

II.4.2 Reconstruction (Verification) Results

1. **Vowels.** Arm. *a* in the Urartian texts is always represented by *a*, in some words by - *e*[30] (e.g. *euri- [ewri-]* - Arm. *awri-ord, ṣerabae [ṣerawa(ə)]* - Arm. *caraw, alzena/i [arjena/i]* - Arm. *arjan, n=ebsi/e=ṭ-[n=ewši/e=ṭ-]* - Arm. *y-awš-at-em, aleke [aylek]* - Arm. *aylak-, zeld- [ǰerd-]* - Arm. *ǰard-em* and so on). Arm. *e* and *i* respectively are represented by *e* and *i*, and *o* and *ow* by *u*. The Armenian long vowel *ē* (old **ey* diphthong) is attested in Urartian texts as *ei [ey]* diphthong; for, example *keid=an-, ki/ed=an-* - Arm. *kēt-, ke/it-* < **geid-, aueiṭi=ne* - Arm. *awēti-s/k′* < **aueid*. In the phonetic clusters mentioned in (II.1 point 3.3), the Armenian unwritten weak vowel (schwa) *ə*, is attested in Urartian by different vowel signs, such as: *man-* - Arm. *mn-am* < **men-ā, tan-* - Arm. *dn-em* < **dhē-ne, šuk=ure* - Arm. *(h)sk-oł*. There are no attestations of the Arm. word-initial *ə* reflected in the Urartian script. According to several scholars, in Urartian the word-final *e* was pronounced as *[ə]*.

In Urartian script there is one attestation for *ie* and one for *e* which correspond to the Arm. *i*: these are attested in the - pronoun *ieše [yes]* - Arm. *es* and verb *der-* Arm. *dir* (in Armenian the form *der* is also present) respectively.

Arm.	Urart.	Arm.	Urart.
a	a, e [əe(?)]	o	u
e	e	ow (=u)	u
i	i	ə (not written)	a, e/i, u, Ø
ē (< *ey)	ei	Ø	-e [ə/Ø] (in word-final pos.(?))
		ə (word-initial)	(?),

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[30] G.Jahukyan (1987:432) explains this by the probable presence of open *e* [æ] in Urartian.

2. **Consonants.** The correspondence of the Urartian and Armenian consonant phonemes received from the comparison of Armenian and Urartian parallel words and certain morphemes, are briefly represented in the Table 3. See explanation below.

2.1 **Stops.** If we bear in mind that for the cuneiform script system (1) *da=ṭa, di/e=ṭi/e, di/ė=ṭi/ė ad=aṭ, du=ṭù,* and for *ṭu* in Armenian we have only forms with *t,* and (2) in the Urartian texts the alternations *gu/qu, ka/qa, du/ṭu, tú/ṭu,* are present, then for stops the following regularities and exceptions are observed.

2.1.1 **Observed regularities.**

a) In place of Urartian voiced *b, d, g* we have Arm. voiced *b, d, g* respectively, also for *b* - voiceless *p.* The latter is perhaps conditioned by the lack of the labial emphatic sign in the cuneiform system, which is substituted by the voiced *b.*

b) The Urartian voiceless *p, t, k* correspond to the Armenian voiceless *p, t, k* and aspirates *p′, t′, k′* respectively. It is noteworthy, that the consonant cluster *št* (in script) always corresponds to the Armenian *st.* The words and morphemes containing this cluster, as a rule, are indigenous Armenian forms, for which we have PIE. **st/zd* > Arm. *st* - Urart. *št* (in script)).

c) Armenian voiceless *t* and *k* match the Urartian voiceless *ṭ* and *q* (Akk. emphatic phonemes) respectively.

As a result we can reconstruct the following main correspondences of stops.

Urartian	d	ṭ	t	g	q	k	b	b	p
Arme-nian	d	t	t′	g	k	k′	b	p	p′
	t′(?)		t			k			p
			d						

2.1.2 **Detected deviations.**

a) For voiced *b,* in addition to the above cases, is also confirmed one dubious attestation of the aspirate *p′* (*e/ir-bu/i-* 'to capture, to seize' - Arm. *ałp′-owc′-an-em* 'to weaken, to entrap' < **alph*).

b) In the following words, in place of Urart. voiced *d,* in addition to Arm. *d,* the aspirate *t′* is present: *ul-de* 'vine' - Arm. *ort′* 'vine' < **orth, qu-du-la-ni/é* 'temple(?)' - Arm. *kot′oł* 'obelisk, monument'. But for the Urart. voiceless *t,* apart from the Arm. *t′* and *t,* the voiced *d* is also present. In the indigenous words, in all cases, this *d* derives from PIE. **dh,* contrary to that which, in the Urartian texts is represented by *d,* and is derived from **t* (also **dh*) and is preceded by **r* (**rt* or **rdh*). It cannot be ruled out that these deviations observed for Armenian frontlingual stops manifest the fact that the Armenian *d* originating from different places (phonemes) were differentiated during the Urartian period. This also applies to the Armenian *t′.*

2.2 **Fricatives.** In the Urartian texts the Armenian labial voiced *v* is represented by *b,* frontlingual voiced *z* - by *z,* backlingual *ł* two ways: by *l* and *r.* To the Arm.

frontlingual voiceless *s* and *š* correspond Urart. *š* and *s* respectively: for example, *sulu=št=i=be* 'to prostrate' - Arm. *soł-am* (*soł-ow-mn*) 'to creep, to crawl on the belly, to wriggle' where in place of Arm. *s* we have Urart. *s* in lieu of the regularly occurring *š*. The Arm. backlingual *x* is represented by Urart. *ḫ*, and the glottal *h* - by *ḫ* or *Ø*.

2.3 **Semi-fricatives (affricates)**. In general, in the Urartian texts the Armenian affricates are represented by *z, ṣ, s* and *g*. The Armenian voiced *j* and aspirate *c'* are rendered by the same Urart. signs - *z* and *s*, and the Arm. *ǰ* - by *z* and *g*. The Armenian aspirate *č'*, perhaps, is represented by *g* and/or *s* (attested in these doubtful examples: Urart. *-V=ge [-V=č(?)]* – Arm. participle/adjective forming suffixes *-ič', -owč', -a(n)č', -(n)č'*, Urart. *suui(=t)-* 'to move, to throw' - Arm. *č'ow-em, č'og-ay* 'to move, to set out, to go away, to leave, etc.'). Arm. voiceless *c* is rendered by Urart. *ṣ*. There are no attestations for Arm. voiceless *č*, probably the *ṣ* and/or *g* were used. For affricates this general picture is reconstructed:

Urartian	**z**	**ṣ**	**s**	
	j	c	j	
g	ǰ	*č (?)	č' (?)	Arm.
	c'		c'	

1.1 **Sonorants**

a) The Armenian semivowel sonorant (glide) *y* in the Urartian texts is rendered in several ways: (1) in word-initial position, including the compounds, matches *i/i̯*, for example: *i̯ar=ani/e* - Arm. **y-ar-an*, *an=i̯=ardu=ne* - Arm. *an+y-ard(-ar)-own*, (2) in post-vowel position it corresponds to *i*, which is often not written, as, for example, *-ka(i)* - Arm. *-kay*, *a(i)šei/a(i)nei* - Arm. *ays/ayn*, (3) it is not represented in the script (matches *Ø*), as *zani-* - Arm. *jayn-em*, *ale/u-* - Arm. *ayl/ł, -e/o* (see also I.3 point 7), and 4) if in certain incidences attested in the Urartian texts we have the *[y]* phoneme hidden in the i/g alternation, then we have also the Arm. *ǰ* (*< *y*) - Urart. *i/g* correspondence (see also I.3 point 9; V.2.6 point 2b, V.2.8 point 2, VI.3 point 2).

b) The Armenian semivowel sonorant (glide) *w* in Urartian texts is repre-sented by: 1) *b* (*abeli-* - Arm. *(y-)awel-owm*, *ṣerabae* - Arm. *caraw*), 2) *u/w* (*eue/ewe* - Arm. *ew*, *euri-* - Arm. *awri-ord*), and 3) *Ø* also frequently comes after *u*.

c) For the Armenian sonorants *m, n, l* and *ṙ* in the Urartian texts we have *m, n, l* and *r*, while *r* (also *ł*) are dually expressed by *l* and *r* (see above, point 2.2). These and several other facts (see II.1 point 3.2c) allow us to conclude that Urartian has differentiated two each of r and *l* (hard and soft) as has Armenian (see also II.1 point 3.2c).

Table 3 *Correspondence of Armenian and Urartian consonant phonemes*

Place of articulation / Manner of articulation		Labial	Frontlingual (Dental-Alveolar)	Mediolingual (Palatal)	Backlingual (Velar)	Glottal
Stops	voiced	**b** = b	**d** = d, t		**g** = g, g/q(1)	
	voiceless	**p** = b, p	**t** = d/ṭ, t		**k** = k, q	
	aspirates	**p′** = p, b (1(?))	**t′** = t, d (2)		**k′**= k, q (1(?))	
Fricatives	voiced	**v** = b	**z** = z **ž** = (?)			
	voiceless		**s** = š, s (1) **š** = s		**x** = ḫ	**h** = ḫ, Ø
Affricates	voiced		**j** = z, s **ǰ** = z, g, g/i (?)			
	voiceless		**c** = ṣ **č** = (?)			
	voiceless aspirates		**c′** = z, s **č′** = s (1(?)), g/i (1(?))			
Sonorants	nasal	**m** = m	**n** = n			
	liquids		**r** = l, r **ṙ** = r	**l** = l	**ł** = l, r	
	semi-vowel (glides)	**w**= u/w, b, Ø		**y** = i/i̯, g(?) ,Ø		

Thus for Armenian sonorants we reconstruct this picture:

Arm.	Urartian	Arm.	Urartian
m	m	r̄	r
n	n	r	r, l
w	u/w, b, Ø	l	l
y	i/i̯, g (?), Ø	ł[31]	r, l

1. **Conclusion.** As the comparison of the Armenian and Urartian parallel forms demonstrates, the same Urartian signs often represent two or more Armenian phonemes. Similarly, each Armenian phoneme is rendered by one or two (for semivowels - by three) Urartian signs (see Table 3). This phenomenon can be explained by the following main factors.

a) The alternations *p/b, g/k/q, d/t/ṭ, s/š; s/z/ṣ* and others, peculiar to cuneiform script, in many cases make the exact transliteration of the Urartian forms impossible which, in its turn, distorts the comparative picture presented in Table 3.

b) The lack of specific signs in the cuneiform script for considerable numbers of Armenian phonemes. As a result two or more Armenian phonemes are represented by one sign in Urartian. For instance, for Urart. *z* we have Arm. *z, ǰ, j,* perhaps also – *cʻ*; and for *g* - *g, ǰ,* perhaps also - *y, čʻ* and *č* (see Table 3).

II.4.3 Phonological Changes In The Indigenous Armenian Words Based On Urartian Language Data

The polyvalency of the cuneiform script, and the scarce and fragmented texts distort the general picture of the phonemic collation of Urartian and Armenian. Therefore it is impossible to fix many potential phonetic changes. Nevertheless for the Armenian indigenous words, morphemes and their Urartian parallels, the ensuing phonetic differences and the presence or absence of phonological changes (specific to Armenian) are observed. These are partly clarified by the collation of Proto-Indo-European prototypes of the Armenian indigenous roots and morphemes.

1. **Vowels.**

1.1 For the Arm. *eł* in Urartian we have *il*, as, for example, Ur. *pile* [pił/p̂ił] - Arm. *peł-em* < *bel* or *heł-em* < *peł*[32]: (the Armenian phonetic sequence *eł* often derives from *ił*[33]).

1.2 The presence of another vowel in place of the thematic vowel: **kʹo-ro >* *sowro-y* = Urart. *šure/i* [sur(i)] (probably we have PIE. **-ro/ri* suffix alternation), **or-th-o > ortʻo-y* (= Urart. *ulte* [ort]), **gʹṛ-so > caṙo-y* (=Urart. *ṣare* [ṣaṙ]), etc.

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[31] In present Armenian ł developed to fricative sound.
[32] If of course we do not connect Ur. *pile* with the Armenian verb *br-em* 'to dig, to hollow' (< *bir* < *bēr*).
[33] About this see, for instance, G.Ghapantsyan, 1961:66:

1.3 *-be* [-w] goes at the end of several Arm. words of *i-* and *i-a*-declensions instead of the anticipated *i* (*qar=be* [qar=w] - Arm. *k'ar, -i, zel=be* [ċeł=w] - Arm. *c'eł, -i, n=ir=be* [n=ir=w] - Arm. *ir, i-a* (?)).

1.4 For the Armenian diphthong *ea*, in Urartian we have *ia*, and for *oy* preceded by a consonant - *iw* or *ew* (uncertain). According to that, it must be assumed that the Arm. **ia* > *ea* and **eu* > **ew/iw* > *oy* developments had not yet occurred.

2. **Consonants.** The presence of the following phonetic changes or their absence in the Armenian of that period is evident from the available Urartian material:

2.1 For the Proto-Indo-European **g´, *g´h* and **k´* in Urartian we have *ș, z/s* and *š*, and in Armenian - *c* (*s* in the personal pronoun *es* 'I'), *j* (in some cases - *z*) and *s* respectively. For **gᵘ, *gᵘh* and **kᵘ*, in Urartian, *k, g, Ø/ḫ* are present, and in Armenian - *k, ǰ* and *Ø/h*.

PIE.	Urartian	Armenian
*serg´	- erși- [erși-]	- z-erc.
*eg´	- ieše [yes]	- es.
*g´ṛ-so	- șare [șaṙ]	- caṙ, -oy.
*ṛg´ipi-i̯o	- arșibe [arșiw]	- arcowi (-ciw).
*g´en-os	- șinu- [șino-]	- cin -i. old *cino.
*phəlg´-niā	- parșane [ṗayłșan]	- *p'ayłcan > p'aycałn, -an.
*g´huьn-i̯i	- zani- [jayni-]	- jayn, -i.
*g´hō	- z- [z-/j-]	- z- or j-.
*bhṛg´h-	- barzu/i- [barju/i-]	- barj. -ow/i.
*g´hu-u̯ (?)	- suui- [juw-]	- *jowg- (?) > jg-em.
*ə(n)k´	- (ḫ)aš- [(h)as-]	- h-as-an-em.
*k´er	- šer- [seṙ]	- seṙ, -i.
*k´er-no	- šere [seṙ]	- seṙ-n.
*k´o-ro	- šuri/e [sur(i)]	- sowr, -oy.
*k´o, *k´e	- šu-, ša- [i=so-, i=sa-]	- so-yn, sa-, etc.
*(e)gᵘa-	- ka-	- ka-m.
*gᵘhono	- gunu- [ǰuno-]	- -ǰown-ǰ, ǰn-em.
*kᵘ-ro	- ule [or]	- or, -oy, owr-iš (?).
*kᵘur	- ure [ur]	- owr.
*kᵘi	- ḫi=ne [hi=n]	- (h)i-n-č', z-i, … .
*i̯ēkᵘṛ-t	- zielde [ǰierd]	- *ǰiard > leard.

If the verb *ag-* 'to bring, to lead' as attested in the Van inscriptions has connections with the Armenian verb *ac-em* < **ag´* 'to carry, to fetch, to bring; etc.', as some scholars usually point out[34], then here we have the only attested case of the Urartian *g* with the Armenian *c* (?). In all other cases the Proto-Indo-European **g´* is

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[34] See, for example, H.Acharyan, 1940, I:172, G.Jahukyan, 1988:139.

represented by the Urart. *ș*, and in Armenian - by *c*. For this reason the Urart. verb *ag-* is not mentioned in our list of parallel words.

2.2 Proto-Indo-European **bh* and **ph* in Urartian are represented by *b* and *p* (after *[ł]* - *b*), and correspond to the Arm. *b* (in the word *aweli* - *w*) and *p'* respectively. And **b* rendered by Urart. *p* - Arm. *p*. In the intervocalic or preconsonantal positions for PIE. **p* we have Urart. *w/u* - Arm. *w*.

PIE.	Urartian	Armenian
*bhr̥g´h-	- barzu/i- [barju/i-]	- barj, -ow/i.
*bher	- (-)ber- [(-)ber-]	- ber-em.
*bhā	- ba=u- [ba=w-]	- ba-n, ba-y.
*obhel	- abeli- [aweli-]	- aweli.
*phoro	- pulu- [ṗoro-]	- p'or, -oy.
*phəlg´-niā	- parșane [ṗayłșan]	- *p'ayłcan > p'aycałn, -an
*alph	- erb- [ełṗ-] (?)	- ałp'-owc'-an-em (?).
*sub	- up- [up-]	- (h)owp-.
*epi	- eue, ewe [ew]	- ew.
*r̥g´ipi-i̯o	- arșibe [arșiw]	- arcowi (-ciw), etc.

2.3 Against the Proto-Indo-European **dh* and **th* the Urart. *t* (after *[r]* - *d*), *d* - Arm. *d* and *t'* take place. For **d* and **t* we have Urart. *d(=ṭ)*, *t* (after *r* - *d*), and correspondingly - Arm. *t* and *t'* (*d* after *r*).

PIE.	Urartian	Armenian
*dhr̥-g´h-no	- tar=ane [daṙ=an]	- daṙ-n-am, darj-n.
*dhē-ne	- tan- [dən-]	- dn-em.
*dhē-r	- ter- [der-]	- dir (der).
*or-dh	- n=uld- [n=ord-]	- y-ord-em (y-/n- alt.).
*or-tho	- ulde [ort]	- ort', -oy.
*ar-ti/tu	- ardi/u- [ardi/u]	- ard, -ow/i.
*geid	- ke(i)d- [ke(i)ṭ-]	- ket/kēt.
*ped	- bed- [ṗeṭ-]	- h-et, et, y-et.
*dud	- dudi [ṭuṭi-]	- towt, -n.
*dei, *di	- di=ae [ṭi=a]	- tē-, ti-.
*i̯ēkᵘr̥-t	- zielde [ǰierd]	- *ǰiard > leard.
*tēu,*tou	- ti(a)- [ti(a/w)-]	- t'iw asel, t'ow-em.
*-eu-ti	- -ibte/i- [-iwt(i-)]	- *-iwt'(i) > -oyt', -i.
*tol-	- tur- [toł-]	- t'oył, t'oł-owm, etc.

There are no reliable attestations for the PIE. **t* > Arm. *y/w/-* development in the Urartian texts, perhaps, except Hurr./Urart. *did-* 'to distribute, to allot' - Arm. *ti* 'age; period, time' < **dī-ti* (expanded form from **dī, *dāi, də* 'to distribute, to allot; to divide into pieces').

2.4 For the Proto-Indo-European *gh* and *kh*, in Urartian we have *g* and *ḫ*, in Armenian - *g* and *x*. For *g* and *pk*, in Urartian come *k* (after *[r]* - *g*) and *k/q*, in Armenian, respectively - *k* (*g* after *r*) and *k/k'*.

PIE.	Urartian	Armenian
*khal (?)	- ḫarare [xałał]	- xałał.
*geid	- ke(i)d- [ke(i)ṭ-]	- ket/kēt.
*gu-r	- kure [kur]	- kr-ownk < *kowr-ownk.
*gol	- kurune [kołun]	- koł(n), -own-s.
*kar	- q/kar=be [qar=w]	- k'ar, -i.
*kəl-	- kar- [qał-]	- k'ał-em (?).
*-kō/o-n	- -ku/ane [-ku/an]	- -k(n) < -kow/an < *-k'o/ōn (?).
*ark	- alg=ane [arg=an]	- arg-el-k', dial. bk'-arg.

2.5 There are also evidences of the following phonetic developments: PIE. *s > Urart. (-) > Arm. (-), PIE. *sk(*sk´) > Urart. *z/s[ċ]* > Arm. *c'*, PIE. *i̯ > Urart. *z[j]* > Arm. *ǰ*, PIE. *ki̯ > Urart. *s[č]* > Arm. *č'* (?).

PIE.	Urartian	Armenian
* i̯ēkᵘr̥-t	- zielde [ǰierd]	- *ǰiard > leard.
* serg´	- erṣi- [erṣi-]	- z-erc.
* sol(u)-i̯o (?)	- ulgu- [ołǰo-]	- ołǰ, -oy.
* sē-mn̥	- imene [imen]	- himn, -an (gen. himan).
* skel₁	- zel=be [ċeł=w]	- c'eł, -i.
* epi	- eue, ewe [ew]	- ew.
* r̥g´ipi-i̯o	- arṣibe [arṣiw]	- arcowi (-ciw).
* ki̯-u, *ki̯-ou̯	- suui- [ču/owi-]	- č'ow-em, aor. č'og-ay (?) etc.

2.6 If all the above mentioned phonological changes intrinsic to Armenian had already occurred during the Van Kingdom period and are reflected with the altered forms in Urartian, then at that time *u̯ > g* and *p > h/-* phonetic changes had not yet taken place. Thus, instead of the anticipated *ḫ/- [h/-]* for *p* we have Urartian *p/b* (in this book it is conditionally transcribed by *p̂*), and for *u̯* we have *w/u,* instead of *g [g]*.

PIE.	Urartian	Armenian
* pors, *per-	- pare, par- [p̂aṙ(-)]	- aṙ, heṙ-an-am.
* ped	- bed- [p̂eṭ-]	- h-et, et, y-et.
* u̯əl, *u̯ēl	- wal=d- [wəl=ṭ-]	- gal-, gl(-t)-, gil.
* u̯ьl	- ware [wał]	- gał.
* g´hu-u̯ (?)	- suui- [juwi-]	- *jowg- (?) > jg-em, etc.

In addition to the above words, as a manifestation of the phonetic developments PIE. *$\underset{\sim}{*u}$ > Urart. *u/w* > Arm. *g*, we can also mention the following place names: Urart. *Uelekuni* - Arm. *Gełak'owni*, Urart. *Waṣa* - Arm. *Ara-gac, -ay*[35].

2.7 In the later Van inscriptions the presence of *i* instead of *g* in the case endings *-i(-i)-e, -u(-i)-e, -i(-i)-e-de, -u(-u)-e-de*[36] and *-V(-i)-e, -V(-i)-u-* suffixes, in essence reflect *$\underset{\sim}{*i}$ > *ǰ* development specific to Armenian. On the other hand, we have the *$\underset{\sim}{*i}\bar{e}k^u_s$ṛ-t > zielde* [ǰierd] > *$\underset{\sim}{*}$ǰiard* > *leard* development, in which the PIE. *$\underset{\sim}{*i}$ is reflected in Urartian with the *[ǰ]* (*z.* in script).

2.8 The existence of Arm. *ṙ, r* and *ɫ* in place of Urart. *r*, and the presence of Arm. *l, r, ɫ* in place of Urart. *l* testify that at that time the Arm. *l* had already been differentiated from *ɫ*, as had *r* - from *ṙ* (see II.1 point 3.2c).

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[35] The territory of the *Waṣa* region/tribe coincides with the historical *"Aragatsotn"* (N.Harouthiounyan, 1985:13).

[36] The *-i/u=(i/g)e* is the ending of the dative case, with which, by the addition of the *ede* adverb (postposition), the Urartian so-called directive case is formed.

IV. MORPHOLOGY

IV.1 General Information

1. **Word formation.** The word roots in Urartian are basically monosyllabic. The stem consists of a root or root plus root-complement(s) (suffix(es), determinative(s)) which can be attached before (prefixes) or after (suffixes, determinatives) the root/stem. In Urartian infixes have not been attested (about affixes see in detail below - IV.3 and IV.4, inflexional suffixes - see also V.2 and VI.2).

The nominal stems in Urartian as a rule are thematic: ending in a vowel (at least, in script). The *i*-stems prevail among them. In script, the direct forms of many words have the word-final *e*: syllabically, *-Ci/e(-e), -Ce(-e),* but in derivation or declension *i* appears instead of *e*, as, for instance: *ulguše - ulguši=ane, alsuiše - alsuiši=nine, gunuše - gunuši=ie, uštipte - uštipti=ne, ᵐMinuaḫe - ᵐMinuaḫi=nele* and so forth[228]. This phenomenon is perhaps conditioned by the weakening or dropping of the word-final *i* vowel in the post accent position (see II.2). Here the *e*, apparently, should be pronounced [ə] or [Ø][229]. As for the *e*-stem words, then for the present we can only speak with certainty about the words *erele* 'king' (erg. - *erele=še), ule* 'other' (erg. - *ule=še)* and *ale/u* 'whoever, some (one)', (cf. with the variant *ale/u=ke* formed by the addition of the suffix *-ke* to the same root *ale/u.* see V.3 point 6)[230]. In Urartian, on the whole, proper names end in *a*, as, for instance: *ᵈAdia, ᵈAdaruta, ᵈAĭa, ᵐErimena, ᵐMinua, ᴷᵁᴿBaršua, ᴷᵁᴿEria, ᵐKatarza* and so forth. There are not many words with *u*-stems (*u* may be pronounced either [u] or [o]).

2. **Compounding and Reduplication.** Reduplication cases in Urartian are infrequent. The following words are attested: *qarqara=ne* 'armor' (cf. Arm. *karkaṙ* 'heap of stones'), *ḫarḫar(š)-* 'to shatter, to ruin' (Arm. *xarxar-em* 'to shake, to shatter, to demolish, to ruin, to destroy'), *ḫilḫili* '(?)', *murmuri=aḫe* '(?)'. Compounding cases are scarce. The words *ari(=)beri-* 'to come up, to come in between', perhaps also - *barzu/idibidu(=ne)* can be viewed as such (see III.2.3 points 3,11). The latter is most probably formed by the roots *barzu/i* (cf. Arm. *barj, -ow* 'high, elevated; sublime, great' (?)) and *dibidu* or *dibi* (but in the Urartian texts neither *dibidu* nor *dibi* are separately attested). At present it is difficult to come to any decision concerning qapqar*(š)- < qap(=)qar(š)-* (?) 'to seize (?), to capture (?)'

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[228] All words formed with the suffixes - *-ḫe, -ibte* (*-ebte), -(u)se, -še* belong to them. In declension or double suffixation the above cited suffixes appear in the form *-ḫi-, -ebti-, -(u)si-, -ši-* .

[229] In scholarly literature *[ə]* is normally preferred; our suggestion is *[Ø]*.

[230] In Urartian the direct forms of words in script often receive a final additional *-e,* the nature of which is uncertain (see V.2.3 point 2).

(cf. Arm. *kap‛-owc‛-an-em* 'to cover, to shut, to close'), *kulu=ar/ubši-* < *kulu=ar/ub(=)ši-* (?) 'to leave (?), to throw over (?), to steal (?)' (cf. *kor-ows-an-em* 'to lose; to miss, to mislay, to be without, etc.', *kor-nč‛-im* 'to be lost, to disappear', see III.2.3 point 32) and other words of the same type. In the second component of the above-mentioned words, one can see both the independent word-roots and the suffixes. The latter (suffixes) may be compound. Some affixes and postpositions in Urartian can be also viewed as second roots of words. They have independent lexical values, and some of them, also - use[231].

IV.2 Derivation

Here, the Urartian affixes and the relation they have with Armenian are dealt with in detail. Moreover, not only will those affixes which have parallels in Armenian be discussed, but all Urartian affixes in general[232], with the exception of some suffixes specific to only proper names. Verbal and nominal affixes are introduced one by one.

The table below briefly represents all the affixes attested in the Urartian texts thus far and their Armenian parallel forms.

Table 4 *Urartian affixes and their parallel forms in Armenian*

Affixes			Significance
In Urartian		In Armenian	
Nominal affixes			
Prefixes			
z(a)-	[z(ə)-]	z-, ǰ- < *g´hō	"augmentative prefix"
h-	[h-]	h-	"prefix"
i̦-	[y-]	i/y- < *en	"prefix/preposition"
an-	[an-]	an- < *n̥	"negative prefix"
ṭ -	[ṭ-]	t- < *dus	"negative prefix"
n(i)-	[n(i)-]	n(i)- < *ni, *nei 'low'	"prefix"
up-	[up-]	h-owp < *sub 'under'	pr./a. 'near, close, by'
Suffixes			
-a=ni/e	[-a=n(i)]	-an	forms nouns and adjectives
-i=ne	[-i=n]	-in < *-e-ni/o	forms nouns, adjectives, etc.

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[231] For example, the prefix *up-* (Arm. *howp(-)* a. 'near, close', pr. 'near, close to, by') in the words *up=ardu-, ṭ=up=ardu-* (see III.2.3 point 4.4-4.5), and the postposition *-kai [-kay]* (cf. the Arm. compound words with *-kay* component, see in detail VII.2), etc. can be viewed as just such cases.

[232] About Urartian suffixes see G.Melikishvili, 1960:51-52; 1964:28-30; I.Diakonoff, 1971:58-87, 139-147; M.Khachikyan, 1985:57-69; G.Wilhelm, 2004:119-137; etc.

Affixes		Significance
In Urartian	In Armenian	
-ne [-n]	-n < *-ni/o, *-en	forms nouns (in Arm. often is not realized)
-(i)a=ne [-(i)a=n] -ne (?) [-n]	-(e)an -n (?)	collective suffixes - " -
-(u=)aṣe [-(u=)aṣ]	-(ow)ac < v. ac-em (?) < *ag´-	forms nouns from the verbal stems
-išḫe, -išḫi- [-isx, -isxi-]	-isx	forms nouns
-ibte, -ibti- [-iwt, -iwti-]	-oytʹ, -i < *-eu-ti	forms abstract nouns
-urda/i [-orda/i]	-ord, i-a < *dhro (?)	forms nouns with the meaning of a person
-use, -usi- [-oċ, -oċi-]	-ocʹ, i-a < *-sk´(sk)	forms nouns with the meaning of location, place; instrument/implement; etc.
-(v=)ze/zi- [-(V=)ċ/ċi-]	- cʹ(i) (?) < *-sk´(sk)	forms nouns
-ka(=ne) [-ka(=n)] -ku=ne [-ku=n]	-k(n), -kan < *-kō-n -k(n), -kown < *ko-n	forms nouns, refers to person, in Armenian also gives the noun diminutive meaning
-(u=)mene [-(u=)men]	-(ow)mn, -man, -mown < *-men	forms action nouns
-še, -ši- [-s, -si-]	-kʹ (?) < *-es/-*os (?)	In Urart. forms abstract nouns, also has collective meaning, in Arm. the marker of pl. nominative, also forms abstract nouns
-šine, -šini- [-sin, -sini-]	-kʹin (?), -kʹean (?)	- " -
-e=le [-e=r]	-er, -(n)ear, -or(e)ay	in Urartian the marker of pl. nominative, Arm. collective suffix (in Modern Arm. *-er* is pl. nominative marker)
-ḫe, -ḫi- [-h, -hi-]	-i (?) < *-hi < *-sio (?)	forms adjectives of appurtence (derives from the marker of genitive (?))
-ḫine, -ḫini- [-hin, -hini-]	-ēn (?), -in (?)	adverbial suffix (?)
-(u=)tu=ḫ(i=n)e	-	forms abstract nouns (?)
-ḫali/e (?)	-	refer to the place from which something/someone is
-a=lḫe, -u=lḫe	-	
Verbal nouns, participles		
-ure, -aure [-oł, -awł]	-oł, < * -o-lo/i, -awł < *-a-tl (?)	Urart. participle forming suffix, in Arm. forms subjective participle ('quasi-participial')
-u [-u]	-ow < *-ues (?)	Urart. participle forming suffix(?), in Arm. forms verbal nouns and verbal adjectives

Affixes		Significance
In Urartian	In Armenian	
-u(=ne) [-u(=n)]	-ow(n) < *-o/u-no/i	forms verbal adjectives, participles ('quasi-participial')
-V=i/ge [-V=y/ǰ (>č̣?)(ə)]	-a(n)č′ (?), -(n)č′ (?) -ič′ (?), -owč′ (?)	participle/adjective forming suffix, in Arm. also verbal suffix
Verbal suffixes		
-V=št- [-V=sṭ-]	-a/ow/i/e-st < *-V-st	Urart. verbal suffix, in Arm forms nouns from verbal stems
-(V)=d- [-(V=)ṭ-]	-at-, -ot -, -t- (?)	Urart. verbal suffix(es), Arm. frequen- tative verbal suffixes (?)
-an- [-an-]	-an-	verbal suffix
-nu- [-nu-]	-now- < *-nu-	verbal suffix
-ul- [-or- (?)]	-or- (?)	verbal suffix, in Arm. forms also nouns

As the table demonstrates, the affixes attested in the Van inscriptions, for the most part, have parallels in Armenian. Moreover, native Armenian affixes of Indo-European origin predominate. The Urartian affixes and their Armenian parallel forms are presented more thoroughly below.

IV.3 Nominal affixes

1. **Prefixes.** The scholars do not usually distinguish prefixes in Urartian, except for N.Harouthiounyan (2001:476), who considers the probability of the existence of prefix *z-,* indicating its resemblance with the Armenian prefix/preposition *z-*. But our analysis has led to the firm conviction that not only *z-*, which we certainly should connect to the Arm. *z-*, but also other prefixes, such as: *h-, i̯-, an-, n(i)-, ṭ-* and *up-*, are distinguished in Urartian and they all have parallels in Armenian. Let us present these prefixes one by one.

1.1 *z(a)- [z(ə)-]* - Arm. *z-, ǰ-* "augmentative prefix" *< *gʹʰō*. As already noted, N.Harouthiounyan considers the possible existence of such a prefix in Urartian, which he substantiates by the comparison of verbs present in the Van inscriptions: *aš(u/a)-* 'to drive away(?); to come(?), to enter(?), to arrive(?)'[233] - *zaš(u)-* 'id(?)' and *ašg(u)-* 'to seize, to capture' - *zašg(u)-* 'to destroy, to annihilate, to kill', which often appear in analogous contexts. As N.Harouthiounyan justifiably points out, the

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[233] N.Harouthiounyan (2001:476) suggests a similar translation for these words. In the newly discovered duplicate of the Topzawa bilingual inscription, found in Movana, the Urart. verb *aš=d- [as=ṭ-]* translates Akk. *erēbu* 'to enter, to come in, to invade, to return, to arrive, to come, etc.' (B.André-Salvini, M.Salvini, SMEA, 44/1, 2002:5-66). Cf. with the Arm. verbal stem *h-as-* (*has-n-em, has-an-em, has-owc′-an-em*, ets.), see III.2.3 point 6.1.

semantic closeness of verbs *aš-* and *zaš-* is particularly clearly seen in the comparison of the phrases '*suuidulube ašubi pare* ^{URU}X' and '*suuid[u…] zašube pare […]*'[234].

Obviously the same prefix exists also in the verb *zad(u)-* [zə=ṭ(u)-] 'to make': cf. *d(u)-* [ṭ(u)-] 'to make' (Arm. *et, tow, tow-r* 'to give, to offer; to make, to produce, to cause, etc.', see III.2.3 point 62.2). On the other hand, in some contexts the verb *zad/t-* may be analyzed as a form of the verb *aṭ/t-* 'to eat, to consume' (Arm. *h-at(-an)-em* 'to cut (off), to break; to carve; to divide, to separate, to consume, etc.') prefixed by *z-* (see III.2.3 point 7.4). For this reason in some cases it is difficult to define which verb in particular is behind *zad/t-*. Thus we can assert that in the following Urartian verbs, the prefix *z-* (Arm. *z-/j-*) can clearly be seen behind the initial *z-* .

Urart. verbal forms without [z-]		Urart. verbal forms with [z-]	
d(u)-	'to do, to make'	za=d(u)-	'to do, to create, to make'
ašg-	'to seize(?), to capture(?)'	z=ašg-	'to destroy, to kill'
aš-	'to come, to arrive, to enter', 'to bring', etc.	z=aš-	'to come, to arrive', 'to lead', etc.

1.2 *ḫ-[h-]* - Arm. *h-*. It occurs in the verbs *ḫ=aṭ-* [h=aṭ-][235] 'to consume (?), to eat(?)' - attested only once and *ḫ=aš-* [h=as-] 'to hear, to be informed'- attested repeatedly. The first corresponds with the Arm. verb *hat(-an)-em* 'to cut (off), to break; to carve; to divide, to separate, to consume, etc.' and the second one, with *has(-an)-em* 'to arrive at, to attain, to reach, to get, to understand; dial. to hear; etc.'[236].

1.3 *i̯- [y-]* - Arm. *i/y-* < **en*. It appears once in the word *an=i=ardu(=ne)* [an=y=ardu(=n)] 'guilty, unjust'. It is formed with the negative suffix *an-* (Arm. *an-*) and *i̯=ardu* [y=ardu] (Arm. *y-ard, -ow)* stem which, in its turn, consists of word-root *ardu* (Arm. *ard, -ow*) 'form, order, shape, etc.' and prefix *y-* (Arm. *y-*). If in the Urart. word *i̯arane* [y=ar=an] 'pedestal, socle' or 'a building adjacent to the sanctuary' it is possible to distinguish the Arm. word *yar* 'adjacent, next, attached' with Urart. suffix *-an* (Arm. *-an*) (about this suffix see IV.3 point 2.13), then in this word we will have one more attestation of *y-* prefix use.

1.4 *an-* - Arm. *an-* < **n̥*. It is attested once, in the word *an=i=ardu(=ne)* 'guilty, unjust' (see the previous point). It is a widespread and active negative prefix in Armenian up to the present.

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[234] N.Harouthiounyan, 2001:254, note 14.

[235] See G.Melikishvili, 1960 (UKN), ins. 130₁₅. N.Harouthiounyan, deriving from the context, proposes reading za(?)-du(?)-[bi] instead of ḫa-ṭu-bi, [KUKN, 176₁₅ and note 21]. If we bear in mind that the root *aṭ-* (from which we have *h=aṭ-)* may lie at the base of the verb *z=ad-* [z=aṭ-], then their appearance in similar contexts and their close meanings is fully understandable and therefore there is no need to read ḫa-ṭu-bi as za(?)-du(?)-bi.

[236] More thoroughly about this see III.2.3 point 6.3.

1.5 **n(i)-** - Arm. *n(i)-* < *ni, *nei* 'low'. This suffix in Armenian is mainly alternated with *h-/y-*, for instance, *n-iwt'/h-iwt', n-ay-im/h-ay-em, n-stak/y-stak, n-e-c'-owk/y-e-n-owm*, but not always, as in the words *n-šoyl/šoł, n-st-em, ni-st, n-kowł*, etc. In Urartian we have the following words with this prefix: 1) *n=uld-* [n=ord-] 'to enlarge, to expand' - Arm. *y-ord-em* 'to cause to abound, to augment, to increase', 'to be full of, to abound; to overflow', 2) *n=ul=u=št-* [n=uł=u=sṭ-] 'to lead, to rule, to drive' - Arm. *y-owł-ark-em, ył-em* < *y-owł-em* 'to send to, to forward, to dispatch, etc.' (see III.2.3 point 46), cf. *ul=u=št-* [uł=u=sṭ-] 'to direct, to lead (away)' formed with the verbal root *ul-* [uł-] 'to go', 'to lead away' by addition of the suffix *-u=št-* [-u=sṭ-] (about this suffix see IV.4 point 1.1), 3) *n=ebsi-* [n=ewši-] 'to slaughter' - Arm. *awš-em, y-awš-at/ot-em*[237] 'to cut to pieces, to tear in pieces, to slaughter' (see III.2.3 point 39), 4) *n=a-* [n=ay-] 'to wait (?)' - Arm. *n-ay-im* 'to look, to see, to observe', fig. 'to wait, etc.' (see III.2.3 point 2.2). It cannot be ruled out that the same prefix is also attested in the Urart. verb *nun-* (< *n=un-* (?)) 'to come', which normally is compared with the Hurr. verb *un-* 'to come'[238]. If *nirbe* indeed means 'property, goods' in Urartian as I.Diakonoff proposes, then in this word is also possible to see the prefix *n(i)-* by analyzing *n(i)=ir=be* (cf. Arm. *ir* 'thing, affair, reality'; for word-final *-be* cf. Urart. *qar=be* 'stone, rock' - Arm. *k'ar* 'stone'; Urart. *zel=be* 'seed, descendant' - Arm. *c'eł* 'tribe, caste, race, etc.'[239]). It is not excluded that the Urart. verb *irb-* 'to appropriate' comes from the same root. In some of the above-mentioned words ([n=uł=u=sṭ-], [n=ewši-], [n=ord-]), in place of the Urartian forms prefixed with *n(i)-*, the variants with *y-* have been retained in Armenian (*y-owł-ark-em, y-ł-em* < *y-owł-em, y-awš(-at)-em, y-ord-em*).

1.6 **up- [up-]** - Arm. *howp-* 'a. near, nigh, close, adjacent; pr. near, close to, by, by the side of' < *sub-* 'under'. In Urartian, from this prefix, we have the verbal forms *up=ardu=d-, up=ardu=i=ale/ge* 'to command(?), to order(?), etc.' and the word *ṭ=up=ardu=ne* formed with the same stem (see the following). For *ardu-* cf. Urart. *ardi=še* 'command(?), rule(?), order(?), etc.' - Arm. *ard, -ow/i* 'order, form, shape, etc.'[240].

1.7 **ṭ- [ṭ-]** - Arm. *t-* 'un-, in-' < *dus*. In the Urartian texts, we have only one word - *ṭupardune* with this prefix . I.Diakonoff (1971:76) compares it with the Hurr. words *tubue* 'strong', *tib-* 'strengthen, fortify' (he analyzes *ṭupardune* as *ṭupar=d(u)-* seeing the Urart. verbal suffix *-d-* in the *-d(u)-*). But if the translation of *upardu-* (see point

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[237] The Urart. *e* - Arm. *a* correspondence is quite frequent. See II.4.2 point 1.
[238] See, for example, M.Khachikyan, 1985:47.
[239] About this see also III.2.4 point 11.
[240] About this see also III.2.3 point 4.1.

1.6) is correct, then a comparison with it allows us to assume that *ţupardune* should roughly mean 'unlawful (?), disorderly (?), etc.': the negative of **up=ardu=ne*[241].

Concluding remark. Thus, we can assert that in a number of Urartian words, the Armenian prefixes *z-, h-, y-, n(i)-, howp-, t-, an-* are distinguished. It is noteworthy that all the above mentioned prefixes are native in Armenian. Among observed peculiarities, the utilization of the prefix *n(i)-* in some Urartian words in lieu of Armenian parallel forms prefixed with *y-*, should be mentioned. In general, this prefix is obviously used more often in Urartian than in Armenian.

2. **Suffixes.** Suffixes in Urartian can either be directly added to the stem-final vowel (they normally start with a consonant) or substitute it. Let us introduce the main nominal suffixes presented in the Urartian texts, one by one.

2.1 *-V=ḫe/ḫi-*[242], *-V=ḫine [-V=h/hi-, -V=hin]* - Arm. ∅**,** *-i, -ēn, -in* (?). In scholarly publications it is considered an appurtenance indicating suffix[243]. G.Melikishvili[244] believes that *-ḫi(ni)* is the form of this suffix assuming *-ḫini/-ḫi* alternation. According to him it forms: 1) patronymics, as: *ᵐMenuaḫi(ni), ᵐIšpuuini-ḫi(ni)*, 2) tribal/personal names, as: *ᵐAbeliani/eḫi, ᵐDiau(e)ḫi, ᵐErikuaḫi*, 3) some nouns, such as: *šuḫe* 'device(?)'[245], *kamnaḫe* '(?)', *paniţḫe* '(?)', *qarmeḫi* 'festival(?), celebrations(?)', *urišḫi* 'weapon', 4) toponyms together with the plural marker *-li*, as: *ᵐMenuaḫinili, ᵐRusaḫinili, ˢᴬᴸTaririaḫinili*, etc. I.Diakonoff[246] considers the Hurr. *-ḫi/-ḫe* and Urart. *-ḫi/-ḫə* as suffixes which form adjectives, especially, from ethnic and geographic names, and in Urartian - also patronymics. He is right in considering toponyms of the type *ᵐDiau(e)ḫe, ᵐUelekuḫe*, which occur in the Urartian texts, to be adjectives and proposes their translation respectively as 'of Diau(e)', 'of Ueliku', as adjectives[247], and not as nouns - 'Diau(e)ḫ', 'Uelikuḫ' (as is done, for example, by G.Melikishvili[248]). G.Wilhelm distinguishes the same suffix also in *eguru=ḫə/ḫu* 'clear, pure' (in a cultic sense), *babana=ḫə* (< *babanə* 'mountainous region') and some other words, as well as in the compound (according to him) suffix *-išḫə* (about this suffix see below, point 2.4)[249].

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[241] In the inscriptions of Gövelek [Van recto₆ (SMEA 44/1, 2001:112-143)], Hagi [KUKN 406] and Çelebibaĝi [KUKN 407] these two words are attested together in the same phrase ((289)-(290)) countervailing each other (see in detail VI.2.4).

[242] *-Ḫe* always occurs in the word-final position, while *-ḫi-* occurs in the word-internal position.

[243] See J.Friedrich, 1933:9.

[244] G.Melikishvili, 1960:51-52; 1964:29-30.

[245] In fact, *šuḫe* means 'new' (adjective), see F.König, 1957:202; N.Harouthiounyan, 2001:465.

[246] I.Diakonoff, 1971:70.

[247] I.Diakonoff, 1963:30.

[248] According to this, for example, the phrase *ᴵUţupuršini LUGÁL ᴵDiaueḫi*, which G.Melikishvili (1964:33) translates 'Utupurši - the king of (tribe) Diaueḫi', should be translated '… the king of (tribe) Diaue', where, of course, the tribe name *ᴵDiaue=ḫe* is not in the genitive, as is mistakenly assumed by G.Melikishvili.

[249] G.Wilhelm, 2004:125.

While basically agreeing with I.Diakonoff, I wish to firstly point out that in Urartian this suffix is also used in some pronouns and adverbial forms constructed with them, e.g. *ina=ḫine, inuka=ḫine, iša=ḫine, išuka=ḫine* (previously read *ikuka=ḫine), išer=ḫine, ideri=ḫine* (or: *ineri=ḫine*)[250]. As for the *-ḫine/-ḫe* alternation, then apart from the above-mentioned pronouns and pronominal adverbs, the variant *-ḫe* is attested only in those cases when the word receiving this suffix is in the singular nominative, namely, does not take any case ending. Contrary to that, the *-ḫin-* is present in any oblique case or in the plural nominative. G.Wilhelm identifies this additional *-ne* with the relational suffix *-n(e)-*, supposing that it is attached to the words formed with the suffix *-ḫe*, when the latter, appearing as a modifier, agrees in case with its head noun. In fact, the additional *-n(e)-* is present in all of those words where this suffix is followed by a case ending or other suffix (about this see more in detail V.2.11). The other peculiarity of this suffix is the fact that, just as for the genitive, in words with thematic *i*, when derived with this suffix, the thematic *i* is changed to *e*, (see in detail V.2.5). As for the Armenian parallel of this suffix then perhaps it is possible to identify the Arm. suffix *-i*, before the *hi > i* development, to the Urart.*-ḫe/-ḫi-*. This -i in Armenian could be derived equally from the genitive marker of the Proto-Indo-European thematic stems *-sio* (*-sio > *-hio > -hi > -i/y*)[251], as from the suffix *-(i)ios/-(i)iom/-(i)ia*[252] (the latter mainly formed adjectives and adjectival nouns in the Indo-European proto-language). On the other hand, the correct pronunciation of the Urart. *ḫi/e* is not clear; it can be pronounced *[x], [h], [y]* or any similar sounding phoneme.

2.2 *-(u)tu=ḫe/-ḫi=ne.* In scholarly publications this suffix is viewed as an abstract noun-forming compound suffix. In the Urartian texts the following words formed by the above suffix occur: LUGÁL–*tuḫ(in)e* 'kingdom'[253], ᴸᵁ́*ta(u)tuḫe* 'manliness', 'heroism'[254], LÚ–*tuḫ(in)e* (identical with the previous(?)), *ḫuṭutu(u)ḫe* 'success'. I.Diakonoff considers it possible to read LUGÁL–*tuḫ(in)e* and LÚ–*tuḫ(in)e* as LUG–ÁL.*TÚ–ḫ(in)e* (=*SÁRRU.TÚ–*) and LÚ.*TÚ–ḫ(in)e* (=*AMÉLU.TÚ–*), comparing them to the Akkadian forms *šarrūtu* 'royalty' and *amēlūtu* 'people, mankind'. Accordingly, he translates the above mentioned words as 'royal power/dignity and 'live booty(?)' respectively[255]. He also considers as possible the presence of the Akkadian particle *ūtu* in the *ḫuṭutu(u)ḫe,* which has spread to the given Urartian word from the above-mentioned forms. In this case the *ḫuṭutu(u)ḫe* perhaps, ought

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[250] See in detail V.3 point 3.4.
[251] If we consider the fact that this suffix is very close to the genitive case, both in its functional aspect and usage, then the Urart. *-ḫe/-ḫi-* most probably originates from it.
[252] See G.Jahukyan, 1987:231-232.
[253] See G.Melikishvili, 1964:29; N.Harouthiounyan, 2001:420.
[254] This, according to M.Tsereteli (RA, XXXII:32), which G.Melikishvili (1964:29) also accepts: N.Harouthiounyan (2001:467) and G.Wilhelm (2004:125) repeat I.Diakonoff's translation (see below).
[255] I.Diakonoff, 1963:63, note 71.

to be read ḫuṭu-*TÚ*(u)-ḫe(?) For the present, we should accept that not everything is clear about this suffix.

2.3 **-a=lḫe, -u=lḫe.** Occur in a number of toponyms, as, for instance: [URU]*Meliṭi(=)a=lḫe*, [KÚR]*Ḫuš(=)a=lḫe* etc. G.Melikishvili[256] finds that the ending *-ḫali* (occurring in country and city names) is a variation of the suffix *-ḫinili* which forms the names of settlements (see above, point 2.1). According to him, the suffix *-alḫe* is formed from the latter, by metathesis. At the same time he does not rule out the possibility that *-ḫinili* may be a compound suffix with the *-ḫe/-ḫi* component[257]. M.Salvini (1971:95-96) proposes the view that the vowels *a* and *u* attributed to these suffixes are related to the stem and therefore the actual suffix is *-lḫe*. G.Wilhelm (2004:125) proposes the same. It seems to me that the metathesis variant analyzed by G.Melikishvili is less possible, since the origin of the *-ulḫe* version remains unexplained. The weakness of the point of view proposed by M.Salvini is the absence of the alternative *-i/e=lḫe* suffix in the Urartian texts, although the *i*-stem words are the most widespread there. For the present, the only thing that can be stated with certainty is that this suffix is compound and in its second component we have the suffix of appurtenance *-ḫe/-ḫi-* (see above). This is clear in the attestations of this suffix in the Urartian texts, in which the suffix *-a/u=lḫe* alternates with the *-ḫe/-ḫi* suffix of appurtenance or the genitive case (see V.2.5 point 3). We should not rule out that *-u/a=lḫe* has to be separated from the true toponym and that we should see in them the Urartian pronouns *ule* 'other, another' and *ale* 'whoever; other, some one (other)'. Compare, for example, with the toponym [URU]*Eraṭele-ule* 'Eratile-other' [KUKN 173 III₅₈], although in this case we would expect **ule=ḫe, *ale=ḫe* but the forms *ul=ḫe, al=ḫe* should not be ruled out.

2.4 **-išḫe, -išḫi-** *[-isx, -isxi-]* - Arm. *-isx*. In the Urartian texts, this suffix forms nouns. (G.Wilhelm regards it as a compound suffix (*-i=š=ḫe/ḫi-*), in which as the second component he sees the *-ḫe/ḫi-* suffix of appurtenance: see above, point 2.1). In Urartian this suffix is seen in the following words: *ḫur=išḫe* [xor=isx] 'reservoir(?), well(?), etc.' (cf. Arm. *xor* 'deep, hollow, excavated', see III.2.3 point 26), *ur=išḫe* [uṙ=isx] 'weapon, metal object/goods' (cf. Arm. *owṙn* 'sledge-hammer, hammer'. Compare also with the words composed by the same root [LÚ]*ur=urda-* 'blacksmith, person who works with metal', *ur=išḫ=use* 'armory, smithy, place where made metal object/goods'[258]). Perhaps, the same suffix is also present in the

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[256] G.Melikishvili, 1960:51-52; 1964:29-30.

[257] I.Diakonoff (DV, 5, 1988:174-175 note 22) initially believes that the *-l-* component in these suffixes is the Urartian plural absolutive marker *-le*; later on, he changes his view on this.

[258] For translations of the word *ur=išhe* and forms shaped with it, see III.2.3 point 45. Other authors translate it as 'weapon', 'object, goods' (see N.Harouthiounyan, 2001:475). M.Salvini(SMEA, 22, 1980:186), based upon NÍG.GA/ú-ri-iš-ḫi alternation present in the Urartian texts, suggests the translation 'treasure' for the latter. Later (SMEA, 43/2, 2001:252), he asserts the same in, but he does not take the Kelishin inscription, where Urart. *urišhe* translates Akk. *bêlu* 'weapon', into consideration at all [KUKN 30₈].

words *tu=išḫe(?)* 'clear(?), pure(?) (river)'[259] (cf. *tu=ai/ge* 'pure (gold)'), *šur=išḫe(?)*[sor=isx] 'stable, stud'[260] (cf. Arm. *sor-a-kal* 'hostler, groom', see III.2.3 point 57). At present it is difficult to say whether the same suffix is present also in the unknown word *LÚtardašḫe (?) < LÚtarda=šḫe (?)*. From this suffix, we have the words *xar-isx* 'base, foundation; pedestal; anchor; etc.' and *xor-isx* 'honey-comb' in Armenian[261].

2.5 ***-ibte, -ibti- [-iwt, -iwti-]***[262] - Arm. *-oyt', -i < *i/ew-t'i < *eu-ti*. G.Meli-kishvili views this as a derivational suffix, distinguishing it in the word *uštipt(i=n)e* 'attack, raid, campaign', which he justifiably derives from the verb *ušt-* 'to raid, to go'[263]. I.Diakonoff[264] believes that the true suffix is *-pti*, which, according to him, forms abstract nouns. In addition to the above mentioned word, he identifies the same suffix in the words *meri=pte* '(?)', (cf. the verb *mer-* '(?)'[265]), DUB-te 'script, inscription' and *ḫa=pti=ne* '(?)'. According to G.Wilhelm[266], this suffix with the *-i(=)ptə* analysis is present in the words *ušt=i=ptə* and *mer=i=ptə* whose meanings he finds to be ill-defined. The Urart. [-iwte/i-] certainly corresponds to the Arm. suffix *-oyt'*, which originates from the PIE. **-eu-ti*. Later on, as a result of the **eu > -oy* development it becomes the *-oyt', -i* form. In Armenian, as in Urartian, it forms verbal nouns[267], as, for instance: *cer-oyt', -i* 'old age', *zayr-oyt', -i (zayr-an-am)* 'anger, wrath, spite, vexation, indignation', *erew-oyt', -i (erew-im)* 'appearance; vision; sight; indication', etc. If it is indeed possible to see a noun formed with the verbal root *ḫa-* by the addition of the suffix *-pti=ne* in the Urart. word *ḫaptine* (as I.Diakonoff proposes), then the latter, perhaps, ought to be compared with the Arm. analogous suffix *-a-wt'*. It forms nouns from the verbal stems, such as: *cana-wt'* 'connoisseur, good judge of; acquaintance', *ama-wt'* 'shame, confusion; bashfulness', *ała-wt'-k'* pl. 'prayer, orison, supplication' (cf. the verbs *čana-č'-em* 'to know; to perceive, to remark, to recognize', *ama-č'-em* 'to be ashamed, to blush with shame, to be confounded', *ała-č'-em* 'to supplicate, to pray, to conjure').

2.6 ***-u*** - Arm. *-ow*. I.Diakonoff considers that it is a participle-forming suffix, which also forms verbal nouns/adjectives. If this is indeed true, then it surely

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[259] This is according to M.Van Loon (AnSt, Fs. Güterbock, 1974:189): N.Harouthiounyan (2001:469) translates it 'difficult to traverse (?), full-flowing (?) (river)'.

[260] According to B.Piotrovski (1988, KB III:43). I.Diakonoff (1963:91) suggests the translation 'armoury (?)', connecting it to the word *šuri* 'weapon, sword'. M.Salvini (SMEA, 43/2, 2001:252) instead of *Éšur-iš-ḫé (Éšur=išḫe)*, reads ur-iš-ḫé.

[261] G.Jahukyan (1987:438) based on the presence of this suffix in Urartian, suggests a probable Urartian origin for the Arm. words *xar-isx* and *xor-isx*.

[262] It is usually read *-ip/bti=ne, -ip/bte*; the reading *-ebti=ne [-ewti=n], -ebte [-ewt]* is also possible. The suffix-final *i* is preserved only in presence of the subsequent *-ne* - in preaccent position.

[263] G.Melikishvili, 1964:30.

[264] I.Diakonoff, 1971:146.

[265] About this, see also N.Harouthiounyan, 1966:39 note 143, 101; 2001:455.

[266] G.Wilhelm, 2004:125.

[267] Also, seldom – other names. About this and adjacent questions see G.Jahukyan, 1987:240.

corresponds to the Arm. suffix -*ow*, which forms verbal adjectives and adverbs from verbs and verbal stems. It seems that this Armenian suffix originates from PIE. **-ues* participial suffix of the active perfect (more in detail see VI.3 point 2.1. see also the next).

2.7 **-*u(=ne)* [-*u(=n)*]** - Arm. -*ow(n)*, -*oy/-ay/-i*. According to I.Diakonoff this suffix forms participles and verbal adjectives. He compares it with the participle forming suffix -*u* (see the previous). In Urartian, from this suffix, we have *agunu=ne* 'armed (?), fortified (?)', *aniardu(=ne)* [an=y=ardu(=n)] 'unjust(?), guilty(?)' (Arm. **an-y-ardow-n*, which should mean 'un-arranged, un-fitted up, incorrect, disorderly, etc.', cf. the words formed by the same root *y-ard-ar(-own)* 'fitted up, adorned, furnished, arranged', *z-ard(-ar)-own* 'ornamented, polished, spruce, smart') and *ṭupardu=ne* [ṭ=up=ardu=n] 'unlawful(?), disorder(ly)(?), illegal(?), etc.'. The Urart. [-*u(=n)*] of course corresponds to the Arm. suffix -*ow(n)*, which, first of all, forms adjectives from the verbal stems, as well as nouns and adverbs (for example, see VI.3 point 2.1). G.Jahukyan regards it as a native suffix, which derives partly from the PIE **-o-mno* (participial suffix of the middle voice), and partly from the constructions of the **-o-no/i*, **-u-no/i* type (fem. **-o-nā*, **-u-nā*). In the Proto-Indo-European language this **-no*, the other variation of which is **-ni*, has formed adjectives and verbal nouns[268].

2.8 **-*urde* [-*ord*, -*urd* (?)]** - Arm. -*ord, i-a*; -*owrd*. I.Diakonoff believes this suffix has the form -*o/urda*, which he distinguishes in the words [LÚ]*ur=urda*- and [LÚ.GIŠ]*ga(?)r=urda* indicating that in Urartian it forms the names of various professions[269]. In addition to the words cited above: [LÚ]*ur=urda*- 'smithy'[270], [LÚ.GIŠ]*ga(?)r=urda*- 'some profession or other' (according to M.Salvini - 'carpenter'[271]), this suffix, also occurs in the word [LÚ]*purun=urda*- 'some profession or other' (N.Harouthiounyan proposes 'some servant or other in the temple'[272]). Maybe this suffix is present also in the word *ṣepurdi/e*[273] *(ṣep=urdi/e)*, cf. *ṣep*- 'to plaster', [m]*ṣep=ane*/[LÚ]*ṣepi=kane* 'people of some profession or other (probably, plasterer). If our observations are true, then it likely means 'plasterer', in Arm. literally, **cep'-ord* and should be in the nominative singular, in contrast to the words formed with -*urda*, which in all likelihood are in an oblique case plural (most probably, the ablative)[274].

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[268] See G.Jahukyan, 1987:234,241.

[269] I.Diakonoff, 1971:70,72.

[270] My translation. N.Harouthiounyan (2001:473) regards it as the name of some profession, F.König (1957:208) - 'beamte (civil servant, officer)'. H.Karagyozyan (1998:44-46) translates it as 'war-chariot driver, driver' ('chariot fighter') comparing it with the Arm. word *var-ord* 'driver'.

[271] M.Salvini, Bastam II, 1988:135:

[272] N.Harouthiounyan, 2001:458:

[273] *Ṣep*- according to the Arm. verb *cep'-em* 'to plaster, to cement'; other authors read it *ṣip*-.

[274] Maybe the *ṣepurdi/e* should be read together with the next *ale* [Ay-susi II₈ (Ayanis I)] - *ṣepurde(e)ale* [ṣeṗ=ord=ear] seeing in this word the plural nominative from *ṣeṗ=ordi/e*. In this case is possible to compare the -*eale* [-ear] with the Arm. collective suffix -*ear*.

   This suffix should obviously be identified with the Arm. *-ord, i-a* (perhaps also, *-owrd*) suffixes, which in Armenian form new words from verbal stems, nouns and adjectives. These suffixes, as in Urartian, mainly signify various professions or groups/categories of people, such as: *yetn-ord* a. 'last; vile; destitute', *ors-ord* n. 'hunter, huntsman', *p'ox-an-ord* n. 'substitute, representative; vicegerent, vicar; successor', *nax-ord* n. 'predecessor', *ařaǰn-ord* n. 'author; captain, director: superior, father', *miǰn-ord* n. 'mediator; intermedium, agent; negotiator', *anc'-ord* n. 'passenger', *žołov-owrd* n. 'people, assembly', *xorh-owrd* n. 'thought; intention, resolution; counsel', etc. In Armenian, the words with the *-ord* ending belong to the *i-a* mixed declension[275], in which the *-a/-i* (?) vowels of the Urartian suffix are probably preserved. But the words with *-owrd* belong to different declensions.

   2.9 **-(u=)aṣe** *[-(u=)aṣ]* - Arm. *-(ow)ac*. In Urartian *-aṣe* is normally considered a postposition with the locative meaning, or a locative-illative marker, see V.2.9 point 3. But at least in the words (both are nouns) *urbuaṣe* 'offering, sacrifice' (formed from the verb *urb(u)-* 'to sacrifice, make offering') and, perhaps, *tanaṣi/e* 'lamp or candlestick' it emerges as a derivational suffix. If the latter interpretation is correct, then it is probably formed from the verb *tan-* 'to put, to lay'. Therefore it should be distinguished from the declensional suffix *-(i)aṣe* (see V.2.9 point 3 and VII.2). This suffix corresponds in form and meaning to the Arm. *-(ow)ac* which in Armenian forms nouns, chiefly from verbs (for instance, *as-ac* 'saying, word, expression; proverb; dictate', *gorc-ac* 'work, manufacture', *orm-ac* 'enclosure, fence, precincts', *arar-ac* 'creature; creation; work, action', *kotor-(ow)ac* 'carnage, massacre, slaughter', *awer-ac* 'ruin, demolition, destruction', *gog-ac* 'hollow, cavity', etc.) and adjectives (*cal-ac* 'pliant, folding, wrapped up', *ank-ac* 'fallen; abject, vile', *ołorm-ac* 'merciful, charitable, compassionate', *c'aw-ac* 'suffering, ill; afflicted', *k'n-ac* or *k'nē-ac* 'sleep-begetting, somniferous', etc.). Later on it changed into a participle-forming suffix[276]. Scholars usually derive the Arm. suffix *-ac* from the verb *ac-em* 'to carry, to bring: etc.', but some of them identify noun-forming and adjective-forming suffixes, for which they suppose different origins[277].

   2.10 **-ure, -aure** *[-oł, -awł]* - Arm. *-oł; -awł, i-a*. In Urartian, these suffixes form participles from the verbal stems. Of course, they correspond to the *-oł/-awł* suffixes of the Arm. subjective participle ('quasi-participial'). See in detail VI.3 point 2.1.

   2.11 **-use/-usi-, -V=se/si-** *(?)* *[-oč/-oči-, -V=č/či- (?)]* - Arm. *-oc', i-a; -V-c'*. There is no agreement among scholars about this suffix. Formerly, it was regarded as an adjective-forming suffix, for which G.Melikishvili[278] provides the following

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[275] G.Jahukyan (1987:237) considers it possible that the Arm. *-ord, i-a* suffix derives from PIE. **dhro* through metathesis.

[276] In fact, even in the pre-Mashtots period, the suffix *-ac* could also have a participial value. The preserved fragments of "epical" Armenian confirm this (G.Jahukyan, 1987:368).

[277] About this see G.Jahukyan, 1987:249.

[278] G.Melikishvili, 1964:70.

examples: *badusi/e* 'magnificent(?)', LUGAL-*(nu)si* 'royal', *(É)urišḫusi* 'armory' (literally: armorial 'оружейный'), *inusi* 'such', etc. G.Wilhelm[279] compares it with the Hurr. suffix *-u/o=ssi* which forms adjectives and nouns of suitability as, for example: *ašt=u/o=ss-* 'a garment' (*ašti* 'woman'), *šēn(a)=iffu=ssi* 'suitable to my brother', *paġ=u/o=ss-* 'a headgear' (*pāġi/e* 'head'). At the same time he notes that, in the Urartian, one can see meanings close to that of the Hurrian suffix in only a few cases, at best.[280] Considering the meaning of the Urartian suffix not well defined, G.Wilhelm presents the following examples: *urišḫ=usə* 'arsenal; treasury' (*urišḫə* 'weapon', 'piece of equipment'), *ašiḫ=usə* 'building for cereals', *al=usə* 'ruler', *pul=usə* 'stele', *bad=usə* 'perfectness(?)', etc. M.Salvini, referring to this issue, considers *-use* a suffix forming abstract nouns from nouns and translates the words formed by this suffix as: *urišḫ=use* 'treasure', LUGAL-*(n=u)se* 'kingship', *bad=use* 'perfection(?)', *daš=use* 'illumination, lights'/ 'candelabrum', *ird=use* 'defense, protection'[281]. As we will see, in fact, only in rare cases is it possible to view as adjectives or abstract nouns the words formed with this suffix. To clarify this question, let us list all those words in which the suffix *-(u)se* is present - by grouping them according to their meanings. The first group includes words which obviously indicate various locations, places or objects/instruments; in the second, words which have pronominal stems and in the third one, the remaining words.

1) *Éadun=usi=ne* 'a building', *Éašiḫ=us(i=n)e* 'a building/house', *(É)su=us(i=n)e* 'a sanctuary, a temple', *(É)urišḫ=us(i=n)e* 'smithy, the place for working with metal, armory'[282], *(NA4)pul=us(i=n)e* 'stele, monument with inscription', *bad=usi(=ne/ie)*[283] - n. 'wall around building, circuit, perimeter', adj./adv. 'walled, enclosed, etc.'[284]. I.Diakonoff and G.Wilhelm justifiably analyze the latter as *bad=usi=ie* considering it

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[279] G.Wilhelm, 2004:106, 126.

[280] It is noteworthy that the Arm. suffix *-oc'* also has a meaning analogous to the Hurrian suffix, as: *krkn-oc', mekn-oc', t'ikn-oc'*: all of them mean 'coat, mantle, frock', *glx-oc'* 'hat, headgear', (*glowx* 'head', cf. Hurr. *paġ=u=ss* 'headgear' from *pāġi/e* 'head'), *jeĩn-oc'* 'glove' (*jeĩn* 'hand'), etc.

[281] See M.Salvini, SMEA, 43/1, 2001:35-36.

[282] See III.2.3 point 45.2 Other authors translate it as 'store house (for weapons/instruments)', 'treasury', about this see N.Harouthiounyan, 2001:479.

[283] Cf. Arm. *pat* 'wall (around building), turn, round', *pat-em* 'to surround, to environ, to enclose, to fence, etc.' and Urart. *bad=g-* 'to surround(?)' (see III.2.3 point 50.1).

[284] In the Urartian texts this word is also attested as a noun, for instance: 1) ᵈḪal-di-né-e ba-du-se-e DUB-te te-ru-ú-bé a-le ᵁᴿᵁAr-ṣu-ni-ú-i-né DUB-te te-ru-ú-bé 'To Ḫaldi splendidly(?) (adv.) (I) established stele …' [KUKN 40r.s.₃; 41r.s.₂], 2) … É-i-né ši-di-ši-tú-né i-nu-ke ba-du-si-né ú-i ge-e-i ši-da-(g)u-re '… the home (É-iné) (he) built such magnificent(?), nothing has been built' [KUKN 18₁,₂ 19₁,₂]. The cited translations have to be corrected, respectively: 1) 'To Ḫaldi's *baduse* (I) established stele …', literally: 'Ḫaldi=i=n(e)=e [ROOT.GEN.REL.DAT] *badusi=(i)e* [ROOT-*use*-DAT]', both are in the dative (Ḫaldi=i=n(e)=e is the genitive modifier, and through the relational suffix *-n(e)-* agrees with its head noun in dative receiving the case marker of the latter), 2) '… the home (É-ine) (he) built, there is no one who can build such(?) *badusi=ne*'. Here also the *badusi=ne,* probably, is a noun. Thus, in the Urartian texts from *bad=use* we have the noun - *bad=usi=ie* (dative), *bad=usi=ne* (nominative) and the adj.(?)/adv.(?) *bad=usi=(i)e* (in frozen dative (?)).

to be in the dative. G.Wilhelm, based on the fact that it, as a rule, does not agree with the other members in the clause, considers it to be an adverb in a frozen dative[285]. This is also accepted by I.Diakonoff[286].

2) *inu=s(i=n)e* 'such', *šu=s(i=n)e* (pl. *šu=si=ne=le*) 'my', 'this (?)', *ma=s(i=n)e* (pl. *ma=si=ne=le*) 'its, his/hers' (see in detail V.3 point 1 and 2).

3) URU LUGAL-(n=u)se 'royal (city)'/'kingdom', ᴸᵁ̇AD-si=n(i=n)e 'ancestral, paternal', *daš=use* 'illumination, lights'/ 'candelabrum', *ird=use* 'defense, protection' (this is M.Salvini's translation, though no evidence substantiates it), *alu=se* 'ruler, governor', *alu=si=ni=ne/EN-si=ni=ne* 'belongs to lord', *ṭi/eru=se* 'an unit of measure', ⁽ᴳᴵˢ⁾*ši=si=ne* 'an object/weapon'. The latter two words are obviously not adjectives. *Al=use* is translated 'ruler, governor' and it is unclear why we should distinguish the adjective suffix *-use* or the suffix *-se* in it. As for *alusinine/EN-sinine*, then the first one is attested many times only in the phrase *alusi=i=ni=ne alsuiši=ne*, which literally means 'by the might of *aluse*'. Here the *alusi=i=ni=ne* is the genitive modifier (noun in the genitive!), and by means of the relational suffix *-n(e)-* agrees with the head noun in the instrumental-ablative - *alsuiši=ne*. Therefore it is certainly not an adjective (G.Wilhelm thinks that the agreement rule of the modifier in *-use* with its head noun is the same as for that of the modifier in the genitive). The same is with the EN-*sinine*[287]. In fact, in this group, only in the words LUGAL-*(n=u)se* and ᴸᵁ̇AD-*si=n(i=n)e* can adjectives be seen and even then, certain reservations, since these two words were only partly written syllabically, therefore it is not possible to distinguish the root from the suffix(es) with certainty[288]. In fact, in Urartian the words with the suffix *-use/-usi-*, in general, are evidently nouns, among which words indicating various buildings prevail (6 occurrences). This is clear from the meanings of the special signs (determinants) which describe the above-mentioned words (the words ᴱ*adun=usi=ne,* ᴱ*aših=us(i=n)e,* ⁽ᴱ⁾*su=us(i=n)e* while ⁽ᴱ⁾*urišḫ=usi/e(=ne)* are characterized by the determinant É 'house, building', and ⁽ᴺᴬ⁴⁾*pul=us(i=n)e* - by NA₄ 'stone'). Therefore all these words should mean some structure or other, including - ⁽ᴱ⁾*urišḫ=us(i=n)e*, which M.Salvini translates 'wealth'. At best, it could mean 'treasury', but in no way - 'wealth'. And the *bad=usi=ne* should not mean 'perfection' but 'walled place, wall around building, circuit, perimeter, etc.', as it is a noun and should not be confused with the a./adv. *bad=usi=ie* 'walled, enclosed; surrounding, etc.' As for LUGAL-

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[285] About this see in detail G.Wilhelm, DV, 5, 1988:98,118-119 note.19.
[286] I.Diakonoff, DV, 5, 1988:165, 180 note 64.
[287] Is attested in phrases similar to ᵈḪal-di-ni-né uš-ma-ši-né/ba-ú-ši-né/al-su-ši-né EN-si-ni-né [KUKN 389₁, 241C₃₀, 406 f.s.₁₄, 407 f.s.₁₁, etc.].
[288] In scholarly literature the root *ate-* (ᴸᵁ̇*ate=ine* 'father') is assumed to be the base of ᴸᵁ̇AD-*si=ne*, but it is never attested with the suffix *-si-*. N.Harouthiounyan compares the form LUGAL-*(nu)se* with the *i/ernu=tuḫe*, seeing the root *i/ernu-* behind LUGAL-*(nu)se*.

(nu=)se, then in the texts it occurs only in the passage URU LUGAL–*(nu=)se* (the
^{URU}LUGAL–*(nu=)se* reading is also possible) and, apparently, should be translated as
'royal city/residence - a place where the king's throne is.' Obviously, *irdu=se* also
refers to some structure, as in the text we have *šidi=št=u=be der=u=be ti=ne*
^{d}*Ḫalde=i ird=use* '(I) built, put the name Ḫaldi`s *irdu=se*' [shisheh$_{11}$ (SMEA,
43/1:36)]. The *daš=use* is attested once, engraved on the bronze candelabrum[289],
from which the meaning is defined, and, evidently must mean 'candelabrum, lamp'
and not - 'lights, illuminations'. Namely, it signifies an object/instrument (concrete
noun), and not an abstract noun. Thus, in the Urartian texts there are 12 words with
the suffix *-use* - ten nouns and two pronouns. Also with *-se,* we have one noun
($^{(GIŠ)}$*ši(=)si=ne*) and one pronoun (*ma=si=ne*[290]). In the case of ^{LÚ}AD–*si=n(i=n)e* and
ṭi/eru=se, the meaning of this suffix is unclear.

In Armenian we have the corresponding suffix *-oc', i-a*, which first of all forms:
1) nouns indicating location, place, building: *t'rc-oc'* 'brick-kiln', *xohaker-oc'*
'kitchen', *całk-oc'* 'flower-garden', *hn-oc'* 'stove', *martk-oc'* 'battery, bastion,
bulwark; tower', *awt'-oc'* 'sleeping-place, bedroom', etc., also, 2) words that show
instruments, devices for making something, such as: *ktr-oc'* 'knife; scissors', *sł-oc'*
'saw' *mx-oc'* 'piston; plunger; etc.', *hal-oc'* 'furnace; foundry; crucible', *ǰnǰ-oc'*
'duster, rubbing-cloth, rubber', etc., and sometimes 3) words with other meanings,
including abstract nouns, for example: *xtr-oc'* 'difference, variety, disproportion'.
This suffix completely corresponds in meaning with the Urartian *-use/-usi-*.

2.12 **-V=ze/zi [-V=ċ/ċi]** - Arm. *-c'(i)* (?). I.Diakonoff considers it possible to
distinguish the morpheme *-zi/e,* which he regards as a nominal suffix, in the Urartian
words *armu=zi* 'family, offspring' (Arm. *z-arm*, *-oy* 'family, house, race, line;
nation'), *naḫi=ze* '(?)' (cf. *naḫi=be* '(?)', *naḫ-* 'to come, to bring, to lead'), *ḫarni=zi-
=nei* '(?)'. He also considers the presence of this same suffix in the words *aš(a)ze*
'ration(?)'[291], *salzi/e* 'slope (?), steep (?)', as well as in *gal(a)zi/e* '(?)' and *zabzi/e*
'(?)'[292], as probable. Apparently, as the attestations of the cited words in Urartian
texts show, it seems two different suffixes: *-ze* [-ċ] and *-zi* [-ċi] are present in
Urartian. The first is present in the word *armuzi* (in script - *ar-mu-ze/i(-i)*), and the
second one - in *naḫi=ze* (in script: *na-ḫi-ze/i(-e)*), *aš(a)=ze* (in script: *aš(-a)-ze/i(-e)*).
The others are not clear.

[289] See M.Salvini, "Orientalia", 60, 1991:344-346.
[290] I.Meshchaninov (1978:204} provides another interpretation of *masine*.
[291] If the meaning provided by I.Diakonoff (which is repeated by N.Harouthiounyan, 2001:437) for the
word *aš(a)ze* 'portion(?) ration(?), subsistence(?)' is correct, then, probably, in this word one should see the
verbal root *aš-* *[as-]* 'to come, to arrive, to enter, etc.' (Arm. *h-as(-an)-em* 'to arrive at, to attain, to reach,
etc.') (cf. Arm. *h-as* 'arrival, tax, duty, dues; income', *h-as-oyt'* 'income; pension; salary', see III.2.3 point
6.5).
[292] See I.Diakonoff, 1963:70; 1971:146, note 153.

These suffix(es) should perhaps be compared with the Arm. suffix(es) *-cʿ/-cʿi*[293], which derive from the PIE. *-skʿ(sk)* (in the Proto-Indo-European language this formed adjectives, partly nominalized). Two types of forms with *-cʿ* are present in Armenian: 1) nominal, which have no parallels with the verbal forms with *cʿ*, 2) nominal-verbal, which have parallels both with nominal and verbal forms. Often the verbal *cʿ*-stems are used as independent nominal forms, as, for instance: *ənt̔-acʿ-kʿ* 'course, race, way; progress, trace' from *ənt̔-an-am* 'to run (to); to go, to pass', *saṙ-oycʿ* 'frost, icy cold; ice' from *saṙ-n-am* 'to freeze, to be frozen, to congeal' and so on. From this *-cʿ* comes the Armenian suffix *(a-, e-)cʿi* which forms adjectives denoting origin or possession (they refer only to people and are often used as substantives)[294]. The suffix *-ocʿ* is also formed with this. In Urartian this has the form *-use/-usi-[-oćˊ/-oći-]* and has the same meaning as in the Armenian (see the previous point). As we have seen, apart from the words formed with *-use/-usi-*, in Urartian we have three or four more words with this suffix which are all nouns. Actually the suffix *cʿ* [ć] in Urartian, contrary to the Armenian, is absent in the nominal and verbal inflexion systems (about this see also V.2.10 and VI.2.5). According to this, we can assume that in Urartian this suffix appears in its primary - derivational function and has less usage, than in Armenian.

2.13 **-(a=, i=)ni/e** *[-(a=, i=)n(i)]* - Arm. *-an, -in, -n*. I.Diakonoff[295] in Urartian texts distinguishes the suffix(es) *-(a=)ne/a-* and gives the following examples: 1) with *-(a)na- - tarma=na/e=lə* 'fountains, (water) spring', *burg=ana-* 'castle, protection', *aṭq=ana* 'offering donative', 2) with *-a=nə - baba=nə* 'mountain', *eba=nə* 'country, district', *paḫa=nə* 'cattle', 3) with *-nə - paḫi=nə* (see the prev.), *ti=nə* 'name', *ar(a)=nə* 'good', *jara=nə* 'chapel'. He indicates that these suffixes in their form resemble the Urart. definite article *-nə* and adjective suffix of appurtenance *-nə*. G.Wilhelm[296] distinguishes this *-nə* suffix in the Urart. word *ti=nə* 'name' and considers it possible that the same suffix is also present in the words *ebanə* 'country', *jaranə* (a sanctuary), *qarqaranə* 'armour'[297], *sirḫanə* 'a structure, building', the roots of which, however are not attested individually. He sees the same suffix *-nə* (functionally different, but in the same form) in the adjective *quldi=nə* 'uninhabited (?), vacant (?)'. First, let us discuss the suffix *-(a=)na-* presumed by I.Diakonoff and point out that the word provided by him, *tarmana=lə* is the result of incorrect reading. It is now read as pl. *tarmane=le* and sg. *tarmane*. The words *burg=ana=ne* and *aṭq=ana=ne* should be broken down, in our opinion as

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[293] In Armenian instead of this *-cʿ* sometimes *-s-* or *-z-*, is present, as for instance: *el-oyz-an-em, kor-ows-an-em, pʿl-owz-an-em* instead of **el-owcʿ-an-em, *kor-owcʿ-an-em, *pʿl-owcʿ-an-em*.

[294] See more detail about this, G.Jahukyan, 1988:235-236. It is not excluded that the Armenian suffix *-acʿi* with the meaning '(someone) from the *X*, *X* inhabitant' is attested in the Urart. word *LÚtard=aš(=az/s)=ḫe* if, of course, the Urart. *-ḫe/-ḫi- [-he/-hi-]* - Arm. *-i* correspondence is correct (see above point 2.1).

[295] I.Diakonoff, 1971:66.

[296] G.Wilhelm, 2004:125.

[297] Cf. Arm. *karkaṙ* 'heap of stones' (see III.2.4 point 13).

burga(=)na=ne, aṭ=qa(=)na=ne. In the bilingual inscription of Kelishin,[298] we have the following correspondence [UDU.MÁŠ] GAL^MEŠ aṭ-qa-na-ne - [UDU].MÁŠ GAL^MEŠ e-qu-te 'big goats (for) offering' [KUKN 30 Ur. 16/Akk. 14], for the *aṭ(=)qa=na=ne*[299], which is usually translated 'offering, donative', 'sacrifice (?) where e-qu-te (gen. of *eqûtu(m)*) means 'of sacrifice'. Accordingly, according to the Kelishin inscription, the *aṭqa(=)na=ne* must either be in the genitive, or an adjective meaning 'sacrificial'. The latter is most probable. In Urartian texts we also have the following words with the *-a=ni/e* suffix: *kai=ani/e* 'station (?), place to stay/stop (?)'[300] (Arm. *kay-an* 'station, place, post; position; residence'), *am=ani/e* 'pot, container'(?) (Arm. *am-an* 'vase, vessel, pot; cloak-bag'[301]), *alg=ani/e* 'border' (Arm. *arg*, cf. *arg-el-an* 'hindrance, obstacle, embarrassment', dial. *bk'-arg* 'hindered by snow-storm' (*bowk'* means 'snow-storm'))[302]. As for the suffix *-i=ne* which is deemed a widespread adjective suffix and allegedly indicates appurtenance, then G.Wilhelm rejects that idea. He views it as relational suffix, which is attached to the genitive modifier to avoid vowel accumulation in case agreement (about this, see in detail V.2.1 point 1). Nevertheless in Urartian, at least in a number of words, one can clearly distinguish the adjective suffix *-(i=)ne* which has no relation with the above suffix. For example: - *alsu(i)=ne* 'great, big' (cf. *alsu(i)=še* 'greatness'), *urbi=ne* 'provided for offering, sacrificial' (cf. the verb *urb-* 'to sacrifice', as well as the nouns ^LÚ*urbi=ka=ni/e* '(pagan)priest who make sacrifice' and *urbi=ka=še* '(?)'[303]), etc.[304]. Apparently, in these words one should also see the suffix *-(V=)ni/e*. In Urartian we also have *-V=ne* collective and *-u(=ne)* adjective suffixes, in which it is similarly

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[298] See N.Harouthiounyan, 2001:439.

[299] We also have the Urartian verb *aṭqana=d-* 'to make an offering, to sacrifice', from the stem *aṭqana* (N.Harouthiounyan, 2001:439).

[300] Our translation (about this more in detail, see III.2.3 point 28.3; VII.2 point 1). I.Diakonoff (1963:72, 89) translates this, doubtfully 'in front of him' (?).

[301] N.Harouthiounyan, 2001:434, see also III.2.1 and III.2.2.

[302] In the words qu-du-la-ni/é 'temple' - Arm. *kot'oł* 'obelisk, monument' i-me-na-ni/é or i-mi-na-ni/é (also written in the logogram ^ÉURU₄-na-ni/é) 'base, foundation' - Arm. *himn* 'base, foundation', the word-final *-(a=)ni/e* apparently is the case ending (perhaps – ablative pl., see V.3 point 4). They are attested only in the following word collocations, respectively: qu-du-la-né šú-ḫi-na-ṣe(e)/GIBIL-ṣe [KUKN 36, I₄, II₄, 38b₁₁; 270₅; 392₅; 424₇] and i-na-(na)-né i-me-na-ni/^ÉURU₄-na-né e-di-né [KUKN 202₅, 247₇, Ay-susi II₄ (Ayanis I)].

[303] About last two see IV.3 point 2.16.

[304] The suffix of the same kind is also present in Urartian proper names, as: ^d*Airaini/e*, ^d*Ḫuṭuini/e*, ^m*Išpuuini/e*, ^d*Nalaini/e*, ^d*Šiuini/e*, ^d*Waruba(i)ni/e*, *Ardini/e*, ^URU*Arṣuniuini/e*, ^KUR*Bia(i)ne=le*, ^KUR*Elaini/e*, etc. In general, in Urartian the particle *-ni/e* occurs in different positions and has functional significances and origins whose differentiation often become impossible. For example, the similar suffix is also present, as a second component, in the compound suffixes *-usi=ne* and *-V=ši=ne*, which often appear instead of *-use* and *-V=še*, especially before the postpositions *-kai(ne)* and *pei(ne)*. But it is not likely that the latter has any connection with these suffix(es). In Urartian, the ablative and definite nominative singular markers also have the same form.

possible to distinguish the same component *-ne* (about these suffixes, see IV.3 point 2.7 and 2.14). It would seem that the *paḫi/a=nə* 'cattle' example given by I.Diakonoff should be viewed in exactly this collective meaning (?).

Thus, in Urartian with the suffixes *-(a=, i=)ni/e* [-a=n(i), -i=n(i), -n(i)] we have the following words: *tarma=ni/e*, '(water) spring'[305] or 'a building'[306], *burgana=ni/e* 'tower, fortress', *aṭqana=ne* adj. 'sacrificial', *baba=ni/e* 'mountain', *sirḫa=ni/e* 'a structure, building', *eba=ni* 'district, country' *ti=ni/e* 'name', *ar(a)=ni/e* 'kindness' or 'masculine, virile'[307], *jar=ani/e* 'pedestal, socle', 'a building adjacent to the sanctuary', *alg=ani/e* 'border(?)', *kai=ani/e* 'station, place to stay/stop'[308] (Arm. *kay-an* 'station, place, post'), *ama=ni/e* 'vessel(?), pot(?)' (Arm. *am-an* 'vase, vessel, pot; etc.'), *qarqara=ni/e* 'armour' or 'buckle', *quldi=ne* 'virgin, uncultivated (earth, land)', *alsu(i)=ne* 'big, great', *urbi=ne* 'sacrificial (animal)'. Among these, in the words: *aṭ=qana=ne, urbi=ne, alsu(i)=ne, quldi=ne* and perhaps, also in the words: *ar(a)=ni/e, baba=ni/e, tarma=ni/e, ti=ni/e, eba=ni*, the original suffix is *-ni/e* and in *kai=ani/e, jar=an/e* and *alg=ani/e* most probably the suffix is *-ani/e*. There is no clear interpretation for the others.

In Armenian we have the following suffixes, respectively: 1) *-an*, forms nouns and adjectives, particularly (but not only) from the verbal stems as, for instance: *kay-an, -i* 'station, place, post', *xor-an, i-a* 'pavilion, tent' *hnj-an, i-a* 'press; winepress; vat' *šrǰ-an, i-a* 'turn, circuit, circulation, cycle, period, round, etc.', *ǰnǰ-an, i-a,* 'duster, rubbing-cloth, rubber', *ord-an* 'cochineal; kermes; scarlet' (from *ordn* 'worm'), etc., 2) *-in*, among other usages, also forms adjectives, as in the following: *ver-in* 'that is above, high, upper, superior', *mt'-in* 'dark, obscure', *stor-in* 'inferior, low, bottom', *xor-in* 'deep; impenetrable', *miǰ-in* 'that is in the middle; middle', etc., 3) *-n*, in Classical Armenian in many words it was already not comprehended as a suffix, as: *anj-n* 'person' *aṙ-n (ayr)* 'man' (cf. Urart. *ar(a)ni/e*), *ez-n* 'ox', *ard-n* 'lance, spear' etc. Some of them come from PIE. suffix **(-e,-o)-no/i, -*nā̄*, which initially formed adjectives and verbal nouns, and some from **-en/-*on*, while some others, have different origins[309].

2.14 ***-(i)a=ne, -ne*** *[-(i)a=n, -n]* - Arm. *-(e)an, -ani, -n* (collective suffixes). In Urartian we have a number of words with collective meanings which have the endings *-(i)ane, -ne*. The first to be distinguished among them should be: ^LÚ*daršu=ane*^(MEŠ) [darsu=an] 'people, group of people' (Arm.. *da(r)s, -ow* 'group of people; troop, division, etc.', see III.2.3 point 14) and ^LÚ/SAL*uedia=(a)ne*^(MEŠ) (gen. ^LÚ*uedia=(a)ne=i*) 'women' (cf. the verb ^LÚ*uedia=d-* 'to castrate (literally: to make

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[305] This is according to I.Diakonoff (1963:61, 91; 1971:66, 77, 85).

[306] Cf. Arm. dial. *t'arma* 'wood garret, grape trellis, etc.' (G.Jahukyan, 1988:143).

[307] Cf. Arm. *aṙn-a-bar* adv. 'manly, vigorously' (N.Harouthiounyan, 2001:435).

[308] I.Diakonoff (1963:72, 89) with doubt translates it 'in front of him (?)'.

[309] About this in detail, see G.Jahukyan, 1987:234, 238 and 241.

woman)'. In all likelihood the same suffix is present also in the words ^{m}*ṣep=ane* 'plasterer(s)'[310], *and=ane* 'fields (?)' (Arm. *(h)and* 'id' (?)[311])[312].

In Armenian we have the suffixes *-(e)an*, *-ani* with collective meanings, as in: *ji-an* 'horses', *xowž-an* 'multitude, populace', *azat-ani* 'the nobility' *eric'-ani* 'the priests', *glx-ani* 'the heads', *awag-ani* 'court, nobility, grandee', *kan-ani* 'women', etc. (as a rule the words with *-ani* belong to the *o-a* 'mixed' declension). In Armenian, words formed with the above-mentioned suffixes *-an* and *-ani* and having collective meanings, have singular declension, for example: *kanani* - gen. *kananwoy*, *eric'ani* - gen. *eric'anwoy*, etc. We have the same picture in Urartian; this is clearly seen in the word form $^{LÚ/SAL}$*uedia=(a)ne=i* (sg. gen.). The fact that $^{LÚ/SAL}$*uedia=(a)ne* should be understood in the collective is confirmed by the $^{LÚ//SAL}$*uedia=(a)ne*^{MEŠ} writing, where the determinative MEŠ demonstrates plurality (cf. also ^{LÚ}*dar-šu=ane*^{MEŠ} 'people, population, group of people'). Different views exist in the Armenological literature on the origin of these suffixes[313]. The attestation of these suffixes in the Urartian texts confirms that they have a long history.

2.15 **-V=še, -V=ši=ne** *[-V=s, -V=si=n]*. (-*še* in the word-final position (absolute sg.), in other cases -*ši*-). It is a widespread suffix in Urartian and has the following main usages[314]: 1) forms abstract nouns from verbal stems, as: *ar=u=še* 'gift', 'good deed (?)' - from the verb *ar-* 'to give' (Arm. *y-ar-em* 'to join, to attach, to affix, to add' or *ai-n-owm* 'to receive, to take, to gather, etc.' (see III.2.3 point 5)), *izi=d(=)u=še* 'order (?)' - from the verb *izi=d-* 'to command (?), to order (?)', *man(=)u=še* '(?)'- from the *man-* 'to be, to remain, to stay' (Arm. *mn-am*, 'to remain, to stay'), etc., 2) forms abstract nouns from nouns (sometimes with very specific meanings), as: *alsui=še* 'greatness' - from *alsui-* (cf. *alsui=(i)ne* 'great'), *ardi=še* 'order, command' from **ardi-* (Arm. *ard, -i/ow* 'form, order'), *ulgu=še* 'life' - from **ulgu-* (Arm. *olǰ, -oy* 'alive, living, safe'), etc., 3) manifests collective meaning, as: ^{LÚ}*ar=še*^{MEŠ} 'youth(s)' or 'men' (Arm. *ayr* 'man' - nom./acc. pl. *ar-k'/s*, see Table in III.2.2 (pages 37-38)), ^{LÚ}*wa(=)še*^{MEŠ} 'men'[315], *kumemu=še* (translates the logogram ^{GIŠ}TUKUL^{MEŠ}) 'a kind of weapons', ^{LÚ}*tašmu=še* 'captive(s) (?)', ^{LÚ}DUMU^{MEŠ}-ni=še   'sons',   ÙKU^{MEŠ}-še   'people,   population',   III

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[310] N.Harouthiounyan (2001:461-462) translates 'a constructional profession' justifiably comparing it with the n. ^{LÚ}*ṣipikane (= ^{LÚ}ṣepikane)* and v. *ṣip- (= ṣep-)*. I.Diakonoff (1963:36, 94) considers it as a personal name.

[311] The word interpretation - by G.Jahukyan (1988:149-150).

[312] It is not excluded that the words *paḫi=ne*^{MEŠ} 'cattle' (Arm. *paxrē* 'cattle, herd'), *ulṭu=ne*^{MEŠ} 'camel(s)' (Arm. *owłt, -ow* 'camel') attested in the same context with them should be also perceived in the collective meaning, although another interpretation for the word-final -*ne* is possible.

[313] See in detail about this: N.Mkrtchyan, "Армянские ареальные показатели множественности", Near. 2000:369-377.

[314] About this suffix and its possible meanings see also G.Melikishvili, 1964:29; I.Diakonoff, 1971:59; M.Khachikyan, 1985:64; G.Wilhelm, 2004:125, etc.

[315] For the collective meaning of the words ^{LÚ}*ar=še*^{MEŠ} and ^{LÚ}*wa=še*^{MEŠ} see also I.Diakonoff, 1971:69.

`PIT.ḪAL.LU=š[e](?)` '3 horsemen (riders)', etc.[316], 4) shows a native or inhabitant of some place, as: *Biaini=še* 'inhabitant of the (country) Biainele', *luluini=še* 'inhabitant of the luluinele (enemy countries)'.The latter two are attested only together with the preceding *ai* conjunction.

From this suffix is formed the compound suffix *-ši=ne/-ši=ni-*, which is present in the word *gunu=ši=ne* n. 'fighter', adj. 'military, battle'. The number written as logogram `III-še` is a noteworthy form which has the phonemic complement *-še* [-s]. It is attested in the phrase `III-še UD`[ME]`: na-ú-be -` '(I) waited(?) three days' (I.Diakonoff). Cf. the Arm. numbers *ere-k′* 'three', *č'ore-k′* 'four'. The usage and meaning of the *-še* [-s] suffix remind us of the Arm. plural nominative marker *-k′* (acc. *-s*), which in Armenian appears also in the derivational meaning, as in the following words: *anc'-k′* 'passage, journey, street', *gir-k′* 'book', *ere-k′* 'three', *č'ore-k′* 'four', *mit-k′* 'mind, intellect', *vaz-k′* 'course; leap, gallop; palpitation', *zar-man-k′* 'wonder, miracle', *hmay-k′* 'divination, augury', *p'owk'-k'/s* 'blast, blast engine, etc.', *mawrow-k'/s* 'beard' and in many others (such usage is also active in Modern Armenian). In Armenian from *-k′* we have also *-k'in, -k'ean* compound suffixes, as, for instance: *erko-k'in, erko-k'ean,* 'both', etc. In Armenian the words formed with these suffixes have a plural declension pattern (plurale tantum) whereas, in Urartian, the suffix [-s/-si-] is perceived as part of the stem[317], at least, when it appears in the form of abstract nouns. There is no agreement among scholars on the origin of the Arm. *-k′*. The most accepted view is that it derives from the *-*es/-*os* ending of the Proto-Indo-European plural nominative[318].

2.16 *-i=ka(=ne), -a=ku=ne [-i=ka(=n), -a=ku=n]* - Arm. *-k(n); -owk; -ik; -ik-an*. In Urartian, from these suffixes we have the following words: [LÚ]*ṣeṗi=ka=ne* [ṣeṗi=ka=n][319] 'plasterer(s)(?)' (cf. *ṣep-* 'to plaster' - Arm. *cep'-em* 'to plaster, to cement'), [LÚ]*urbi=ka=ne,* '(pagan) priest who make sacrifice(?)', [LÚ]*urbi=ka=še*[320] '(?)' (cf. *urb-* 'to sacrifice', adj. *urbi=ne* 'sacrificial (?)'), *ušt=ak=une* [oṣṭa=ku=n] '(?)' (cf. *ušt-* [oṣṭ-] 'to go (raid)' - Arm. *ost-n-owm* 'to leap, to jump, to rush forward, etc.', *ost-an-im* 'to burst forth, to fly or escape from, to go out of, to rush

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[316] It is not excluded that the same suffix is also present in the words [UDU]*šuše*/UDU-*še*, ÁB-*še*, GUD-*še*. In scholarly literature it is considered that the final *-še* of [UDU]*šuše* belongs to the stem/root. J.Friedrich (1952:298) proposes to read the forms UDU-*še*, ÁB-*še*, GUD-*še* as UDU.ŠE, ÁB.ŠE, GUD.ŠE seeing, behind the ŠE, the logogram 'fat', as it is in the Hittite.

[317] As in Modern Armenian, for example, *xos-k′* 'speech' (gen. *xos-k'-i*, inst. *xos-k'-ov*), *awren-k′* 'law' (gen. *awren-k'-i*, inst. *awren-k'-ov*), etc.

[318] See in detail G.Jahukyan, 1982:139 and 222 note 75.

[319] N.Harouthiounyan (2001:462) analyses it as [LÚ]*ṣipi=kani/e* seeing in *-kan(i)* the Urart. postposition *-ka(i)* with the meaning 'in front of', and translates the word 'in front of *ṣipi* (*ṣipi* man)'. But cf. analogous [LÚ]*urbi=kani=kai* 'in front of *urbi=ka=ni/e*', where together are present both the postposition *-ka(i)* and derivational suffix *-ik=ani/e*.

[320] This form attests to the existence of the suffix *-V=ka* in Urartian, which corresponds to the Arm. *-a/ow/i-k*. The latter is viewed (but not always) as a borrowing from Iranian.

forward')[321]. There are many words in Armenian with the suffix *-k(n)* (pl. nom./acc. *-kown-kʿs*, oblique cases *-kan*), as, for example: *armow-kn* 'elbow; fore-arm', *dalow-kn* 'jaundice', *krow-kn* 'heel', *mow-kn* 'mouse', *arega-kn* 'sun', *kayca-kn* 'lightning, thunder', etc. This suffix comes from the PIE. *-kōn/*-kon* (it is a compound suffix formed by *-ko/-kō-* and *-n*). The suffixes *-ik*, *-owk* are quite widespread in Armenian. They have mainly diminutive meanings or form nouns with the meaning of a person (but not only), as for instance: *ałǰ-ik (-kan)* 'maid, girl', *astł-ik (-kan)* 'morning-star', *xcʿ-ik (-kan)* 'small room, cell', *man-owk* 'babe, little child', *mart-ik* 'warrior, soldier', *r̄azm-ik* 'warrior', *mayr-ik* 'mam, mamma, dear mother', *pʿokʿr-ik (-kan)* adj. 'very little, quite small, minor', etc., and in the word *mard-ik (-kan)* 'men', also a plural meaning. In *-ik-an* form we have the word *čʿłǰ-ik-an* 'bat', etc. Some of the *–ik̇*, *-owk* forms come from the above-mentioned *-k(n)*- by dropping the final *-n*[322], and some, which have interfused in Armenian, are of Iranian origin. Those suffixes which in the pl. nom./acc. *(-kown-kʿs)* and genitive-dative sg. *(-kan)* have preserved the final *-n*, must be chiefly considered as native, in Armenian[323]. In Urartian it is attested in the forms *-ku=ne* and *-ka=ne*. Deriving from the context, perhaps, we can assume that the word [LÚ]*šepi=ka=ne* is in the genitive[324]. If that is true, then maybe we can assume that, for the two variants of this suffix in the Urartian declension system, a distribution analogous to that of the Armenian (gradation) operates. But in our opinion the probability of this seems low.

2.17 **-(u=)mene** *[-(u=)men]* - Arm. *-(ow)mn* (oblique *-(ow)man*, pl. nom./acc. *-(ow)mown-kʿs*) < *-men*. I.Diakonoff considers it possible to distinguish the suffix *-umə* in the Urart. word *sudumeniedi* '(?)' (analyzing it as *sud=umə=nedə*[325]), which he compares with the Hurr. suffix *-umme/-ume*[326]. But it is evident that here we have the suffix *[-(u)men]* - Arm. *-(ow)mn* (*ar-mn* 'root', *beł-mn* 'harvest', *geł-mn* 'fleece,

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[321] It is not excluded, that this suffix is also present in the word [LÚ]*udi=k/qu=ne* ([LÚ]*ú-di-qu-ni/é*) 'governor (of district)(?)', cf. the possible verbal form *ú-di-da-be* '(?)'. In this case, perhaps, it may to be compared with the Arm. verb *owt-em* 'to eat'. For the meaning cf. the Arm. *ker* 'nourishment, food; prey' - fig. 'diocese, province', where such meaning comes from the notion 'eat' (see H.Acharyan, HAB, II:576).

[322] This process also continued later, as a result of which, in Modern Armenian, many of the words formed with this suffix have lost the final *-n,* whereas in Classical Armenian they still retained this *-n*.

[323] About this and adjacent issues more thoroughly see G.Jahukyan, 1987:238-239; A.Abrahamyan, 1976:27-34, etc.

[324] In the passage of inscription where the word [LÚ]*šepi=ka=ni/e* is attested, various groups of people are mentioned. Some of these words apparently are in the genitive: see N.Harouthiounyan, 2001, ins. 412b note 14.

[325] In fact, the Urartian directive sg. ending is *-(e/i)di*, and not - *-nedi*, as supposes I.Diakonoff. About this see V.2.8.

[326] Speaking about the Hurr. suffix *-umme, -ume*, I.Diakonoff (1971:146, note 154) does not exclude its attestation in Urartian in the words *sud=ume=niedi* '(?)' which he compares with the verb *sud=u=št=u(=ne)*, and also - *kulme* 'supply, backup'. The latter he compares with the verb *kulu-* 'leave, flee' presuming the **kul=ume > kulme* changing. Later on (1979:75), analyzing this question, he notes that in Urartian this suffix is represented only in one doubtful word (likely considering the *sudumeniedi*). G.Wilhelm (2004:125), with doubt, indicates *-umə* as an indefinite marker, listing the following examples: *ašhume* 'offering (?)', *sudumeniedi* '(?)'.

wool', *hi-mn* 'foundation, base', *ser-mn* 'seed, grain; berry; corn', etc.). In Urartian from this suffix we have the words *imeni/e* (pl. abl. *imen=a=ne*) 'foundation, base' - Arm. *himn, -man/mown-kʹ* 'foundation, base'[327] and the above-mentioned *sud=u=meni-* '(?)'. The words formed with the root *sud=u-* are attested only in one of the inscriptions [KUKN 520 f.s.$_{13}$, r.s.$_{8,8}$], once - in the noun *sud=u=meni/e=edi* (directive from the **sud=u=mene/i*) and twice - in the form of the verb *sud=u=št=u(=ne)*. It is noteworthy that in Armenian the words produced with the suffix *-ow-st,* in the forms suffixed by *-(ow-)mn* appear in just that *-ow-mn* version. As the word-forms *sud=u=št-/sud=u=meni-* demonstrate, the same picture is also present in Urartian (see also IV.4 point 1.1 about this). The Armenian suffix *-mn* derives from the PIE. **-men/-mn̥-* which, on the whole, forms action nouns. In Armenian the *-ow-mn* alternative of this suffix forms verbal nouns from verbal stems, as, for example: *lkʹ-owmn* 'abandonment; desertion', *holov-owmn* 'rolling, rotation', etc. It is considered as a relatively late formation[328].

IV.4 Verbal suffixes

1. **Urartian verbal suffixes.** About the classification of the Urartian verbal suffixes, see VI.1 point 1. About suffixes that form verbal nouns, see IV.3 point 2. Here we will comprehensively present those verbal suffixes whose grammatical meanings in Urartian are either weakly understood, or are not understood at all. At least, there is no evidence in the available material.

1.1 *-V=št- [-V=st-]* - Arm. *-V-st < *-V-s-ti*. It is a widespread verbal suffix in Urartian. In all available attestations it is directly attached to the thematic vowel of the verbal stem, as in the following examples: *ama=št-* 'to burn' (cf. *am-* 'id'), *šulu=št-* 'to prostrate, to fall to the ground' (Arm. *soł-am,* 'to creep, to crawl on the belly', *soł-ow-mn* 'crawling; creeping'), *šidi=št-* 'to build' (cf. *šid-* 'id'), *sudu=št-* '(?)' (cf. n. *sudu=meni=edii* (in directive) '(?)'), etc.[329]. In Urartian texts the grammatical meaning of this suffix is unclear; is not apparent[330]. In Armenian the suffix *-V-st* forms verbal nouns (action nouns) from verbal stems and is also adjoined to the verb stem-final (thematic) vowel, as, for instance: *owte-st* 'food, nourishment' (*owte-m* 'to eat'), *hangi-st* 'repose; relaxation' (*hang-č-ʹim < *hangi-č-ʹi-m* 'to repose'), *zga-st* 'vigilant, discreet' (*zga-m* 'to feel, to be sensible of'), *ima-st* 'signification, sense, meaning' (*ima-na-m* 'to understand, to know', *ima-cʹ*

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[327] See III.2.3 point 23.

[328] About this see G.Jahukyan, 1987:239.

[329] G.Wilhelm, considering *-Všt-* as the original suffix, supposes that its vowel assimilates to the preceding vowel (see in detail II.3.4 point 5).

[330] I.Diakonoff (1971:117), comparing it with the Hurr. verbal suffix *-Vst-*, considers it possible that it reflects intensiveness of an action, completeness (see also M.Khachikyan, 1985:61), but that is not apparent from the available evidence. G.Wilhelm (2004:129) also compares it with the above mentioned Hurr. verbal suffix, indicating that in Urartian the meaning of this suffix is unknown.

'understanding'), *elow-st* 'vegetation, growth' (*ela-ne-m* 'to go out', *el-owmn* 'proceeding, emanation, birth'), *p'axow-st* 'flight, escape' (*p'ax-č'i-m* 'to flee, to run away, to escape'), etc. It derives from the PIE. **-s-ti* compound suffix[331]. According to G.Jahukyan, many words shaped by the *-ow-st* variant of this suffix are new formations in Armenian, where *-ow-* plays the same role as it does in the compound suffix *-ow-mn* which forms verbal nouns[332]. A comparison of the Urart. forms *sudu=št-/sudu=men-* reveals that the same picture exists in Urartian. Also compare Urart. *(n=)ulu=št-* [(n=)uɫu=sṭ-] 'to lead, to guide, to rule', 'to march' - Arm. *yɫ-ow-mn < *y-owɫ-ow-mn* 'sending', *šulu=št-* [soɫu=sṭ=-] 'to prostrate, to fall to the ground' - Arm. *soɫ-ow-mn* 'crawling; creeping' etc.

1.2 **-(V=)d-** (alternative transcription - *-(V=)ṭ-*) *[-(V=)ṭ-]* - Arm. *-at-, -ot-, -t-* (?). It is one of the most frequently occurring Urartian verbal suffix(es). It can be positioned both after the vowels *u/o, a, i/e*, and after consonants. See, for example: *aṭ=qa=na(=d=u)-* '(to) donate, (to) gift', *erṣi/e=d=u-* 'to free, to leave', *zani/e=d=a-* 'to call, to speak', *n=ebši/e=d=u-*, etc. V.Sarkisyan compares the Urart verbal suffix *-(V=)d-* (according to him - *-du-/-tu-*) with the Arm. frequentative verbal suffix(es) *-at-, -ot-, -t-* and Basque suffix *-tu* 'do', the primary meaning of which, he thinks, is 'to do something'[333]. G.Wilhelm distinguishes the *-id-, -ud-, -ad-* (once), *-d-*, Urartian verbal suffixes, which he considers are close in form to the Hurr. verbal suffix *-ed-*, though indicating that in Urartian its meaning is not clear[334]. Some scholars derive it from the Urart. verb *d(u)-* 'to do, to make' (cf. Arm. *ta-m, tow(-r), e-t, (e)tow* 'to give, to offer; to deliver: to make, to produce, to cause, etc.')[335]. There is also an analogous use for the above mentioned verb in Modern Armenian, where it can be utilized with other verbal stems, as, for instance: *man ta-l* 'to take somebody for a stroll', *howp ta-l* 'to strangle', *jayn ta-l* 'to speak', *kowl ta-l* 'to ingest', etc. Cf. also the Classical Armenian so-called analytic form (mood) of causative (*ta-m acel*, *ta-m spananel*, *ta-m gorcel*, etc.) where sometimes the verb *aṙn-em* 'to do, to make' substitutes the verb *ta-m*. But it seems more probable that in the Urart. *-(V=)d-* one should indicate the Arm. frequentative suffixes *-ot-, -at*[336]-, *-t-*, from which we have, for example, the verbal forms *y-awš-at-em* 'to cut to pieces, to slaughter, etc.' (cf. Urart. *n=ebši/e=d-* [n=ewše/i=ṭ-] 'to slaughter, to cut out'), *hast-at-em* 'to affirm, to confirm', *krč-t-em* 'to gnash, to grind', *bek-t-em* 'to break to pieces', *xoc'-ot-em* 'to wound severely' and others.

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[331] G.Jahukyan, 1987:240.
[332] G.Jahukyan, 1982:125-126.
[333] See V.Sarkisyan, 1998:120-140.
[334] G.Wilhelm, 2004:129.
[335] See, for example, G.Melikishvili, 1964:45. G.Jahukyan (1988:139) compares the latter with the PIE. **dhē*, from which we have the Arm.verb *dn-em* 'to put, to lay'.
[336] This suffix in the scholarly literature is usually connected to the verb *h-at-an-em* 'to cut, to break'. But it is not justified in all cases. About this see G.Jahukyan, 1987:353.

1.3 ***-an- [-an-]*** - Arm. *-an-*. In Urartian, it is attested in the verbs *ke(i)d=an-* 'to aim at, to point (at), to direct (against)'[337], *ušḫ=an-* 'to give(?), to endow', maybe also in *ašt=an-* '(?)' and *ḫiš=an-* '(?)'. I.Diakonoff, presenting the first two examples, considers it possible that this suffix has a causal nuance[338]. It is difficult to agree with him on this question. At least, the available attestations do not confirm his opinion, particularly since the evidence is scarce and not reliable enough to draw such a conclusion. G.Wilhelm also distinguishes the same verbal suffix *-an-* in Urartian but considers its meaning unidentified[339]. This suffix, apparently, should to be compared with the Arm. verbal suffix *-an-*, which is widely used in Armenian. The latter is partly derived from the PIE. **ne* with the preceding *-a-* or *-ə-*, as, for instance: *aṙog-an-em, harc'-an-em* and so forth, and in part originates from the PIE infix *-n-*, or has other derivations. Examples include: *awc-an-em, bek-an-em, boc'-an-em, mec-an-am, hn-an-am*, etc.[340].

1.4 ***-ul- [-or-(?)]*** - Arm. *-or-* (?). It is attested frequently in Urartian, but an independent verbal suffix should not always be seen behind it. In many cases it probably should be viewed as the component of some verbal endings of the Urartian subjunctive mood (irrealis) (about this see in detail VI.2.3). J.Friedrich (1933:5) and G.Melikishvili (1964:50-51) consider it as verbal suffix specific to the transitive verbs, whose significance is not perceived. M.Khachikyan finds it probable that it may indicate actions made in favor of subject and presents the verbs *par=ul-* '(he/she) brings, (he/she) takes (for himself/herself)' and *badg=ul-* 'to besiege'[341], as examples. Apparently, this suffix corresponds to the Arm. verbal suffix *-or-* (cf. *gl(-or)-em* 'to roll', *mol(-or)-em* 'to go out of one's way, to ramble', etc.). In Armenian it forms nouns as well. Other Urartian verbs formed with this suffix include: *ter(=ul)-* [der(=or)-] 'to put, to place' (Arm. *dir, der* 'id'), *suui(=d)(=ul)-* [juwi(=t)(=or)-] (?) 'to move, to throw' (Arm. *jg(-t)-em* 'to stretch; to throw, to fling; etc.' (?), see III.2.4 point 21), *wal(=)d(=ul)-* [wəl(=)t(=or)-] 'to overcome, etc.' (Arm. *gl(-t)(-or)-em* 'to win over; to roll down; etc.', see III.2.3 point 63), and maybe also the following examples: *mak=ul-* [mək=or-] 'to throw (arrow)' (cf. Arm. *mk-ownd* 'lance, halberd', see III.2.3 point 36), *ur(=ul)-* 'to spread (?)/to place (?)' (cf. Arm. *owr* 'place', see III.2.3 point 44). As the verbal form *suui(=d)=ul-* (cf. the verbal form *suui-*) shows, the suffix -ul- [-or-] follows the -d- [-ṭ-][342] (about the latter see above, point 1.2).

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[337] This is my translation. Other authors translate it 'to send (troops)' (see II.2.3 point 30).

[338] He notes the same suffix (with the same meaning) in Hurrian as well (in the latter, also - with the *-am-* variant) (I.Diakonoff, 1971:114). About this see also M.Khachikyan, 1985:60.

[339] G.Wilhelm, 2004:129.

[340] About this see in detail G.Jahukyan, 1982:170-187.

[341] M.Khachikyan, 1985:61.

[342] If we suppose that in the Arm. verb *gl(-t)(-or)-em* 'to roll (down)' the *-t-* is the same as the Urart *-d-[-ṭ-]*, then the Urart. verb *wal(=)d=ul-* [wəl(=)t=or-] is another example, where the suffix *-ul-* follows the *-d-*.

2. **Other possible verbal suffixes.** I.Diakonoff points out a few more Urartian verbal suffixes, such as, *-ar-* which he considers as Hurrian-Urartian verbal suffix, with factitive values. G.Wilhelm[343] provides the examples of *qapq=ar=ul-* 'to besiege', *up=ar(=)d=d-*, *ṭup=ar(=)d-*, in which he indicates the same suffix *-ar-* as iterative-frequentative in Hurrian. He also compares it with the Urartian corresponding verbal suffix, but considers the latter's meaning in Urartian to be unclear. The word forms *upardu(=d)-* and *ṭupardu-*, mentioned by G.Wilhelm, apparently, are formed from the root *ardu/i* 'order' (Arm. *ard, -ow/i* 'order, form, shape') (see III.2.3 point 4.4, 4.5; VI.2.4), therefore the probability of the presence of the suffix *-ar-* in them is low. I.Diakonoff also distinguishes the verbal suffix(es) *-iy-*, *-uy-* in Urartian which, according to him, are normally used with *-ar-* and also mean an action done in the interest of the subject (himself/herself/itself). He substantiates this interpretation by presenting the following examples: *bed=uy=a(r)=šə* 'on coming back, on return of', *kul=uy=ar=š-* 'to flee', *an=iy=ar=d=u/o(=nə)* 'recalcitrant(?), independent(?)'. In fact, the first word is written be-du-i-a-šə, therefore here the suffix *-ar-* is absent, and generally speaking, such analysis of this word is imaginary and unreliable. For the second word we have *ku-lu-ar-ši-*, where, although the *kul=uy=ar=ši-* segmentation is possible, it is not inevitable. The third word, which he later translates 'guilty', is without doubt formed with the stem **y=ardu* (Arm. *(y-)ard, -ow* 'order, form, arrangement, etc.') and the negative prefix *an-* (Arm. *an-*) (see III.2.3 point 4.3); hence, this word also needs to be eliminated. Also, the suffix *-il-* pointed out by him, for which he mentions the verb *abili-* 'to add, to join' (G.Wilhelm also supports this view), is equally doubtful. But I think the stem of this word, of course, is *abeli-* [aweli-] (Arm. *aweli* a./adv. 'exceeding; more', *y-awel-owm* 'to add, to augment; to join'). If the root of the Arm. verb *y-ar-nčʿ-im, y-ar-em* 'to attach, to join, to add', 'to relate or belong to, etc." (see III.2.3 point 5) should be seen in the Urartian verb *ar(=)nu=iale* '(to) come to the aid', then surely in Urartian we must have the verbal suffix *-nu-.* The latter, in this case, perhaps, ought to be compared with the similar Arm. suffix *-n(ow)-* < **-nu-* (cf. *aṙ-now-m* < **ar-nu-mi, ǰeṙ-now-m* < **gʷher-nu-mi, l-now-m* < **plē-nu-mi*, etc.).

IV.5 **Summary**

Summarizing the analysis of the Urartian affixes, we come to the following conclusion:

1.   The nominal affixes attested in the Urartian inscriptions - except for one or two - have their obvious parallels in Armenian. They often appear in their primary forms and functions in Urartian texts. As: Arm. *-oytʿ, -i* < **-eu-ti -*

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[343] G.Wilhelm, 2004:129.

Urart. [-ewt(i-)] or [-iwt(i-)], Arm. *-k(n), -ka(n), -kow(n)* < **-kō-n/ko-n* - Urart. *-ka(=n)/ku=n*, etc. They are mainly native affixes and have Indo-European origin.

2. A great number of native nominal affixes representing the ancient strata of Armenian are attested in the Urartian texts.
3. The verbal suffixes attested in Urartian also have their parallels in Armenian, sometimes with distinct differences in usage from the Urartian. Here the main difference is the absence in Urartian of the Armenian *c'-*al (formed with *c'* affricate) verbal suffixes. Instead, forms with *c'*, with their initial - derivational values, are attested.
4. Some Urartian suffixes have their parallels in other languages as well, particularly, in Hurrian.