URARTIAN PHONOLOGY AND MORPHOLOGY

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This work is a study of the language of the cuneiform inscriptions of the kings of Urartu (c. 830 - c. 650 B.C.). Using the written forms as basic data, it attempts to analyze formally the phonology and morphology of the language by application of the methods of descriptive linguistics.

The phonemic system has been found to consist of three vowels only: /a/, /e/, and /u/, and at least nineteen or twenty consonants: /p/, /b/, /p̣?/, /t/, /d/, /ṭ/, /k/, /g/, /q/, /s/, /z/, /ṣ/, /š/, /r/, /l/, /m/, /n/, /h/, /ʔ/, and /x/. The last consonant finds written expression in the form of a discontinuity between vowels (so-called "broken-vowel writing" V_1-V_2) or by the use of a vowel sign between two vowels (thus, e.g., *a-i* or *a-i-e* = /*axe*/); the existence of this consonant accounts for the sequences of vowels which have puzzled students of this language.

The morphological classes are verbs, nouns, and particles; the last includes a number of postpositions: independent words standing after the word governed, corresponding generally in meaning to English prepositions. Each inflectional category of each class is separately examined, an exhaustive list of the forms which can be attributed to the category is presented, and an analysis is made of the formation of the category.

Verbs fall into two conjugational classes, roughly corresponding to English transitive verbs (Class I) and intransitive verbs (Class II). Generally, Class I verbs have stem vowel u, Class II verbs have a. The following personal endings can be recognized:

	Class I	Class II
Past		
First person singular	/-be/	/-de/
Third person singular	/-ne/	/-be/
Third person plural	/-tu/	/-le/
Present		
Third person singular	/-lexe/	--

In addition, a number of passives, imperatives, and deverbatives are tentatively identified. A thorough examination of all the relevant forms has resulted in the documented conclusion that there is no real justification for characterizing the Urartian verb as "passive."

Six cases and two number categories can be recognized for the noun, characterized by the following endings:

	Singular	Plural
General case	(unmarked)	/-le/
Ergative case	/-š(e)/	--
Genitive case	/-Ø/~/-xe/	/-axe/
Dative case	/-xe/~/-Ø/	
Allative case	/-x(e)de/	/-ašte/
Locative case	/-xa/~/-a/	/-xaṣe/

The ending -ni which occurs on many nouns is a stem formative and not a case ending.

The limited amount of data and the nature of the writing system leave many uncertainties about the structure of the language, but the main lines of its phonology and morphology seem reasonably clear. Most of the Urartian texts can be read with sufficient assurance to permit their use as historical sources. Future investigation and additional data will no doubt permit refinements of the structural analysis of Urartian.

An exhaustive bibliography of works dealing with the Urartian language and inscriptions is supplied.

ABBREVIATIONS AND SYMBOLS

Ass.	Assyrian
C	any consonant
Fr.	Johannes Friedrich (see Bibliography)
G	Albrecht Goetze (see Bibliography)
GAG	Wolfram von Soden, *Grundriss der Akkadischen Grammatik* (*AnO* 33, 1952)
IE	Indo-European (languages)
IH	E. A. Speiser, *Introduction to Hurrian* (Annual of the American Schools of Oriental Research XX, 1941)
Inc.	Incerta. Used by K of inscriptions of unknown authorship.
K	Friedrich Wilhelm König. Unless otherwise specified, reference is made to his *Handbuch* (see Bibliography). References to inscriptions in this work are by inscription number and line. References to forms or meanings not accompanied by such a citation refer to his "Wörterbuch" (pp. 168-214) under the word in question.
KB	Karmir-blur. Refers to the excavation reports by B. B. Piotrovskiĭ, Volumes I-III (see Bibliography). It is also used by Piotrovskiĭ with the numbers he assigns to the inscriptions found there.
L-H	C. F. Lehmann(-Haupt) (see Bibliography)
M	G. A. Melikishvili. Unless otherwise specified, reference is to his *UKN* (see Bibliography) by inscription and line number.
pl.	plural
sg.	singular
Ts.	M. de/von Tseretheli (see Bibliography)
Ur.	Urartian
V	any vowel

( )	In transliterations, enclose a sign, usually a reinforcing vowel, present in some occurrences of the word, absent in others. In translations, normally indicates a word necessary for the English idiom, having no counterpart in the text being translated; occasionally indicates a word present in some occurrences of the passage cited, absent in others.
[ ]	Enclose transliterations of signs or parts of signs completely lost in the original text.
⌜ ⌝	Enclose transliterations of signs or parts of signs only partly legible in the original.
⟨ ⟩	Enclose transliterations of signs lacking in the original due to scribal or engraving error.
:	Between Urartian forms, indicates that these forms seem to be variant spellings of the same word. Also used with reference to bilingual texts between an Urartian form and its Assyrian translation.
::	A strengthened form of : indicating that the words so joined are almost certainly variant spellings of one another since the contexts are identical.
~	Connects variant forms of the same morpheme, to be read "varies with" or "or."
←	Indicates that the form standing at the head of the arrow replaces the other, to be read "replaces."
Ø	zero

Proper names which appear in a transliteration are abbreviated in the accompanying translation to the first letter only. The names of the kings of Urartu are indicated by two initials, corresponding to the given name and the patronymic:

SL	Sarduri apil Lutipri		c. 835 - c. 825 B.C.
IS	Išpuini Sardurihini		c. 825 - c. 805
MI	Menua Išpuinihini	coregent	c. 815 - c. 805
		alone	c. 805 - c. 780
AM	Argišti Menuahini		c. 780 - c. 758[1]

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[1] On the dates see I. M. D'i͡akonov, *Istorii͡a Midii* (Moscow, 1956) 170-71 n. 3. Melikishvili, *Nairi-Urartu*, 205-210 suggests c. 786-764.

SA	Sarduri Argištihini	c. 758 - c. 735 B.C.
RS	Rusa Sardurihini	c. 735 - 714
AR	Argišti Rusahini	713 - c. 680
RA	Rusa Argištihini	c. 680 - c. 655
	(Sarduri, Erimena?)	c. 655 - c. 600
RE	Rusa Erimenahini	

(The order of succession of the last kings is uncertain.)

Abbreviations used in referring to the literature are given in a list preceding the Bibliography.

In referring to inscriptions, the first face (if there is more than one) is called the obverse, the second the reverse, abbreviated _obv_. and _rev_. respectively. If the sides are used, they are referred to as right and left. A text differing only slightly from the standard is called a variant, abbreviation _var_.

CONTENTS

Page

ABBREVIATIONS AND SYMBOLS ii

Chapter

I. INTRODUCTION

1.0 General 1
1.1 Available material 3
1.2 References to the literature 9

II. WRITING SYSTEM

2.0 General 11
2.1 Syllabic signs V, VC, and CV 12
2.2 Syllabic signs CVC, VCV, CVCV 14
2.3 Distribution of V, CV, and VC signs 15
2.4 Combinations of CV and VC signs 17
2.5 Use of separate vowel signs 19
2.5.1 Initial use of separate vowel signs 19
2.5.2 Reinforcement CV_1-V_1 20
2.5.3 Reinforcement V_1-V_1C 20
2.5.4 Sequences (C)VC-V 20
2.5.5 Sequences V_1-V_1 21
2.5.6 Sequences of dissimilar vowels 21
2.6 Logograms 25
2.7 Determinatives 26
2.8 Word boundaries 27

III. PHONOLOGY: VOWELS

3.1 /e/ 28
3.1.1 Interchange of i and e 28
3.1.2 Incomplete series of Ce signs 31
3.1.3 i and e submembers of phoneme /e/ 31
3.2 /a/ 32
3.3 /u/ 33
3.4 Contrast and interchange of vowels 33
3.5 Vowel sequences 36
3.5.1 Sequences of identical vowels (V_1-V_1) . . . 36
3.5.2 Sequences of dissimilar vowels (V_1-V_2) . . . 36
3.5.2.1 Examples of variant spellings of V_1-V_2 . . . 36
3.5.2.2 Classification of frequent spelling variants 40
3.5.2.3 Classification of infrequent variants . . . 42
3.5.2.4 Summary of sequences of dissimilar vowels . 44
3.5.2.5 Interpretation of sequences V_1-V_2: /x/ . . . 45
3.5.3 Interpretation of orthographic V and V_1-V_1 . 53

Chapter Page

IV. PHONOLOGY: CONSONANTS

4.1 /p/, /b/ 55
4.2 /k/, /g/, /q/ 55
4.3 /t/, /d/, /ṭ/ 56
4.4 /s/, /z/, /ṣ/ 58
4.5 /š/ 58
4.6 /r/, /l/ 60
4.7 /š/, /r/, /l/, /m/, /n/ as a group 60
4.8 /m/, /n/ 63
4.9 /h/ 64
4.10 /x/ 64
4.11 /ʔ/ 64
4.12 y 65
4.13 Summary of phonemes 65

V. MORPHOLOGY: GENERAL

5.1 Word classes 66
5.2 Terminology 66
5.3 "Singular" and "plural" 67

VI. MORPHOLOGY: VERB

6.1 Verb base 69
6.1.1 Composite bases 72
6.2 "Tenses" 75
6.3 Conjugational classes 75
6.4 Inflections of Class I 79
6.4.1 First person singular 79
6.4.2 Third person singular 81
6.4.3 Third person plural 85
6.4.4 Third person singular present 86
6.4.5 Medio-passive 88
6.5 Inflections of Class II 89
6.5.1 First person singular 89
6.5.2 Third person singular 89
6.5.3 Third person plural 90
6.6 Other forms derived from verb bases . . . 91
6.6.1 Active imperative 91
6.6.2 Passive imperative 92
6.6.3 Subordinate (?) 93
6.6.4 Verbal noun 93
6.6.5 Passive participle (?) 94
6.6.6 Verbal adjective 96
6.7 Summary of verbal inflections 97
6.8 Forms of m(an)- 98
6.9 Verbal forms with pronominal suffixes . . 99
6.9.1 Third person singular direct object (?). . 99
6.9.2 Third person plural direct object 99
6.9.3 First person singular indirect object . . 102

Chapter Page

6.9.4 Structure of verbal forms with suffixes . . 102
6.10 On the so-called passival character of the verb 104

VII. MORPHOLOGY: NOUN

7.1 Vowel classes 118
7.2 Stem formation 118
7.2.1 Stem formative -še 118
7.2.2 Forms in -ni 119
7.2.3 Other simple stem formatives 129
7.2.4 Composite stem formatives 130
7.2.5 List of stem formatives 131
7.3 Structure of the nominal form 131
7.4 Case inflections 132
7.4.1 General case, singular 134
7.4.1.1 Intransitive use of the general case 135
7.4.1.2 Instrumental-ablative use of the general case 143
7.4.1.3 Circumstantial use of the general case . . . 146
7.4.1.4 Postpositional use of the general case . . . 149
7.4.2 General case, plural 150
7.4.3 Ergative case 152
7.4.4 Genitive and dative 154
7.4.5 Genitive case, singular 156
7.4.6 Dative case, singular 162
7.4.7 Genitive-dative case, plural 167
7.4.8 Allative case, singular 169
7.4.9 Allative case, plural 171
7.4.10 Locative case, singular 172
7.4.11 Locative case(?), plural(?) 174
7.5 Summary of case endings 176
7.6 Nouns with pronominal suffixes 176

VIII. PRONOUNS

8.0 General 178
8.1 Relative and indefinite pronouns 178
8.2 Personal pronouns 180

IX. POSTPOSITIONS 182

X. PARTICLES 184

APPENDIX I tú(-ú)-hi, tú-hi-ni(-e), tú-hi-ni-na-a 186
APPENDIX II Nouns in -na(-a) 188
APPENDIX III The postpositional use of the general case . . . 190
APPENDIX IV gi(-e)-i 195

BIBLIOGRAPHY 197

CHAPTER I

INTRODUCTION

1.0. General.--The language most scholars call Urartian is known to us from well over three hundred major and minor cuneiform inscriptions and legends, mostly on free-standing stones or living rock, a few on metal or clay. They range in date from about 830 to about 650 B.C. The majority have been found in Turkey, in the area centered about Lake Van, but some have been located as far afield as the Malatya region to the west, Seqendel (about 60 km. northeast of Tabrīz) and Topzawa to the southeast and south, and the vicinity of Çĭldĭr Gölü to the north. Attempts to interpret the Urartian inscriptions have given rise to a considerable body of literature. While many uncertainties remain--and some passages still defy interpretation--great strides have been made in understanding them.[1]

There is little doubt that Urartian and Hurrian are genetically related.[2] However, interpretations based on this relationship should only be resorted to when the possibilities of internal evidence have been exhausted.[3] Uncritical use of the etymological method has resulted in great waste of time and ink in Urartiology, as in other fields. The present study attempts to describe the phonology and morphology of Urartian in the light of modern methods of linguistic science. The primary emphasis is on form, and internal evidence alone constitutes the basis for the analysis.

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[1] The early progress of decipherment is related in Robert William Rogers, History of Babylonia and Assyria (New York, 1915) I, 263-73. All the major inscriptions are of royal origin.

[2] The relationship, however, is not close. It is quite out of the question that Urartian can be a direct descendant of Hurrian, as is generally assumed. Rather they are parallel descendants from a common ancestor (cf. D'i͡akonov, Comparative Survey). The period when the separation took place must have long antedated the appearance of the Hurrians upon the stage of history.

All the occurring words which seem to be members of each category have been brought together in a series of lists. In order to examine the forms alone, it has been necessary to remove them from their contexts. The traditional practice of citing selected examples of a category in more or less extended contexts is advisable in ascertaining meanings, but it is not suitable for the examination of forms. There are, of course, many words of unknown meaning and many sequences of signs whose division into words is uncertain. Some of these are sufficiently clear in form to be assigned tentatively to a form category, while others (over two hundred words) have had to be left out of the present study. The analysis of most categories is based upon examination of a considerable number of forms, so the inclusion of one or a few improperly attributed forms in a list will not materially affect the conclusions.

The present work would obviously have been impossible if previous scholars had not cleared the ground. The pioneering work of A. H. Sayce, and more recent researches by Johannes Friedrich, M. de Tseretheli, and by G. A. Melikishvili, I. M. D'iakonov, and other Soviet scholars, are particularly worthy of mention. It is hardly practical on each point to call attention to those who have anticipated the conclusions reached here. Such references do appear, however, when these conclusions diverge from those of previous scholars;[4] therefore it may seem that these conclusions differ more from the views of previous scholars than they in fact do. The exposition of Urartian grammar by J. Friedrich differs in only a few points from the conclusions reached in this study, though the methods are rather different.

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[3] Johannes Friedrich, Extinct Languages (New York, 1957) 154-56.

Major points on which this study diverges from most previous interpretations include the following conclusions: (1) The sequences of dissimilar vowels ("broken-vowel writings") indicate syllable separation, and probably the presence of a consonant which the cuneiform writing system lacked the means to explicitly render (see 3.5.2). (2) Orthographic i and e probably represent only one phoneme (3.1). (3) The nominal ending -ni is not a case marker (7.2.2). (4) The Urartian verbal system cannot legitimately be described as "passive" (6.10).

It is hoped that the results of the present study, with those modifications and amplifications which become necessary, will form a solid base for the further elucidation of Urartian. Once the structure of the language is firmly established, careful application of comparative method to Urartian and Hurrian may shed new light on both.

1.1. Available material—The only available data, of course, are the written records, and this study is based upon at least two premises involving them. First, from familiarity with the use of cuneiform writing for various dialects and languages, we can be reasonably confident that a cuneiform symbol was chosen to represent a given Urartian sound because of some resemblance of the Urartian sound to the sound in the other languages (especially Assyrian) for which that symbol was used. Another premise, frequently implicitly denied by previous scholars, is that two words consistently spelled differently were phonemically different. The phonological conclusions reached, starting from these premises, are, of course, extremely tentative. It should be emphasized that the symbols used represent phonemes, and cannot be precisely defined phonetically.

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[4] To avoid confusion, when Urartian passages are included in quotations from other scholars, the transliteration will be modified to the system used in this paper.

This study is based upon the legible portions of all the inscriptions of which enough is preserved to be usable. The fragmentary texts (including all those labelled as "Incerta" by König) were examined, however, and any interesting forms found there are referred to in footnotes. Those proper names which seem to be clearly Urartian, including the names of kings, deities, and towns of Urartu are included in the lists of forms. The names of persons and places referred to in connection with the military campaigns of Urartian kings do not appear in the basic lists, since most of them are probably not Urartian. Such names were not used at all in analyzing phonology. Many such names, however, do have inflectional endings which are clearly Urartian. Under the morphological categories some proper names clearly belonging to the category are listed, but such lists are not necessarily exhaustive.[5] Completely restored forms are never cited.

Where a count of occurrences is given, this count indicates only the occurrences where the feature under discussion is clearly present.

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[5] Under the heading "proper names" in the lists are included only those names which were not listed as Urartian words.

That is, partially restored forms may be counted if there is virtual certainty about the spelling. The figures are based on the body of material indicated in the preceding paragraph. There is frequently disagreement among scholars as to the degree of legibility of signs in some passages, raising doubt as to whether or not a form is sufficiently clear to be included in the count. The counts, therefore, are not to be considered as numerically exact, but serve primarily to indicate comparative frequency of variant spellings. The count of a particular word given in one context may vary a little from the count given in another place. This arises from the fact that words partially restored may be clear with respect to one feature but uncertain with respect to another.

Where the manner of spelling is not important, Urartian words or expressions are given in normalized form. Normalization consists solely of the elimination of the repetitious vowels inherent in the cuneiform (syllabic) writing and of the reinforcing vowels (see 3.5.1 below). Some interpretation is involved in normalizing vowel sequences. Where the sequence is considered to form two syllables (see 3.5.2 below) all the vowels are retained, e.g. pi-e-i-ni-e = pieine. Unless enclosed in / /, all citations of Urartian signs, words, and phrases are in orthographic form, either transliterated or normalized (e.g. e-si-ni, esini, but /esene/).

All translations are tentative, but to minimize tedium, question marks are placed only after translations which are highly dubious.

New inscriptions in Urartian have been recovered in considerable numbers in recent years, mostly from outlying areas, and most are very short and add little to our knowledge of the language. Some serious excavations in the Urartian heartland would almost certainly add greatly to the epigraphic material in Urartian.

Another prime need for the advancement of Urartian studies is an adequate corpus of the texts. Lehmann-Haupt's Corpus Inscriptionum Chaldicarum was never completed, and certain features of its publication left something to be desired. The most recent collections of the texts are those of Melikishvili and König, but neither is actually a corpus of the texts.[6] Melikishvili furnishes transliterations of all the documents known in 1953, gives translations of most of them, and supplies photographs of impressions of a considerable number. More recent is König's Handbuch, which gives autographed copies of virtually all the inscriptions known in 1955. His work, unfortunately, has a number of serious weaknesses.[7] There are quite a few errors in his copies, and he does not adequately indicate on his copies what is restored and what is clear or partially clear on the originals. He has written out in cuneiform characters large segments of restored text, a procedure which seems of slight usefulness. His transliterations all too often disagree with his own copies. His glossary ("Wörterbuch," pp. 168-214) is very difficult to use, for the typographical arrangement is unfortunate, there are far too many cross-references, and words are frequently listed under unexpected headings. Most inconvenient of all is his practice of referring to the inscriptions by his own arbitrarily assigned paragraph numbers. In order to check a reference on the autograph it is usually necessary to ascertain from the transliteration the line number corresponding to the reference given. But in some cases the transliteration does not show the line numbers at all, and then it is necessary to read the entire inscription in order to find on the plate the reference cited in the glossary. The glossary entries also fail to indicate which passages are clear and which restored (which is also true of the glossary of Melikishvili).[8] In general, the glossary of Melikishvili (VDI 1954,1, 179-256) will be found much more convenient to use. König's bibliography of the inscriptions (pp. 1-30, 164-65) has many omissions and not a few errors.[9]

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[6] Full references for the works mentioned will be found in the bibliography.

[7] See review of Part I by Friedrich, OLZ L (1955) 524-29. Cf. Beran, Istanbuler Mitteilungen VII, 134, 137 n. 18.

It is also unfortunate that both Melikishvili and König have chosen to perpetuate the very inconvenient system of numbering the inscriptions which has been traditional. König devotes seven pages to comparative lists of the numbers used in various collections of the texts, yet by the time Part II of his work appeared (1957), he had found it necessary to add additional inscriptions (Nos. 135-140) out of chronological order, at the end of his numbering system.[10] His additions, however, include only a few of the inscriptions published since Part I of the Handbuch appeared (1955), and some inscriptions published as early as 1954 are still not included in

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[8] In this paper, if the word or phrase under discussion is completely restored in the reference cited, the reference is enclosed in full brackets; if partially restored it is enclosed in half-brackets.

[9] The bibliography appended to this study indicates what inscriptions (as numbered by K) are included in each reference. It will thus serve as a supplement and correction to K's listing of the literature for the individual inscriptions.

[10] Note that the inscription now numbered 135 was assigned the number 44A by König, WZKM LII, 302.

Part II. We are badly in need of a definitive, reliable corpus of Urartian inscriptions, which would use photographs as far as possible and employ a numbering system (such as that which has long been in use for Achaemenid inscriptions) which would allow for the insertion of newly discovered inscriptions without altering numbers already assigned.

In the present work the numbering system of a single compilation is used throughout, from which other editions of the text can be found, if desired. The numbering of Melikishvili is in many respects preferable to that of König, but his work, although published in one of the most significant journals of ancient oriental studies, seems to be not readily available in this country. Therefore, the numbers assigned by König have been used, even though his system of references (involving contrast of small letters and capital letters) is confusing and its rationale is unclear.[11] All references are to his copies, with line numbers as there shown. His No. 103, the annals of Sarduri, gives an arrangement of the columns in a different order than that used by previous scholars. He does not assign numbers to the columns, but merely arranges them in order by his paragraph numbers. For convenience of reference in this study the columns will be numbered in the order in which he arranges them:

I	Par. 1-5	Marr, Tseretheli: "C"
II	6-9	"E"
III	10-12	"D"[12]
IV	13-14	"B"[12]
V	15	"F"
VI	16	"A"

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[11] If reference is made to an inscription not included in König, a note will indicate where the inscription was published.

[12] The references to the plates of CICh and Marr for these two columns are reversed in K p. 19.

The textual readings used in this study are the result of a careful examination of the best available copies of the texts. Since many texts have been published only inadequately, there is room for considerable divergence of opinion, particularly as to degree of legibility. For the brackets (indicating illegibility or partial legibility) here used no high degree of accuracy is claimed, and no serious attempt has been made to revise the existing readings of texts. More reliable material was available for only two texts. In 1951 a University of Michigan expedition headed by George G. Cameron prepared rubber latex squeezes of the bilingual inscriptions of Kelishin and Topzawa (K Nos. 9, 122). Dr. Cameron very graciously turned these squeezes over to the writer for study. While preliminary examination of these squeezes indicated that few major revisions in existing readings of these texts could be expected, all readings from these two inscriptions in the present paper are based upon study of these squeezes, which will eventually be published.

1.2. References to the literature.--There exists no adequate bibliography on the Urartian language and inscriptions. Much of the published material is of slight value, but even where a commentary is useless there may be valuable contributions to the establishment of a text. A selected bibliography has much to recommend it, but an honest judgment of the worth of any reference is impossible unless that reference has been consulted. However, many relevant items are very difficult to locate, and some were unobtainable. It has seemed advisable to attempt to list all the relevant items, including even those not available in the preparation of this study. Only items dealing directly with the language or texts are included, and items dealing primarily with the history and culture of Urartu are listed only if they contain extensive discussion of the meaning and significance of Urartian texts. In the case of unavailable items, decision as to inclusion or exclusion could be made only on the basis of the title or of the context in which the reference was cited. Probably some items omitted should have been included, and, no doubt, there are a number of inadvertent omissions. For the convenience of users of libraries in the United States, Russian titles are transliterated according to the system used by the Library of Congress.[13] To avoid confusion, the same transliteration is used for Russian everywhere in this study. Armenian and other non-Roman references are transliterated according to the prevailing practices of scholars. All references in this paper are given in short form; the full reference may be found in the bibliography.

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[13] Titles written in the old orthography are transliterated as though they were written in the current orthography.

CHAPTER II

WRITING SYSTEM

2.0. General.--The Urartian texts so far known are written in a cuneiform system of the Sumero-Akkadian type. The forms of the signs are essentially those used in Assyrian royal inscriptions of the early or middle Ninth Century B.C., but often modified so as to avoid intersecting wedges.[1]

The signs are used as (1) syllabic signs (syllabograms, including phonetic complements), (2) word-signs (logograms), (3) determinatives, and (4) numerals.[2]

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[1] With one possible exception (see n. 26 below), all the forms and values of signs used in Urartian are derived from the Assyrian writing system. There is not a trace of evidence that the Urartians had any acquaintance with Hurrian orthographic practices. Two isolated attempts to attribute the value *wa/wi/wu* to the PI sign in Urartian (L-H, *ZDMG* LVIII, 818 [cf. Fr., *Cauc*. VIII, 122 n. 3]; G, *RHA* 22, 183) have found no support. The Urartian writing system thus confirms the evidence, or rather lack of evidence, of archeology in opposing the widely held view of historical continuity from the Hurrian state to the Urartian. A variety of indications point to the reign of Aššur-nāṣir-apli III (883-859 B.C.) or shortly thereafter for the rise of the Urartian state and the adoption of cuneiform writing: Melikishvili, *Nairi-Urartu*, 180-93, 384; Rigg, 155-204; L-H, *Arm*. II, 21-24.

[2] The sign lists appended to K (Tf. 103-105 and Addenda, Tf. 113) omit the syllabic signs *še*, *aya*, *tuš* and the uncertain *kam*, and the logogram MU. A number of the logograms he lists are more or less conjectural: PAGRU (= KUŠ), URUM (= URÙM), UDU.ŠE, UZU, NINDA (see K, p. 111 n. 4), NU, UMUN (see K, p. 111 n. 4), IÀ, etc. Other possible logograms are GI, Ú, and URI.GAL.MEŠ. He shows GAZ only in the form LÚ.GAZ.MEŠ. The expression LÚ.MEŠ-*še* GAZ.MEŠ also occurs (7 rev. 27; cf. K, pp. 183, 192), which obviously represents two words. Therefore, at least a separate entry for GAZ.MEŠ is indicated, and considerable

2.1. Syllabic signs V, VC, and CV.--The following syllabic signs of the types V, VC, and CV are used:

a		e		i		u, ú	
pa				pi		p/bu	up/b(=ár)
ba	ap/b	be		bi	ip/b		
ka				ki, ki$_4$[3]		ku	
ga				gi		gu	
qa				qi		qu	
ta		te		ti		tu, tú	
d/ṭa				di	it/d/ṭ	du	
		ṭè		ṭí(=hi)		ṭu	
sa				si		su	
z/ṣa				zi		zu	
				ṣi		ṣu	
šá	áš	še		ši	iš	šu, šú	uš
ra	ar, ár(=up/b)			ri	ir	ru	ur
la	al		el	li	il	lu	ul
ma	am	me				mu	
na	an			ni		nu	
ha				hi(=ṭí), hí		hu	
ˀa							
ya							

---

doubt is raised as to whether LÚ is a determinative or a logogram in the form he lists. There is no clear evidence that KUR is used with that syllabic value as shown in K's list. In addition to the numerals he lists, 20 occurs, as well as various combinations of the listed numerals, all written according to the same principles. The transliteration values which K uses deviate in many cases from those generally used by cuneiformists (see his Vorwort, p. [III]). The transliterations in this paper, with the exceptions noted below in this note and in notes 3, 7, and 9, will follow for syllabic signs W. von Soden, *Das Akkadische Syllabar* (AnO 27, 1948), and for logograms René Labat, *Manuel d'Épigraphie Akkadienne* (Paris, 1948, 1952). In order to simplify typography, the diacritic under ḫ will be omitted, and *y* will be used as the first element of *i̯a* (which von Soden transliterates simply as *ia*) and as the middle element of *ai̯a* (which von Soden transliterates *aiia*).

[3] The KID sign (von Soden, *op. cit.*, No. 166) occurs in three words. The evidence for its value in Urartian consists of the variant spellings.

a-li-ki$_4$ (twice) :: a-li-e-ki-e, a-li-ki

ka-a-i-u-ki$_4$ :: [ka-a]-ú-ki, ka-ú-ki

ki$_4$-da-nu-ú-li :: [k]i-e-i-da-nu-ú-l[i]

Von Soden does not recognize a *ki* value for this sign, but the development of a secondary value by dropping the final consonant of a CVC sign is common (cf. von Soden, *op. cit.*, pp. 12, 23; Labat, *op. cit.*, A number of these signs have two or more values in the Assyrian syllabary and some presumably also in Urartian. In most cases the Urartian evidence does not enable us to determine which value is applicable in a particular occurrence. This is true of *da/ṭa*, *bu/pu*, and *za/ṣa*. That the sign *hi* has also the value *ṭí* in Urartian is shown by the interchange with *ṭè* in *ṭí-ru-si*, in *ku-ṭí-tú*, and in forms of the land name $^{\mathrm{KUR}}$*uiṭeruhi*.[4] In other contexts we cannot be certain which of the two values most nearly corresponds to the pronunciation of the original Urartian word. Some other signs have secondary values in the Assyrian syllabary for whose use in Urartian there is no evidence: *tú* = *ut/d/ṭ* and *ṭè* = *ne*.[5] Signs whose values have the form *vowel* + *stop* indicate the approximate region of articulation of the stop, but nothing else about it (e.g. *at* = *ad* = *aṭ*). Since evidence for distinguishing these values is lacking, the

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p. 18). Labat assigns the value *ki$_4$/ke$_4$* to this sign (his No. 313, but the value appears only in the alphabetical list, p. 259). Von Soden's list (p. 103) of the disagreements of his values with those of Labat does not dispute this assignment. The Urartian evidence clearly demands a value *ki$_x$/ke$_x$*, so Labat's value will be used as transliteration in this paper. K transliterates this sign as *ké*, but this value is ordinarily allotted to another sign.

[4] See D'i͡akonov, *EV* IV, 105-106. *ku-ṭí-tú* (6b:4) must be a variant spelling of the form which appears elsewhere as *ku-ṭè-i-tú* (e.g. 6:26). The forms of $^{\mathrm{KUR}}$*uiṭeruhi* which occur are the following: $^{\mathrm{m/KUR}}$*ú-i-ṭè-ru-hi*, $^{\mathrm{m}}$*ú-ṭè-ru(-ú)-hi*, $^{\mathrm{KUR}}$*u-i-ṭí-ru-hi-ni-i*, $^{\mathrm{[KUR]}}$*⸢ú⸣-i-ṭè-e-ru-hi-i-ni-e-i*, $^{\mathrm{KUR}}$*u-i-ṭí-ru-hi-e-d[i]*, $^{\mathrm{m}}$*ú-i-ṭè-ru-hi-ni-e-d[i]*.

[5] A value *dè* has been attributed to the *ṭè* sign: Ts., *NHI* 38, 71; Fr., *Einf*. 8; D'i͡akonov, *EV* IV, 106. D'i͡akonov says this value is "as also in Assyrian," but neither von Soden, *op. cit.*, nor Labat, *op. cit.* lists it as a regular value for this sign (it does appear in Labat's alphabetical list, p. 252). The value is assigned on the assumption that the word *a-ri(-e)-dè* (103 V 21, VI 18) is of the same morphological type as *[ha]-⸢i-di⸣* (9:31). This does not seem to be a sufficiently firm basis for attributing a syllabic value otherwise unsupported in Urartian and, at best, very rare in Assyrian.

transliterations used in this paper for the signs mentioned will be: *da*, *pu*, *za*, *hi* (except in the words in which it varies with *ṭè*), *tú*, *ṭè*, and for signs of the type *vowel* + *stop*, the stop will be transliterated as voiceless (*ap*, *ip*, *up*, *at*, *it*).

The sign *ʔa* has also in Assyrian the values *ʔi*, *ʔu*, *aʔ*, *iʔ*, and *uʔ*; *ya* in Assyrian has also the values *yi* and *yu*, but there is no evidence for the use of these values in Urartian. The *me* sign also has the value *mì* in Assyrian, but the transliteration *me* will be used throughout this paper.

A number of the signs listed are quite rare. *el* and *up*/*ár* occur each in three words only, *it* and *šu* each in two words only, *an* in only a single word, and *il* occurs only once.[6]

2.2. Syllabic signs CVC, VCV, CVCV.—The following syllabic signs of the type CVC occur. Signs in parentheses occur only in proper names.[7]

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[6] *el* and *up* also occur each in two proper names: $^{\mathrm{URU}}$*ú-ba-a-ru-gi-el-du-ú-⌈e⌉* (80 I 27), $^{\mathrm{KUR}}$*e-ri-el-tú-a-i-ni* (118:8); $^{\mathrm{KUR}}$*qu-up-li-ni* (126:6), $^{\mathrm{m}}$*qu-up-za-ni-i-ni* (80 I 18).

[7] Most signs of the type CVC are not distinctive as to the nature of the first consonant: *bar* = *pár*, *bal* = *pal*, *bur* = *pur*, *qar* = *kàr* = *gàr*, *šur* = *sur*. The transliterations shown in the table will be used throughout for convenience, since this is the prevailing usage. It should be kept in mind that the nature of the first sound is really unknown. *din* is so transliterated because its only occurrence is as a variant spelling for *di-ni*. Some CVC signs also are not distinctive as to the nature of the vowel: *har* - *hír* = *hur*, *bal* = *bùl*, *man* = *mìn*, *síp* = *sàp*. In the case of *tar*, the values *tír* and *ṭír* are rare. The sign "sar$_5$" (NINNI$_7$), occurring only in the name of Sarduri, is always preceded by the ^{d} sign. This is presumably due to the development of the value from the Akkadian deity name *Ištar* (cf. K, Vorwort, p. [III]; Albright, *BASOR* LXXXII (1941) 17 and CXXXIX (1955) 16-17). To be accurate, the value *sar$_x$* should be attributed to the combination ^{d}NINNI$_7$, since the entire combination alternates with *sar*. In this paper, therefore, the value *sar*$_5$, which von Soden (*op. cit.*, No. 62) assigns to NINNI$_7$ will be used to transliterate the combination ^{d}NINNI$_7$.

	bal						bur		
bar									
(kar)		kam?[8]						(kul)	
				giš			(gur)		
qar									
tar									tuš
					din				
sar sar$_5$	sal					síp?[8]			
							šur		
(mar)		man	mat						
har	hal								

Most of these signs are limited to one or two occurrences. The few that occur a considerable number of times owe their frequency to their use in the spelling of some common word, e.g. hal occurs only in the forms of the name Haldi, sar$_5$ only in forms of the name of Šarduri.

One sign of the type VCV occurs: aya, and one of the type CVCV: duri.[9]

2.3. Distribution of V, CV, and VC signs.--The distribution of the V, CV, and VC signs is as follows. CVC signs and the VCV and

---

[8] The signs kam and síp occur in broken contexts and are themselves somewhat damaged, therefore they are quite uncertain.

[9] The value dur$_8$ is assigned to the BÀD sign by von Soden (op. cit., No. 114) as occurring in Neo-Assyrian and Urartian, citing as example, "$^{m\ ilu}$Šar$_5$-dur$_8$ CICh. Nr. 1-3 u.ö." As far as Urartian is concerned, the sign occurs only in forms of the name of Šarduri. The fuller syllabic writing is ^{m}sar$_5$-du-ri(-) or -du-ú-ri-. Therefore, in Urartian BÀD must be assigned the syllabic value duri rather than dur$_8$.

CVCV signs are not included in these data because of the rarity of their occurrence.

Word initial: All signs occur except *ra*, *ri*, *hí*, *tu*, *it*, *il*.[10]

Word medial: All signs occur except *pi*, *ár*, *an*, *hí*.

Word final: C*a* and C*u* do not occur finally if C is a velar or a sibilant (*s*, *z*, *ṣ*).[11] The following chart shows the signs which occur in this position. Dashes represent the positions of signs which exist in the syllabary but do not occur word finally.[12]

a		e	i		ú	
pa[13]	—		pi	—[14]	pu	—
—		be	bi			
—			ki		—	
—			gi		—	
—			qi		—	

---

[10] *ru* occurs initially only in the various forms of the name of *Rusa*. In Urartian this name is always spelled with *ru* as the first sign. However, Assyrian texts usually render this name as *ur-sa-a* (e.g., F. Thureau-Dangin, *Une relation de la huitième campagne de Sargon* [Paris, 1912], line 56 and fifteen other occurrences, cf. index, p. 83). The spelling *ru-sa-a* is much less common in Assyrian texts, but it does occur (e.g. A. G. Lie, *Inscriptions of Sargon II*, Pt. 1 [Paris, 1929] lines 84, 101, 143). *hi* and *u* occur initially only once each; *up* occurs initially in only a single word (*upše*).

[11] In 124 obv. 29 and 125 obv. 22 K divides *a-lu-ka(-a)* *ú-e-ši-ya-ú-li*; M (276:29) has *[a]-lu-ka-a* *ú-e-ši* *ya-ú-[ ]*. The meaning of the passage is not clear, but there is no attested example of final *-ka(-a)* in Urartian. It therefore seems more likely that the division should be *a-lu-ka(-a)-ú-e* *ši-ya-ú-li*.

[12] Secondary values of signs are not included in the table, e.g. *pu* appears, but not *bu*, which is another value of the *pu* sign.

[13] *pa* occurs finally only as the last sign of ^{URU}*ṭušpa*, which appears to be a defective writing for ^{URU}*ṭušpae*. It is apparently always followed by URU or its syllabic equivalent *patare*, or some form thereof. It has sometimes been considered to form a compound with the latter, in which case *pa* would not be in final position. The variant spellings *-pa*, *-pa-a*, *-pa-i/e*, and possibly *-pa(-i)-ni*, seem to favor considering the combination as two words.

[14] There is one possible occurrence of final *ip* in *me-ri-ip[ ]* (97:10), but probably the preserved signs are only part of a word.

ta	--	te		ti	--	tu, tú	
da?[15]				di		du	
		ṭè				ṭu	
--				si		--	
--				zi		--	
				ṣi		--	
šá	--	še		ši	iš	šú	--[16]
ra	--			ri	--	ru	--
la	--		--	li	--	--	--
--	--	me				mu	
na	--			ni		nu	
--				hi, hí		hu	
ʔa							
ya							

The only VC sign occurring finally is iš. The only other case of a word-final consonant is in e-din. The occurrences of word-final consonants are:[16]

⌜^{d}⌝hal-di-iš (once)

^{m}iš-pu-ú-i-ni-iš (4 times)

[nu]-na-a-li-⌜iš?⌝ (once)

e-din (once)

2.4. Combinations of CV and VC signs.—CV and VC signs occur in the following combinations:

(1) **Sequences CV-CV.—Sign sequences of the type CV-CV are very** frequent.

(2) **Consonant clusters.—Sign sequences of the type VC-CV** produce the following consonant clusters:

---

[15] There is one possible occurrence of final da: [x]-⌜ri-e-da?⌝ (122:18). K shows the last three signs as clear.

[16] There is a possible case of final -uš in 74 rev. 7, but the more probable word division is [a]-⌜lu⌝-uš-ni tú-li-e, since tule is a common word, while nitule is otherwise unattested, though perhaps it occurs in 126:39, where also the division is uncertain.

		šp	rp[17]			
	tb		rb	lb		
						nk
	tg	šg	rg	lg		
pq	tq		rq			
pt		št	rt	lt		
		šd	rd	ld		nd
pṭ			rṭ	lṭ		
ps			rs	ls		
		šz	rz	lz		
			rṣ			
pš			rš			
pr			rr			
pl?		šl?	rl?			
	tm?	šm	rm	lm		
pn		šn	rn		mn	
ph	th	šh	rh	lh	mh	
			rʔ			

Only *p*, *t*, *š*, *r*, *l*, *m*, and *n* occur as first members of consonant clusters.[18] There are no cases of *k* or *y* in clusters, except for *nk*. *g*, *q*, and the sibilants (*s*, *z*, *ṣ*) occur only as second members (the velars and sibilants lack VC signs in the Urartian syllabary). The only written geminated consonant is *r* in ^{d}*tar-ra-i-ni-e* (twice).[19] The status of *?* in *r?* is somewhat uncertain, as the sequence could also be read *rV?*.

---

[17] The cluster *rp* occurs only in the sign sequence *ur-pu-*, which can also be read *ur-bu-*.

[18] Because of the nature of the writing system, the symbol *p* here may include phonemic /*p*, *b*/, *t* may include /*t*, *d*, *ṭ*/.

(3) Sequences CV_1-V_1C.--Sequences of the type CV_1-V_1C (the two vowels being the same) are frequent.

(4) Broken-vowel writings (CV_1-V_2C).--Broken-vowel writings of the type CV_1-V_2C (where the adjacent vowels are different) are much less common than the types of sequences previously mentioned. It occurs certainly only in *ha(-a)-ši-al-me(-e)*.[20] Sequences of the type CV_1-V_2- are discussed in 2.5.6 below.

(5) Sequences CV_1-V_1- or V_1-V_1C.--Sequences of the types CV_1-V_1- or V_1-V_1C, with a reinforcing vowel, are discussed in 2.5.2 and 2.5.3.

(6) Sequences (C)VC-VC.--There is only one example of the sequence (C)VC-VC: ^{d}*al-ap-tú-ši-ni-e*.[21]

2.5. Use of separate vowel signs.--The separate vowel signs (*a*, *e*, *i*, *u*, *ú*) are used in the following contexts:

2.5.1. Initial use of separate vowel signs.--Initially in a word, before a CV or CVC sign, any vowel may stand before any consonant, except for some limitations of *i* and *e* (see 3.1.1).

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[19] For this reason *sal-ma-at-hi* should be read instead of *sal-ma-aṭ-ṭí* (Ts., *NHI* 58). Tseretheli's *giš-šú-ri-e* (and other forms) (*NHI* A 1 etc.) is also to be corrected to ^{GIŠ}*šú-ri-e* etc., primarily because the writing with the determinative also occurs (cf. Kapant͡sy͡an, *ArO* XVII,1, 366-67). Possibly ^{d}*tar-ra-i-ni-e* is a borrowed word.

[20] Another possible example, *pi-ur-ta-a-ni* (110:5) is perhaps to be corrected (with K) to *tú-ur-ta-a-ni*. The same type of writing occurs in the proper name ^{m}*lu-ip-ru-ni* (103 V 23).

[21] This type of writing also occurs in the proper name ^{KUR}*ar-tar-ap-šá-ka-a-i-ni* (124 rev. 5) (2 words?).

2.5.2. Reinforcement CV_1-V_1.--After a CV sign, the vowel sign of the same type as the vocalic content of that CV sign may be used, apparently, as simple reinforcement, varying freely in alternate spellings with the CV sign not followed by the vowel sign.[22] There is no evidence that the writing CV_1-V_1- indicates length of vowel. Examples:

uš-*ta-a*-bi : uš-*ta*-bi $^{\mathrm{GU_4}}$*pa-a*-hi-ni : $^{\mathrm{GU_4}}$*pa*-hi-ni

te-e-ru-bi : *te*-ru-bi $^{\mathrm{KUR}}$e-ba-ni-ú-*ki-e*-di : $^{\mathrm{KUR}}$e-ba-ni-ú-*ki*-di

e-*si-i*-ni : e-*si*-ni   šú-lu-uš-*ti-i*-bi : šú-lu-uš-*ti*-bi

a-*tú-ú*-bi : a-*tú*-bi   a-*gu-ú*-ni : a-*gu*-ni

2.5.3. Reinforcement V_1-V_1C.--A separate sign may be used before a VC sign, to reinforce the vocalic content of the VC sign:[23]

[h]a-ši-a-al-me-e : ha-ši-al-me

Sometimes a vowel sign may reinforce a preceding CV sign and a following VC sign simultaneously:

s*i-e-*⌈*i*r⌉-ši-ni-i-e : s*i-i*r-ši-ni-e

$^{\mathrm{URU}}$ṭ*u-ú-u*š-pa-e : $^{\mathrm{URU}}$ṭ*u-u*š-pa-e

[$^{\mathrm{KUR}}$b]i-a-i-n*[a]-a-á*š-te : $^{\mathrm{KUR}}$bi-a-i-n*a-á*š-te

$^{\mathrm{m}}$ar-*gi-i-i*š-ti(-i)-še : $^{\mathrm{m}}$ar-*gi-i*š-ti(-i)-še, $^{\mathrm{m}}$ar-g*i*š-ti(-i)-še

2.5.4. Sequences (C)VC-V.--In the following cases a separate vowel sign follows a VC or CVC sign:[24]

---

[22] The equivalence of *i* and *e* as reinforcing vowels after *Ci* signs (and presumably after *me*) or before *iC* signs is discussed in 3.1.1.2 below and will be assumed in this section without further comment. Some vowels in some words occur only in reinforced form, e.g. the *pu* in the name of *Išpuini* and the *šá* of *šali* are always followed by *ú* and *a* respectively.

[23] Another possible example is *i-iš-hi* (104:6), but the word division is uncertain.

[24] The same sort of writing occurs in the proper name $^{\mathrm{KUR}}$*si-ri-mu-tar-a* (80 I 10).

al-a-su-ú-i-ni-e

am-ú-⌈e⌉

ar-a-ni

áš-ú-la(-a)-bi

^{d}e-li-ip-ú-ri-e

⌈iš?-e⌉-ya-me

^{d}ta-la-ap-ú-ra-a

tar-a-⌈e⌉, tar-a-i-e[25]

⌈tar⌉-a-i-[nu]-⌈ú⌉-a-di

tar-a-i-ú-e-di

tar-a-i-ú-hi

tar-a-mu?

^{URU}ṭu-uš-ú-pa-a-e

ú-bar-a-⌈du?⌉

These forms are discussed in 4.7 (3).

2.5.5. Sequences V_1-V_1.--The only cases of two identical separate vowel signs in succession are:

(1) The following cases of -*ú-ú*-:

na-a-ú-ú-še

ši-du-ú-ú-li (twice)

šá-tú-ú-ú-l[i]

ú-ú-li

ANŠE.KUR.RA.MEŠ-ú-ú

(2) One case of initial *a-a*-: ^{d}*a-a-i-na-ú-e*.

There are no cases of sequences of separate vowel signs -*i-i*- or -*e-e*-.

2.5.6. Sequences of dissimilar vowels.--A separate vowel sign may follow either a CV sign or a V sign of a different vowel type. The vowel sequences which occur are listed in the following charts. In these charts the symbol *u* represents orthographic *ú* and/or *u*. Figures in parentheses show the number of different words or stems in which very rare sequences occur. A sequence marked * constitutes a complete word.

---

[25] The spelling *tar-aya-*⌈e⌉ also occurs (9:11).

2.5.6.1 Word-initial position.

a-a-i-C (1)		a-i-C[a] [a-i-a]* a-i-u-C (1)	a-u-C (2) [a-u]-a-C (1) a-u-e-C (2)[b] a-u-i a-u-i-e* a-u-i-e-i
		—[c]	e-u-C (1) e-u-e*
i-a-C	i-e-C (1) i-e-i-C ?[f]	—[d]	i-u-C (2)[e] —[g]
u-a-C[h] u-a-i-C (1)	u-e-C	u-i* u-i-a* u-i-e*	u-u-C (1)

---

[a] The sequence a-iš also occurs.
[b] including a-ú-e*.
[c] The sequence e-ir occurs (3 cases).
[d] The sequence i-iš occurs once.
[e] including i-u*.
[f] i e i me e [x?], division unknown.
[g] i-ú i-ú is probably two words.
[h] There is also ú-a*.

2.5.6.2. Word-medial position.

Ca-a-C	Ca-e-C	Ca-i-C	Ca-u-C
--[a]			
Ca-a-e-C			
Ca-a-i-C			Ca-u-i-C
Ca-a-i-e-C[b]			
Ca-a-i-u-C			
Ca-a-u-C		C-a-i-u-C[c]	
Ca-a-u-a-C			
		C-a-i-u-e-C[c]	
Ca-a-u-u-C (1)			

Ce-a-C (1)	Ce-e-C	Ce-i-C	
		Ce-i-a-C (1)	
		Ce-i-e-C (1)	
	Ce-e-i-C (1)		

Ci-a-C	Ci-e-C	Ci-i-C[d]	Ci-u-C
--[e]		Ci-i-a-C	Ci-u-a-C
		Ci-i-a-i-C	
Ci-a-e?-C[f]		Ci-i-e-C	
		Ci-i-e-i-C (1)	
Ci-a-i-C	Ci-e-i-C[g]	--[h]	
	Ci-e-u-C (1)	Ci-i-u-C	Ci-u-i-C (1)
		Ci-i-u-i-C (1)	

Cu-a-C	Cu-e-C (1)	Cu-i-C	Cu-u-C
		Cu-i-a-C (1)	Cu-u-a-C
			Cu-u-e-C
Cu-a-i-C (1)	Cu-e-i-C (1)		Cu-u-i-C
			Cu-u-i-u-C (1)
		Cu-i-u-C (1)	Cu-u-u-C[i] (2)

---

[a] a-a-aš occurs three times.
[b] This sequence is uncertain, occurs only in [gi?-ú?-ra?-a?]-i-e-di.
[c] -a-i-u- and -a-i-u-e- occur only in tar-a-i-ú-hi, tar-a-i-ú-e-di.
[d] The sequence Ci-iC is also frequent.
[e] The sequence Ci-a-al occurs once.
[f] One uncertain occurrence, [x x l]i hi a e [x], division unknown.
[g] Ci-e-ir also occurs.
[h] Ci-i-iš occurs.
[i] The sequence Cu-u-uš also occurs.

2.5.6.3. Word-final position.

Ca-a	Ca-e	Ca-i (2)[a]	Ca-u (1)
		[a-i-a]*	
Ca-a-e (1)		Ca-i-e	Ca-u-e
Ca-a-i			Ca-u-i (1)
Ca-a-i-e (1)			a-u-i-e*
			a-u-i-e-i*
Ca-a-u (1)			
Ca-a-u-e			
Ca-a-u-i (1)			
	Ce-e	Ce-i	
		Ce-i-e (1)	e-u-e*
	Ce-e-i		
Ci-a	Ci-e	Ci-i	Ci-u (2)[b]
		Ci-i-a	
		Ci-i-e	Ci-u-e
		Ci-i-e-i (1)	
Ci-a-i (1)	Ci-e-i		
		Ci-i-u-⸢e?⸣ (1)	
Cu-a	Cu-e	Cu-i (2)[c]	Cu-u
	Cu-e-a (1)	u-i-a*	Cu-u-a
			Cu-u-a-i (1)
			Cu-u-a-i-e (1)
		u-i-e*	Cu-u-e
Cu-a-i (1)			Cu-u-i
Cu-a-i-e	Cu-e-i-a[d]		

---

[a] Including a-⸢i⸣*.

[b] Including i-ú*.

[c] Including ú-i*.

[d] One uncertain occurrence: [^{d}ţu-uš-pu-e]-⸢i-a⸣

2.6. Logograms.—A considerable number of logograms are used. These are of three types. (1) Sumerograms: words whose orthography originated in Sumerian, and which are logograms also in Akkadian,[26] e.g. ANŠE.KUR.RA = Akk. *sisū* 'horse.' (2) Akkadograms: words which are syllabically written in Akkadian, used in Urartian in their Akkadian orthography, e.g. *DAN-NU* = Akk. *dannu* 'mighty.' (3) Sumero-Akkadograms: Sumerograms to which a phonetic complement was added in Akkadian, used in Urartian inscriptions in their Akkadian form, e.g. ^{d}UTU-*ŠI* = Akk. *šamši* (the sun-god). Syllabic signs are often used as phonetic complements to logograms, e.g. KUR-*ni-e* = *e-ba-ni-e*. The Urartian equivalents of a number of logograms are known or surmised, through occurrence of the logogram and the word written syllabically in identical or very similar contexts. However, in order to emphasize the manner of writing, even in such cases, the Urartian equivalents of logograms will not be used in the transliterations in this paper.

The typography used for the transliteration of logograms follows the conventions adopted for Hittite in E. A. Sturtevant and George Bechtel, *A Hittite Chrestomathy*.[27] Thus capital letters, the signs separated by . if two or more signs are involved, designate Sumerograms; italic (underscored) capital letters separated by - designate Akkadograms. If a logogram consists of only one sign it will be transliterated as a Sumerogram. In the case of Sumero-Akkadograms, the Akkadian element will be italicized and the signs separated by -. The examples in the preceding paragraph exemplify these principles.

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[26] LÚ.A.SI is not attested in Akkadian, but it does occur as a logogram in Hittite (Hittite Laws, par. 48-49: Frédéric [Bedřich] Hrozný, *Code Hittite* [Paris, 1922], pp. 42-43; cf. E. Neufeld, *The Hittite Laws* [London, 1951], p. 165 n. 204).

[27] (Philadelphia, 1935), see esp. pp. 21-22.

2.7. Determinatives.—The common determinatives of Akkadian are also used in Urartian.[28] There is frequently uncertainty whether a given sign should be considered a logogram or a determinative.[29] The plural determinative MEŠ is used with both logograms and words written syllabically, though it is rare with the latter. If the word is completely written out syllabically, MEŠ stands at the end of the word (e.g. $^{\text{GU}_4}$*pa-hi-ni*$^{\text{MEŠ}}$). If a logogram is used with a phonetic complement, the MEŠ precedes the complement (e.g. LÚ.A.SI.MEŠ-*ṣi*).[30]

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[28] A determinative will be represented in this paper by the Sumerian value of the sign raised above the line of writing (e.g. $^{\text{NA}_4}$*pu-lu-si*), with two exceptions. The determinative DINGIR 'god' will be indicated by a raised ^{d}. The single vertical wedge preceding the name of a man will be indicated by a raised ^{m}. Determinatives before logograms will be written on the same level as the logograms, not raised; that is, they will be treated as components of compound logograms. Apparently a compound determinative occurs in 128:3: $^{\text{LÚ.GEME}}$*lu-tú-ni*.

[29] This is particularly true of KUR. Names preceded by KUR are often followed by the word for "land," written either logographically or syllabically. In such cases, the preceding KUR is presumably a determinative (unpronounced). However, when "land" is not written after the name, it seems probable that the preceding KUR should be interpreted as a logogram, rather than as a determinative. Many other so-called determinatives were probably pronounced and should be considered logograms (cf. Ts., *RA* XXXII, 31-32).

[30] Plurality is not always marked—occasionally a logogram without MEŠ interchanges with one with MEŠ (e.g. UKKIN :: UKKIN.MEŠ, 10:30, 91). Also, the plural determinative is sometimes omitted with a word clearly plural; compare

286 ANŠE.KUR.RA.MEŠ (80 IV 38); 232 ANŠE.KUR.RA (80 II 47).

Such occurrences suggest the possibility that MEŠ may be used as indicator of a logogram, without signifying plurality (as, for example, in Elamite; cf. Herbert H. Paper, *The Phonology and Morphology of Royal Achaemenid Elamite* [Ann Arbor, 1955], p. 6). K apparently considers this to be the case, as in Tf. 103 he describes the sign

2.8. Word boundaries.--A word divider sign does occur in Urartian materials, but not in display inscriptions.[31] The end of a line always coincides with the end of a word, otherwise word boundaries are not indicated in the writing.

MEŠ as "Pluralzeichen und nach Ideogramm." Most words with MEŠ are clearly plural. There are no examples of MEŠ on a word certainly singular, though some possible cases occur. On the available evidence it seems unlikely that MEŠ is used otherwise than as indicator of plurality. The prevailing practice of writing MEŠ raised above the line after a logogram is unwarranted, as the relation of MEŠ to the preceding signs in such an expression as LÚ.UKÚ.MEŠ is entirely different from that in LÚ$_{\underline{\text{hu-ra-di-ni-li}}}^{\text{MEŠ}}$. In the latter case the form of the preceding word already includes the plurality, in the former case it does not.

[31] It occurs several times, for example in K Inc. 32 and 33. There is a possible occurrence in the damaged text 89:20.

CHAPTER III

PHONOLOGY: VOWELS

3.1. /*e*/.--Evidence for the phoneme /*e*/ is contained in those cuneiform signs which in Assyrian are known to contain the vowels *i* and *e*. Those containing *i* are: *i*, *pi*, *bi*, *ki*, *ki*$_4$, *gi*, *qi*, *ti*, *di*, *si*, *zi*, *ṣi*, *ši*, *ri*, *li*, *ni*, *hi*, *hí*, *ip*, *it*, *iš*, *ir*, *il*, *giš*, *din*, *duri*. Those containing *e* are: *e*, *be*, *te*, *ṭè*, *še*, *me*, *el*. That *hi* and *hí* are homophonous is shown by the fact that three of the four words in which *hí* appears (^{m}*iš-pu-ú-i-ni-hí*, ^{m}*sar*$_5$*-du-ri-e-hí*, *šú-hí*) have analogues with *hi*; only *e-gu-ru-hí* does not.

3.1.1. Interchange of *i* and *e*.--In general, there is consistency in the use of a *Ci* sign or a *Ce* sign in spelling a given word. There are, however, some examples of interchange.

3.1.1.1. *Ci* and *Ce* signs:

(1) *bi*/*be*: With the possible exceptions of *be-di*/*bi-di* discussed below and the deity name ^{d}*ar-ṣi-be-di-ni-e*, every occurrence of *be* is in a word also spelled with *bi*. One of these is an occurrence word initially (*be-di-ni* : *bi-di-ni* : *bi-e-di-ni*), the others are all word final (14 occurrences in 7 different words; the corresponding spellings with *bi* occur 34 times).

(2) *ti*/*te*: Interchange occurs only in various forms of the name of Argishti (e.g. ^{m}*ar-giš-ti-hi* : ^{m}*ar-giš-te-hi* : ^{m}*ar-giš-ti-e-hi*)

and in the word *iš-te(-e)-di* : *iš-ti-di* : *iš-ti-e-di*.[1] The signs *ti* and *te* occur followed by different consonants in most cases; the same following consonant occurs only in the sequences *tih*/*teh*, *til*/*tel*, *tiš*/*teš*, and *tid*/*ted* (the latter only in *iš-te-di* : *iš-ti-di* : *iš-ti-e-di*).

(3) *ši*/*še*: There are no examples of interchange of these two signs, with the possible exception of *al-su-i-še-e* : *al-su-i-ši-e* discussed below and probably *i-ni-ri-a-ši* : ^{d}*i-ni-ri-a-še* : *i-ni-ri-a-ši-e.* These signs occur for the most part with different following consonants; the only sequences that occur for both are: *šib*/*šeb* (the latter only in two deity names), *ših*/*šeh*, *šil*/*šel*, *šip*/*šep*, *šir*(?)/*šer*, *šiš*/*šeš*.

3.1.1.2. The separate vowel signs *i* and *e*.

(1) *i* and *e* are used interchangeably after *Ci* signs, apparently as reinforcing vowels, in final position,[2] e.g.

a-zi-b*i-e* : a-zi-b*i-i*

a-l*i-e* : a-l*i-i*

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[1] Forms of Argishti with *te* occur 13 times, the same words occur with *ti* 27 times and with *ti-e* 14 times. The listed spellings of *ištedi* occur once each. Possibly another example is to be found in *te!-⸢lu⸣-ni* (10:26) :: *ti-⸢lu-na⸣* (10:83). Cf. Ts., *RA* XLVIII, 201; *CICh* Tf. VIII, X.

[2] Note, however, that a consistent writing *Ci-e* usually represents defective writing of a vowel sequence, and is therefore distinct from *Ci-i* representing simple reinforcement, e.g. ^{d}*hal-di-e* :: ^{d}*hal-di-i-e* :: ^{d}*hal-di-e-i* differs from ^{d}*hal-di-i* :: ^{d}*hal-di*. Similarly, *a-li-e* 'he says' is not the same word as *a-li* 'which,' even though the latter spelling very rarely appears as a defective writing for the former. *a-li-i* occurs as a reinforced form for *a-li*, only once clearly as a variant spelling of *a-li-e*. Similarly, *iš-ti-ni* and *iš-ti-ni-e* (with one possible exception), $^{\text{GIŠ}}$*šú-ri-i* and $^{\text{GIŠ}}$*šú-ri-e* are different words.

Such interchange is rare non-finally, occurring only adjacent to *š*, *r*, *l*, and especially *n*,[3] e.g.

š*i-e*-du-li-[e] : š*i-i*-du-li
p*i-e*-ni : p*i-i*-ni

The rarity of such interchange suggests that where it occurs it probably represents defective writing of a vowel sequence (see 3.5.2). There are no examples of such interchange after *Ce* signs. There are examples of both *i* and *e* appearing after *Ce* signs in different words, but there is always the possibility that the *Ci-e* sequence is a defective writing for a longer sequence (e.g. *Ci-i-e*) and not equivalent to *Ci-i*.

a-gu-ú-b*i* : a-gu-ú-b*i-e* ; hu-b*i* : hu-b*i-i*
a-lu-s*i* : a-lu-s*i-e* ; e-s*i* : e-s*i-i*
^{m}ar-gi-iš-t*i*-hi : ^{m}ar-gi-iš-t*i-e*-hi ; iš-t*i*-ni : iš-t*i-i*-ni
ú-l*i*-še : ú-l*i-e*-še ; ur-pu-l*i*-ni : ur-pu-l*i-i*-ni

Sequences of *Ce-i* (except *me-i*) are uncommon; some, at least, are interchangeable with vowel sequences (*a-i-še-i* : *a-i-še-e-i* is the only such occurrence in other than initial position). The sequence *Ce-e* interchanges with *Ci-e* but never with *Ci-i*. There are no examples of *Ci-e* interchanging with *Ce-i*.

(2) *i* and *e* interchange in variant spellings of some vowel sequences, e.g.

a-ú-e :: a-ú-i (:: a-ú-i-e)
qi-r*a-e*-di : qi-ú-r*a-i*-di

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[3] Since one member of this group is always present, it seems reasonable to connect the interchange with the presence of *š*, *r*, *l*, or *n*, rather than with another neighboring consonant (e.g. *d* or *p* in the examples cited).

The simple substitution of i for e in clusters involving only i and e (as distinct from reinforcement) does not occur (e.g. Ci-e-i occurs, but not *Ci-e-e). The Urartian scribes avoided writing -i-i- or -e-e-. However, the sequence -i-e- seems to be interchangeable with -e-i- (see 3.5.2.2 (3)).

gu-nu-ši-ni-e-i : gu-nu-ši-ni-i-e
^{d}hal-di-e-i : ^{d}hal-di-i-e

3.1.2. Incomplete series of Ce signs.—The incompleteness of the series of Ce signs does not constitute significant evidence for the equivalence of e and i, since the Assyrian cuneiform syllabary, the source of the Urartian, is also extremely defective in this respect. The only striking feature is the failure of Urartian to use the mi sign, which is commonly used in Assyrian. The apparent failure to use ṭè with the value ne is probably due primarily to a tendency to minimize polyphony.

3.1.3. i and e submembers of phoneme /e/.—The features discussed above would seem to indicate that i and e are variant writings of a single phoneme. There are, however, some contrary indications. bi-di and be-di, i-si and e-si seem to be different words. It is possible that they are homonyms which have been made distinct by a spelling convention, or one or the other may represent defective writing of a vowel sequence (see 3.5.3). Perhaps our inadequate knowledge of the meaning of Urartian words and phrases makes these words seem to be different in meaning, when they are identical. al-su-i-še-e and al-su-i-ši-e seem to be different inflectional forms of the same stem. This is probably due to -ši-e being a defective writing of a vowel sequence, *-ši-i-e, or the like (see

3.5.3). Or they could be variant writings of the same phonemic form, the apparent difference in meaning as translated being one which is not rendered in Urartian by a difference in form. The fact that *Ce-e* interchanges with *Ci-e*, but never with *Ci-i* also would suggest that *i* and *e* are distinct phonemes.

The evidence as a whole seems to favor the tentative conclusion that *i* and *e* represent different sounds, but that they are allophones of a single phoneme. There is enough evidence of fluctuation to warrant such a conclusion, and there are no certain cases of minimal contrast. In general, a *Ci* sign may have the value *Ce*, but a *Ce* sign does not have the value *Ci*.[4] Therefore, *Ci-e* is often equivalent to *Ce*, though it may also be a defective writing of a vowel sequence (see 3.5.3). The infrequency of interchange may be due, in part, to scribal training which stabilized the spelling quite rigorously, and to the practice of using the sequences -*i-e*- or -*e-i*- to indicate that the vowels are in separate syllables (see 3.5.2), as well as to phonetic considerations.[5]

3.2. /*a*/.--Evidence for the phoneme /*a*/ is contained in the signs: *a*, *pa*, *ba*, *ka*, *ga*, *qa*, *ta*, *da*, *sa*, *za*, *šá*, *ra*, *la*, *ma*, *na*, *ha*, *ʔa*, *ya*, *ap*, *at*, *áš*, *ar*, *ár*, *al*, *am*, *an*, *aya*, *bar*, *kam?*, *qar*, *tar*, *sar*, *sar*$_5$, *sal*, *mat*, *hal*.

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[4] The same applies to Neo-Assyrian (cf. von Soden, *op. cit.*, signs Nos. 163, 42, 218, 122, 212, 306, with reference to his period 7, and also p. 8). The acquaintance of Urartian scribes with Assyrian writing practices may have been a factor in stabilizing Urartian writing in this respect.

[5] The conventions seem to have been in effect from the beginnings of Urartian writing, so strict scribal conventions can hardly be attributed to local tradition.

ár occurs certainly only in ^{m}*ár-giš-te-hi-ni-še*; its equivalence with *ar* is shown by the more common spelling of the same word, ^{m}*ar-giš-te-hi-ni-še*. *sar* occurs only in ^{d}*sar-di-i-e* and ^{m}*sar-du-ri-še*. Its equivalence with *sar*$_5$ is shown by the more common spelling of the latter word: ^{m}*sar*$_5$*-du-ri-še*.

3.3. /*u*/.—Evidence for the phoneme /*u*/ is contained in the following signs: *u*, *ú*, *pu*, *ku*, *gu*, *qu*, *tu*, *tú*, *du*, *ţu*, *su*, *zu*, *şu*, *šu*, *šú*, *ru*, *lu*, *mu*, *nu*, *hu*, *up*, *uš*, *ur*, *ul*, *bur*, *tuš*, *šur*, *duri*.

Variant spellings show clearly that *u* and *ú*, *tu* and *tú*, *šu* and *šú* are homophonous pairs.[6]

^{KUR}šu!-ra-a-⌈u⌉-e : ^{KUR}šú-ra(-a)-ú-e
ši-i-di-i-iš-tu-a-li : ši-di-iš-tú-a-li
t[e]-ir-tu : te-ir-tú
ha-u-bi : ha-ú-bi
ku-ţu-u-be : ku-ţu-ú-bi

3.4. Contrast and interchange of vowels.—There are a number of words in the Urartian texts which differ only in the nature of a vowel. A few of these appear to be variants of the same word, a number of them are apparently minimal pairs, while others are of uncertain status. The uncertainty about the meaning of many words and phrases in Urartian makes it impossible in many cases to be certain whether a pair of words are variants of the same word or are distinct.[7]

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[6] *u* occurs a considerable number of times, and only three of the words in which it occurs have no analogues with *ú*: *li-u-a-ni*, *ti-u-li*, and *a-i-u-ri*. ^{m}*iš-pu-u-ni(-e)-hi* does not occur with *ú*, but the equivalent ^{m}*iš-pu-u-i-ni-e-hi* occurs with both *u* and *ú*. *tu* occurs in five words, three of which have no analogues with *tú*: *[at-qa]-⌈na⌉-di-tu*, *a-tu-li-i-e*, *ha-ši-tu-ú-[x?]*. *šu* occurs only twice, one of these occurrences has no analogue with *šú*: *ha-šu-li-i-[e]*.

[7] In the lists which follow, the form in the second column is the more frequent one, if there is a marked difference in frequency of

(1) Probably variants of the same word:[8]

a/i	a-lu-⌈si-i⌉-n*a-a*-ni (9:32)	:	a-lu-si(-i)-n*i*-ni (80 II 10)
a/u	har-har-š*á*-bi (80 VI 20)	:	har-har-š*ú(-ú)*-bi (80 I 7)
i/u	bar-z*i*-di-bi-du-ni (55C)	:	bar-z*u*-di-bi-du-ni (56:3)
	e-gu-ru-h*í* (9:15)	:	e-gu-ru-h*u* (9:24)
	ú-ri-iš-h*i* (112C)	:	ú-ri-iš-h*u* (112C var.)

A possible explanation for several of these cases would seem to be a tendency toward vowel harmony (e.g. *eguruhi* > *eguruhu* due to the influence of the *u*'s of the second and third syllables), but the language as a whole shows little evidence of such harmony. It is possible that the difference of vowel in such pairs conveys a nuance which we are not yet able to recognize or corresponds to a difference of dialect or level of usage. Some of the variations, especially in final position, suggest that in some cases the vowel of a CV sign was not pronounced, i.e. that the sign functioned as a pure consonant in the expression of a consonant cluster. The extensive use of reinforcing vowels would seem to support this surmise, especially when it is noted that in certain places in some words reinforcement never occurs. For example, the common word *kuruni* occurs in the spellings *ku-ru-ni* and *ku-ru-ú-ni*, but **ku-ú-ru-ni* does not occur. This suggests that the

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occurrence. The reference cited, in those cases where there is more than one occurrence, is a typical usage of the word.

[8] It is also tempting to see in *e-ti-bi* (122:31 'many') a variant of *a-ti-bi* (103 V 31 etc. '10,000'). The relation, if any, between *ši-ši-ni* (82 rev. 34) and *šú-si-ni* (82 obv. 40 etc.) is uncertain. Possibly dittography is involved in the former. Cf. also n. 1 above. Another example of vowel variation in two writings of perhaps the same word is the personal name(s) ^{m}*mu-ri-i-ni-ni* (103 I 42), ^{m}*mu-ri-nu-ni* (102 III 3), though they are mentioned in connection with different lands.

word was perhaps pronounced something like [kruni].[9] In final position, note the variant spellings *e-di-ni* or *e-din*, while *e-di-ni-i/e* is a different word.[10] In some cases, however, there is reinforcement of a vowel fluctuating apparently with another vowel (as in some of the examples listed above) or with *ø* (e.g. in the ergative case ending, see 7.4.3).

(2) Apparently minimal pairs (different words):

ar-d*i*-ni (10:26)	ar-d*u*-ni (103 II 48)
a-t*i*-bi (103 V 31)	a-t*ú(-ú)*-bi (103 III 36)
$^{\mathrm{KUR}}$bi-a-i-n*a*-še (121:7)	$^{\mathrm{KUR}}$bi-a-i-n*i*-še (126:41)
bi-d*i*-ni (14:4)	bi-d*u*-ni (23:17)
k*a*-ru-ni (80 V 34 etc.)	k*u*-ru-ni (80 III 29 etc.)
ma-n*i*-ni (56:6 etc.)	ma-n*u*-ni (117:3, 129:12)[11]
na-h*a*-bi (81 obv. 19)	na-h*u*-bi (103 VI 26)
qa-ap-qa-r*i*-li-ni (10:25, 82)	qa-ap-qa-r*u*-li-ni (104:22)
za-d*i*-ni (97:8)	za-d*u*-ni (103 VI 29 etc.)

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[9] Conversely, some words show vowels which always appear reinforced, e.g. the forms of the name of Išpuini are always written -*pu-ú*-; *šá-a-li(-e)* occurs, never **šá-li(-e)*.

[10] Because of the frequency of defective writing of vowel sequences, the data for occurrences of final vowels cannot be accurately evaluated, especially for *i* and *e*. There are 18 cases of *Ci* : *Ci-i/e* and 2 cases of *Ce* : *Ce-e* in final position which are clearly variants of vowel sequences. Besides these, the following vowel reinforcements occur in final position with the frequencies noted:

	No. of words	No. of Occurrences	
		CV	CV-V
Ca-a	5	20	36
Ci-e	66	640	296
Ci-i	27	274	68
Ce-e	10	246	18
Cu-u	2	6	2

(*Cu-u* occurs in final position only in the sequence -*tú-ú*.

[11] Perhaps also *[m]a?-na-ni* (16 up. 8).

3.5. Vowel sequences.--The graphic vowel sequences occurring in Urartian are listed in 2.5. Aside from simple reinforcement, the usual type can be symbolized as $CV_1(-V_1)-V_2(-V_3)$ or $CV_1(-V_1)-V_2-V_1$, sometimes with one or two additional vowels.[12]

3.5.1. Sequences of identical vowels (V_1-V_1).--The only cases of two successive identical vowels in such sequences are:

(1) Reinforcement of the first vowel of the sequence (e.g. ú-lu-uš-ta-a-i-bi).

(2) A single example of reinforcement of the last vowel, where the sequence ends with a VC sign: [h]a-ši-a-al-me-e.

3.5.2. Sequences of dissimilar vowels (V_1-V_2).--The spelling of sequences of dissimilar vowels shows a number of variations in different writings of the same word.

3.5.2.1. List of variant spellings of V_1-V_2.[13]

a(-a)-e	:	a(-a)	(?) (see note 14)		
a-a-i	:	a[15]	ú-lu-uš-ta-a-i-bi (3)	::	ú-lu-uš-ta-bi (5)
a-i	:	a-a[15]	^{d}?a(-a)-ru-ba-i-ni-e (2)	::	[^{d}?a-a]-ru-ba-a-ni-e (1)

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[12] For the purposes of these formulas, i and e are different vowels, except in cases of reinforcement of V_1 (see n. 2 above).

[13] In the lists which follow and in the discussion of the sequences, in statements of sequence patterns u represents graphic u and/or ú, but in citing examples the diacritic will be used wherever appropriate. Figures in parentheses indicate number of occurrences.

[14] Interchange of (a-)a-e and (a-)a occurs only in

$$\left.\begin{array}{l}{}^{\mathrm{URU}}\text{ṭu-uš-pa-a-e (16)}\\ {}^{\mathrm{URU}}\text{ṭu-uš-pa-e (7)}\end{array}\right\} :: \left\{\begin{array}{l}{}^{\mathrm{URU}}\text{ṭu-uš-pa-a (12)}\\ {}^{\mathrm{URU}}\text{ṭu-uš-pa (14)}\end{array}\right.$$

This probably represents substitution of a dative form for a genitive (see 7.4.4) rather than a spelling variation.

[15] An example of (a-)a-i : a-a is perhaps to be restored in 7 rev. 19: [ú-lu-uš]-t[a-a]-bi :: ú-lu-uš-ta(-a)-i-bi.

a-i	: a[16]	a-i-ni-e-i a-i-ni(-i/e) (24)	::	⌈a⌉-ni-e-i (1)
		^{KUR}bi-a-i-na-i-di (3)	:	^{KUR}bi-a-i-na-di (3)
		[^{m}r]u-sa-hi-na-i-di (1)	:	^{m}ru-sa-hi-na-d[i] (1)
		ú-lu-uš-ta-i-bi (4)	::	ú-lu-uš-ta-bi (5)
	: a-e	qi-ú-ra-i-di (1)	:	qi(-ú)-ra(-a)-e-di (3)
a-a-i-e	: a-a-e[17]	^{GEME}si-la-a-a-i-e (1)	::	^{GEME}si-la-a-⌈e⌉ (1)
a-i-e	: a-e	tar-a-i-e (7)	:	tar-a-⌈e⌉
a-a-i-ú	: a-u	ka-a-i-ú-ki$_4$ (1)	:	ka-ú-ki(-i/e) (5)
a-u	: u[18]	ha-ú-li(-i)-e (3)	:	hu-li-i-e (1)
a-a-u-e	: a-e	^{KUR}bi(-i)-a-i-na-a-ú-e ^{KUR}bi-i-na-a-ú-e (15)	::	^{KUR}bi(-i)-a-i-na-e ^{KUR}bi-i-na-e (10)
a-u-e	: a-e	^{KUR}bi(-i)-a-i-na-ú$^{(?)}$-e ^{KUR}bi-a-na-ú-e (36)	::	^{KUR}bi(-i)-a-i-na-e ^{KUR}bi-i-na-e (10)

a-ú-i-e (16) :: a-ú-e (1) :: a-ú-i (1) perhaps ; a-ú-i-e-i (2)
(each of these is a complete word)

e-e-i	: e	a-i-še-e-i (4)	:	a-i-še (1)
i-a-i	: i-a	^{KUR}bi-a-i-na(-a)-áš-te (9)	::	^{KUR}bi-a-na-áš-te (6)
	: i-i	^{KUR}bi-a-i-na(-a)-ú-e ^{KUR}bi-a-i-na-e (29)	::	^{KUR}bi-i-na-a-ú-e ^{KUR}bi-i-na-e (2)
i-i-a-i	: i-a	^{KUR}bi-i-a-i-na(-a)-áš-te (2)	::	^{KUR}bi-a-na-áš-te (6)
		^{KUR}bi-⌈i⌉-a-i-na-a-[i-di] (1)	::	^{KUR}bi-a-na-i-di (3)

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[16] In 59a:18 *i-na-⌈ni⌉* occurs as a variant spelling for *i-na-i-ni-⌈e⌉* (59b:18). In all other occurrences these two spellings apparently represent different words.

[17] There is a possible example of *a-a-i-e* : *(a-)a-i/e*. *[qi-ú-ra-a]-i-e-di* (6 rev. 52), *qi-ú-ra-i-di*, *qi-ra-e-di*, *qi-ú-ra-a-e-di*.

[18] It is unlikely that any of the occurrences of *hu-bi* (16 up. 10, 80 II 13, 80 IV 54, ⌈80 V 12?⌉, 82 obv. 29, 124 rev. 24) represents a variant spelling of *ha-ú-bi* (cf. Belck, *ZDMG* LVIII, 163-64).

i-i-a-i	: i-i-a	^{KUR}bi-i-a-i-na(-a)-ú-e ^{KUR}bi-i-a-i-na-e (22)	::	^{KUR}bi-i-a-na-ú-e (1)
	: i-i	^{KUR}bi-i-a-i-na(-a)-ú-e ^{KUR}bi-i-a-i-na-e (22)	::	^{KUR}bi-i-na-a-ú-e ^{KUR}bi-i-na-e (2)
i-e-i	: i-i[19]	a-i-ni-e-i (12)	::	a-i-ni-i (8)
		ap-si-e-i (3)	::	ap-si-i (3)
		gi-e-i (13)	:	gi-i (3)
		ha-ar-[ni-z]i-ni-e-i (1)	::	ha-ar-ni-zi-ni-i (1)
		^{d}hal-di-ni-e-i (1)	:	^{d}hal-di-ni-i (1)
		pi-e-i (4)	::	pi-i (6)
		pi-e-i-ni(-e) (12)	::	pi-i-ni (11)
		^{m}me-nu-a-i-ni-e-i (3)	::	^{m}me-nu-a-i-ni-i (1)
		^{m}sar$_5$-du-ri-e-i (5)	::	^{m}sar$_5$-du-ri-i (4)
		si-e-⌈ir⌉-ši-ni-i-e (1)	::	si-ir-ši-ni-e (1)
		ú-ri-iš-hu-si-ni-e-i (1)	::	ú-ri-iš-hu-si-ni-i (2)
	: i[19]	a-i-ni-e-i (12)	::	a-i-ni (2)
		e-si-ni-e-i (1)	:	e-si(-i)-ni (10)
		gu-nu-ši-ni-e-i (1)	:	gu-nu-ši-ni (1)
		[k]i-e-i-da-nu-ú-l[i](1)	:	ki$_4$-da-nu-ú-li
		^{m}me-nu-a-i-ni-e-i (3)	::	^{m}me-i-nu-ú-a-ni ^{m}me-i-nu-a-ni ^{m}me-nu-a-ni ^{m}me-nu-ú-a-ni ^{m}me-nu-a-i-ni (45)
		^{m}sar$_5$-du-ri-e-i (5)	::	^{m}sar$_5$-du-ri (8)
		ú-ri-iš-hu-si-ni-e-i (1)	:	ú-ri-iš-hu-si-ni (2)
	: i-e	a-i-ni-e-i (12)	::	a-i-ni-e (2)
		e-si-ni-e-i (1)	:	e-si-i-ni-e (1)

---

[19] Some of the examples of such variation in final position may represent interchange of genitive and dative (see 7.4.4).

i-e-i	: i-e	^{d}hal-di-e-i (6)	:	^{d}hal-di-e (54)
		pi-e-i-ni(-e) (12)	::	pi-e-ni (2)
		^{m}sar$_5$-du-ri-e-i (5)	::	^{m}sar$_5$-du-ri-e (5)
i-i-e	: i-i	al-di-ni-i-e (1)	::	al-⌈di⌉-ni-i (1)
		^{KUR}e-ba(-a)-ni-i-e (10)	:	^{KUR}e-ba(-a)-ni-i (4)
		gu-nu-ši-ni-i-e (2)	:	gu-nu-ši-ni-i (5)
		^{m}me-nu-a-hi-ni-i-e (1)	:	^{m}me-nu-a-hi-ni-i (1)
		^{GIŠ}šú-ri-i-e (10)	:	^{GIŠ}šú-ri-i (23)
	: i	ba(-a)-du-ú-si-i-e ba-du-si-i-e (15)	:	ba-du-si (1)
		bi-[i]-e-di-i-⌈ni⌉ (2)	::	bi-di(-i)-ni (4)
		du-li-i-e (6)	::	du-li (4)
		^{KUR}e-ba(-a)-ni-i-e (10)	::	^{KUR}e-ba(-a)-ni (26)
		ma-si(-i)-ni-i-e (2)	:	ma-si-ni
		^{m}me-nu-a-hi-ni-i-e (1)	:	^{m}me-nu-a-hi-ni (1)
		su-ú-i-du-li-i-e (2)	:	su-ú-i-du-li (1)
		^{GIŠ}šú-ri-i-e (10)	::	^{GIŠ}šú-ri (5)
i-i-u	: i	qi-i-ú-ra-a-ni-e (1)	:	qi-ra-ni (1)
i-u	: i	ar-ni-u(´)-ši-ni(-e)-li (25)	::	ar-ni-ši-ni-li (1)
		^{KUR}e-ba-ni-ú-ki-di (1)	:	^{KUR}e-ba-ni-ki-di (1)
		qi-ú-ra-a-e-di (2)	::	qi-ra-e-di (1)
		qi-u-ra-ni, qi-ú-ra-a-ni (4)	:	qi-ra-ni (1)
		^{d}zi-ú-qu-ni-e (1)	::	^{d}zi-qu-ú-ni-i-e (1)
i-u-a	: i-a	ú-e-ši-ú-a-li (1)	::	ú-e-ši-a-li (1)

(u-)u-a : u(-u)(-u) probably does not occur--see Note 20.

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[20] There are some passages in which the ending Cu(-ú)-a-li seems to be a variant of Cu(-ú)(-ú)-li. For example, ši-di-iš-tú-li (11:5, 11) and ši-di-iš-tu-ú-a-li (12:9, ⌈41⌉, both are translated 'they built them.' However, the morphological patterning of the language demands

u-a-i	: a-a-i	^{d}ú-a-i-na-ú-e (1)	:	^{d}a-a-i-na-ú-e (1)
u-u-i	: u-u	al-su-ú-i-ši(-i)-ni (25)	::	al-su-ú-ši-ni (2)
		^{m}iš-pu-ú-i-ni(-e)-hí ^{m}iš-pu-$\overset{(\prime)}{\text{u}}$-i-ni-e-hi ^{m}iš-pu-$\overset{(\prime)}{\text{u}}$-i-ni-hi (36)	::	^{m}iš-pu-u-ni(-e)-hi (2)
		^{m}iš-pu-$\overset{(\prime)}{\text{u}}$-i-ni(-e)-hi-ni-še ^{m}iš-pu-ú-i-ni-e-hi(-i)-ni-e-še (97)	::	^{m}iš-pu-$\overset{(\prime)}{\text{u}}$-ni-hi-ni-še (8)
		ku-ú-i-gu-ú-ni (3)	:	ku-ú-gu-ú-ni (4)
	: u	al(-a)-su-ú-i-ni(-e) (9)	::	al-su-ni (8)
		al-su-ú-i-ši(-i)-ni (25)	::	al-su-ši-ni (17)
		ku-ú-i-gu-ú-ni (3)	:	ku-gu(-ú)-ni ku-gu-i-ú-ni (14)
u-i	: u-u	al-su-i-ši-e al-su-i-še(-e) (10)	::	al-su-ú-ši-e (1)
		al-su-i-ši(-i)-ni (63)	::	al-su-ú-ši-ni (3)
		⌈ṣu⌉-i-ni(-i) (2)[21]	:	ṣu-ú-ni-e (1)
	: u	al-su-i-ni (27)	:	al-su-ni (8)
		al-su-i-ši(-i)-ni (63)	::	al-su-ši-ni (17)
		⌈ṣu-i⌉-ni-a (1)[21]	:	ṣu-ni-a (1)
u-i-a	: u-a	^{d}ú-i-a (1)	:	^{d}ú-a (2)

ú-i-e (5) :: ú-i (25) (each a complete word)

u-i-u	: u-u	ku-gu-i-ú-ni (2)	::	ku(-ú)-gu-ú-ni ku-ú-i-gu-ú-ni (13)
	: u	ku-gu-i-ú-ni (2)	:	ku-gu-ni (10)

3.5.2.2. Classification of frequent spelling variants.—From the variant writings certain principles seem to emerge clearly:

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interpretation of the former as a third person plural verbal form and the latter as third person singular. This substitution of the singular verbal form for the plural is a syntactic feature and not a phonological or orthographic one. The form zatuli is probably a syncopated third plural form (< *zadituli), for which the third person singular form zaduali is sometimes substituted (10:2, 22). Cf. 6.4.2.

[21] Cf. also ṣu-i-ni-a-ni (118:12).

(1) The first vowel of the sequence may be single or repeated (simple or reinforced): CV_1-V_1-V_2- and CV_1-V_2- seem to be completely equivalent, e.g.

$^{\text{KUR}}$e-ba(-a)-n*i-i-e*-di : $^{\text{KUR}}$e-ba-n*i-e*-di

qi-ú-r*a-a-e*-di : qi-r*a-e*-di, qi-ú-r*a-i*-di

za-d*u-ú-a*-li : za-d*u-a*-li

Such doubling is very rare in word-initial position, occurring only in $^{\text{d}}$*a-a-i-na-ú-e*, *e-ir-⌈a⌉*, *e-ir-i*, *e-ir-ṣi-du(-ú)-bi*, *i-iš-hi*, and *ú-ú-li* (if the last two represent correct word division). In at least some of these words the two vowels may represent two syllables.

(2) The vowel signs *i* and *e* are interchangeable as reinforcing vowels after *Ci* signs and probably also after *me*. It seems likely that *i* and *e* are equivalent after *a* or *u*, though data are scanty. The sequences (*a-*)*a-e* and (*a-*)*a-i* have the same variant spellings. There are a few cases of interchange:

a-ú-i : *a-ú-e* (: *a-ú-i-e*)

qi-ú-r*a-a-e*-di : qi-r*a-e*-di : qi-ú-r*a-i*-di

$^{\text{URU}}$ṭu-uš-p*a(-a)-e* : $^{\text{URU}}$ṭu-uš-p*a(-a)-i*

and apparently the same inflectional ending occurs in variant spellings in $^{\text{KUR}}$*bi-i-a-i-na(-a)-ú-e* and $^{\text{KUR}}$*lu-lu-i-na(-a)-ú-i*.[22]

(3) The sequences of separate vowel signs -*i-e*- and -*e-i*- are equivalent. This appears evident from the fact that the same variant spellings occur for -*i-i-e* and -*i-e-i* and from a few cases of interchange:

---

[22] Similar forms, probably dative singulars of *u*-stems, occur in the proper names $^{\text{URU}}$*ša-a-ši-lu-ú-i* and $^{\text{m}}$*ka-am-ni-ú-i*. It should be remembered that *i* and *e* are not equivalent after one another.

^{m}ar-gi-iš-ti-i-e : ^{m}ar-giš-ti-e-i
gu-nu-ši-ni-i-e : ^{LÚ}gu-nu-ši-ni-e-i
^{d}hal-di-i-e : ^{d}hal-di-e-i

3.5.2.3. Classification of infrequent spelling variants.--The variant spellings not accounted for by the above principles can be classified as follows. Since many of the spelling variants are infrequently attested and do not occur in varied environments, no reliable general conclusions can be drawn.

(1) The sequences -i-e and -e-i as portions of longer sequences may be simplified to either i or e. After Ci these sequences may be lost completely.[23]

(a) (a-)a-i-e : a-i(?), (a-)a-e
(b) e-e-i : e
(c) (i-)i-e-i or i-i-e : (i-)i or (i-)i-e[24]
(d) a-u-i-e-i : a-u-i-e, a-u-i, a-u-e (a little uncertain)
(e) u-i-e : u-i (one example only)

(2) The sequences i-a and a-i/e, whether constituting the whole sequence or only part of it, may lose the second element.[25]

(a) (a-)a-i : (a-)a[26]

---

[23] There is one possible but uncertain case of u-e-i-a : u-e-a, [^{d}ṭu-uš-pu-e]-⸢i-a⸣, ^{d}ṭu-uš-pu-⸢e⸣-a. The example for e-i-e : e-e is somewhat uncertain: ku-ul-me-[i]-e, ku-ul-me-e. The example for i-i-e : (e-)e is uš-ma-ši-i-e : uš-ma(-a)-še(-e).

[24] But (i-)i and i-e are frequently not equivalent (see n. 2 above).

[25] There is a possible but uncertain example of u-a-i : u-a, ^{m}me-nu-a-i, ^{m}me-nu-a.

[26] ^{m}ru-sa-i-ni-e (126:16) is apparently different from ^{m}ru-sa(-a)-ni (e.g. 119:7).

(b) a-a-i-u : a-u (one example only)

(c) (i-)i-a-i : (i-)i-a or i-i (one example only, before *n*)

(3) *a* may interchange in a sequence with *u*.[27]

u-a-i : a-a-i (one example only, initial, before *n*)

(4) Whether constituting the whole sequence or only part of it, the sequences *u-a*, *u-i*, *i-u* and *a-u* may lose the second element, less commonly the first element.[28] If the vowel remaining is *u*, it may remain single, or it may be repeated if it is not followed by another vowel.

(a) (i-)i-u : i

(b) i-u-a : i-a (one example only, before *l*)

(c) (a-)a-u-e : a-e (attested finally only, after n)[29]

(d) a-u : u (one example only, before *l*)

(e) (u-)u-i : (u-)u

(f) u-i-a : u-a (one example only)

(g) u-i-u : (u-)u (one example only, before *n*)

---

[27] A related phenomenon seems to be involved in *ni-ip-si-du-li-ni* (126:19, etc.) : *ni-ip-si-di-ˀa-a-li* (10:3, 35), but probably these are different morphological forms (see 6.9.2). The pair *ú-ru-li-a-ni* and *⸢ú⸣-ru-lu-ni* seem to be different forms, though of the same stem. There is a possible but uncertain case of *a-i-e* : *a-a*, *ar-da-i-e*, *a[r-da]-a*. Note also the apparent change of vowel in $^{\mathrm{d}}$*ú-a-ru-ba-ni-e* : $^{\mathrm{d}}$*ˀa(-a)-ru-ba-i-ni-e*, $^{\mathrm{d}}$*ˀa(-a)-ru-ba-ni* (see 3.5.2.5 (3)).

[28] The equivalence of *i-u-i* and *u-i* in $^{\mathrm{d}}$*ši-ú-i-⸢ni-i-e⸣*, *šú-i-ni-i* is unlikely. The equivalence of *i-u* and *u-u* is quite improbable: *ti-ú-li-i-e* and *tú-ú-li-i-e* seem to be different words.

[29] There is an improbable case of *a-u-e* : *a-a*, $^{\mathrm{LÚ}}$*hu-ra-di-na-ú-e*$^{\mathrm{(MEŠ)}}$: $^{\mathrm{([LÚ])}}$*hu-ra-di-na-a*. These are almost certainly different forms of the same stem.

3.5.2.4. Summary of sequences of dissimilar vowels.--The sequences which occur, with the variant writings, can be summarized as follows:[30]

Sequence	Occurrence I.	M.	F.	Variant spellings					
(a-)a-e		x	x		a-i	(a-)a-i-e		(a-)a-u-e	
(a-)a-i	x	x	x	(a-)a	a-e	(a-)a-i-e?		a-ya	(u-)u-a-i
a-i-a*									
(a-)a-i-e		x	x		a-i?	(a-)a-e		a-ya-e?	a-gi
(a-)a-i-u	x	x		a-u					
a-i-u-e		x							
(a-)a-u	x	x	x	u	(a-)a-i-u				a-gu
[a-u]-a	x								
(a-)a-u-e	x		x	a-e	a-u-i-e* (a-)a-u-i			a-u-i-e-i*?	
(a-)a-u-i	x	x	x		(a-)a-u-e a-u-i-e*			a-u-i-e-i*?	
a-u-i-e*					a-u-e/i*			a-u-i-e-i*?	
a-u-i-e-i*					a-u-e/i*			a-u-i-e*?	
e-a		x							
(e-)e-i		x	x	e					
e-i-a		x							
e-i-e		x	x						
e-u	x								
e-u-e*									
(i-)i-a	x	x	x		(i-)i-a-i		i-u-a	ya i-ya	{I. M.}

---

[30] The abbreviations used in the chart and the discussion which follows are: I. initially in a word; M. medially; F. finally. The sequences marked * constitute complete words.

Sequence	Occurrence			Variant spellings
	I.	M.	F.	
i-a-e?		x?		
(i-)i-a-i	x		x	i-i (i-)i-a
(i-)i-e	x	x	x	(i-)i (i-)i-e-i i-gi
(i-)i-e-i	x	x	x	(i-)i (i-)i-e
i-e-u		x		
(i-)i-u	x	x	x	i
i-u-a		x		i-a
(i-)i-u-e			x	
(i-)i-u-i		x		
(u-)u-a	x	x	x	?a(-a) (I.)
(u-)u-a-i	x	x	x	a-a-i(I.)
(u-)u-a-i-e			x	u-a-gi
(u-)u-e	x	x	x	u-i
(u-)u-i	x	x	x	(u-)u u-i-e u-e
u-e-a			x	
u-i-a	x	x	x	u-a*
u-i-e*				u-i
u-e-i-a?			x	
(u-)u-i-u		x		(u-)u

3.5.2.5. Interpretation of sequences V_1-V_2: /x/.—The occurrence of such sequences, and the variant spellings, can best be interpreted as attempts to render successive syllables separated by some sort of consonant or junctural feature for which the Assyrian syllabary did not offer adequate means of representation. The juxtaposition of dissimilar vowels ("broken-vowel writing") or the use of a vowel sign not indicating length is frequently encountered in Akkadian texts as a variant writing for $V_1\underline{?}V_2$, $V_1\underline{y}V_2$, or $V_1\underline{w}V_2$.[31] Therefore the occurrence of such a feature in Urartian writing should occasion no surprise, though Urartian scribes used it much more extensively than Akkadian ones did. This fact presumably arises from a difference in phonological structure. The Urartians also seem to have preferred use of a separate vowel sign to emphasize the broken writing, rather than merely juxtaposing two dissimilar vowels. This feature is in line with their practice of using separate vowel signs to emphasize the vocalic content of a preceding or following sign. The conclusion that such broken-vowel writing is an attempt to indicate an intervening phoneme is supported by occasional interchanges involving *g*, *y*, or *?*.

(1) All or part of a cluster may be replaced by the sign *ya*, the vowel sign *i* being replaced by the semiconsonant *y*.[32]

i-a : ya   *i-a*-ni : *ya*-ni

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[31] The writing with a vowel sign is used especially if $V_1 = V_2$. On broken-vowel writing in Akkadian see Jussi Aro, *Abnormal Plene Writings in Akkadian Texts* (Studia Orientalia XIX:11, Helsinki, 1953) esp. 3-4. Cf. I. J. Gelb, *Old Akkadian Writing and Grammar* (Materials for the Assyrian Dictionary II, Chicago, 1952) 36-37, 161, 168; André Finet, *L'Accadien des lettres de Mari* (Académie Royale de Belgique, Classe des Lettres, Mémoires LI fasc. 1, 1956) 4-5; *GAG* 24-25 (cf. Gelb, *BO* XII [1955] 102). The theory of W. von Soden (see esp. his "Vokalfärbungen im Akkadischen," *JCS* II [1948] 291-303; *GAG* 12) that these broken-vowel writings indicate modification of the vowel quality is not very likely in either Akkadian or Urartian (cf. Arno Poebel, *Studies in Akkadian Grammar* [Assyriological Studies No. 9, Chicago 1939], 176 n. 1; F. Thureau-Dangin, "Les graphies rompues en Accadien," *Mededeelingen en Verhandelingen No. 8 van het Vooraziatisch-Egyptisch Gezelschap "Ex Oriente Lux"* [Leiden, 1946], 15-18). Neither is it very likely that such 32Probably ndicate a weakened vowel (*GAG* 26 [cf. Gelb, *BO* XII (1955) 102]).

[32] Probably another example is *tar-a-i-e* : *tar-aya-⌈e⌉*, though these may be different words. Probably another example of intrusive *y* is involved in the town name $^{\text{URU}}$*ir-⌈di⌉-ya*, cf. $^{\text{URU}}$*e-ri-di-a-ni*.

a-i : a-ya   ha-i-la-a-ni : ha-ya-la-a-ni

i-i-a : i-ya   ul-gu-ši-i-a-ni : ul-gu-ši-ya-ni

(2) *g* may be inserted into a cluster:[33]

a-i-e : a-gi   te-ra-i-e : te-ra-gi

u-a-i-e : u-a-gi   tú-a-i-e : tú-a-gi

i-e : i-gi ^{KUR}e-ba-ni-e-di : ^{KUR}e-ba-ni-gi-di

a-u : a-gu   ši-da-ú-ri : ši-da-gu-ri

(3) There is one example of addition of initial *ʔ*:

u-a : ʔa(-a) ^{d}ú-a-ru-ba-ni-e : ^{d}ʔa-a-ru-ba-i-ni-e
^{d}ʔa-ru-ba-ni
^{d}ʔa-ru-ba-i-ni-e

The alternative values of the sign which contains *ʔ* permit reading either *ʔu(-a)* or *ʔa(-a)* at the beginning of the word. The latter seems more likely, to be interpreted as /*ʔa*/ for /*xa*/.[34]

3.5.2.5.1 Unlikely that both /w/ and /y/ occur.—In interpreting these vowel sequences, it is tempting to assume the existence of two phonemes concealed in them, which might be symbolized by /*w*/ and /*y*/.

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[33] Another possible example is *a-i-ú-ri* : *a-ga(-a)-ú-ri*. There is an intrusive *g* in the form of the land name ^{KUR}*ú-e-li-ku-ni-gi-di*. Probably also this phenomenon is involved in the forms *ku-ú-i-tú-ú* and *ku(-ú)-gu(-ú)-ni*, which are probably both from the same base, /*kux*-/. The other spellings which occur are *ku-gu-i-ú-ni* and *ku-ú-i-gu-ú-ni*, which seem to be from a different form of the base (see n. 44 below). An intrusive *g* also sometimes appears not between vowels, e.g. *šur-i-ni* : *šur-gi-ni*. Cf. Fr., *Cauc*. VIII, 120 n. 1 and 139 n. 2. Perhaps a similar phenomenon is involved in the relation between the Hurrian and Urartian forms of the name of the sun god: Urart. *šiuini*, Hur. *šimigi* (cf. Fr., *Or*. IX, 217-18). Perhaps also such a form as *šepuyaraiani* (117:5) contains a formative cognate to Hurrian -*ugar*- (*IH* 136-37).

[34] Cf. also ^{d}*ú-a-i-na-ú-e* : ^{d}*a-a-i-na-ú-e*, where also the initial *ú* seems to represent a consonant rather than a vowel. Probably another example of intrusion of *ʔ* into a vowel sequence is *ni-ip-si-di-ʔa-a-li* (cf. *ni-ip-si-du-li-ni*). Interpretation of the former as one word seems more likely than to consider it two words, as is done by Ts. (*NHI* 38).

The attempt to analyze the occurring sequences on this basis, however, encounters many difficulties.[35]

(1) The sequences are frequently reduced to only two signs, apparently representing in most cases the vowels preceding and following the consonant, with the consonant itself not overtly expressed in writing.[36] If there are two consonants, all such sequences are ambiguous. In one case the sequence with the postulated */w/ alternates with a form lacking any indication of such a phoneme; the alternate also varies with a form which would clearly have to be interpreted with */y/.[37]

a-u-e : a-e : a-i-e (: a-gi)

Similar ambiguity would prevail in those cases where the sequence is shortened to a single vowel.

(2) For many combinations no writing occurs which could clearly be interpreted as */VwV/. Only the following could clearly be taken to be of this form:

between:	a-e/i	(a-)a-u-e/i	*/awe/	cf. (a-)a-i-e
	a-a	[a-u]-a	*/awa/	
	e-e	e-u-e	*/ewe/	e-i-e
	i-e/i	(i-)i-u-e/i	*/ewe/	(i-)i-e-i
	i-a	i-u-a	*/ewa/	e-i-a

---

[35] If three such consonants were assumed, one corresponding to each of the writings a, i/e, u, difficulties would be encountered in even greater number.

[36] The word "consonant" is used in this discussion for convenience; the phoneme(s) involved may be junctural.

[37] also (i-)i/e : (i-)i-e-i, */eye/; (i-)i-u-i/e and e-u-e are also found in the texts, but no variant spellings are attested for them.

initial before a	u-a	*/wa/	cf. i-a (I.)
a-i	u-a-i	*/waye?/	i-a-i (I.)

There are no sequences clearly to be interpreted with */w/ between the following pairs of vowels:[38]

a-u	cf.	(a-)a-i-u	*/ayu/	(a-u : a-gu)
e-a		e-i-a	*/eya/	
e-u		e-u	*/eyu/	(or */ewu/, */ew/)
i-u		i-e-u	*/eyu/	
u-i/e(M.&F.)		(u-)u-a-i	*/uye/	(or */uwe/)
		u-i-e	*/uye/	
		(u-)u-i/e	*/uye/	(or */uwe/, */uy/)
u-a (M.&F.)		u-e-a	*/uya/	
u-u		(u-)u-i-u	*/uyu/	

(3) There seems to be no case of two words distinguished solely by the contrast of */w/ and */y/.

3.5.2.5.2. The phoneme /x/.--These difficulties and ambiguities disappear if the assumption is made that there is only one consonant involved. The following chart indicates the spellings occurring for each phonemic sequence on this assumption. The symbol /x/ has been arbitrarily chosen to represent this consonant.[39]

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[38] These data could be interpreted as merely defining a limitation on the distribution of */w/: not occurring adjacent to u. The lack of *e-u-a is probably accidental, since i-u-a does occur.

[39] The symbol is purely arbitrary and is not intended to suggest any phonetic value such as this symbol sometimes has in other usages. Some comparative evidence also suggests that Urartian has lost the phoneme /w/ which Hurrian is believed to have had. The following are probably cognates:

/exe/	(i-)i	: i-i-e	
	(i-)i/e	: (i-)i-e-i	
	(i-)i-e	: (i-)i	(e-)e-i : e
	(i-)i-a-i	: (i-)i-a (M.&F.)	
	(i-)i-u-e/i		e-u-e
	i-e	: i-gi	
/exa/	i-u-a	: i-a (M.&F.)	
	i-i-a	: i-ya (M.), ya (I.)	e-i-a
/exu/	i-e-u		
	(i-)i-u	: i	
/axe/	(a-)a-e	: (a-)a-u-e	
	(a-)a-i/e	: (a-)a-i-e	
	(a-)a-e-i	: (a-)a	
	a-u-i	: a-u-e	
	a-i-e	: a-gi	
	a-i-e	: a-ya-e (a-yi-e?)	
/axe(xe?)/	a-u-i-e	: a-u-e : a-u-i (F.)	
	a-u-i-e-i	: a-u-e/i, a-u-i-e	
/axa/	[a-u]-a		
	a-i-a		
	a-i	: a-ya (a-yi?)[40]	
/axu/	(a-)a-i-u	: a-u (M.&F.)	
	a-u	: a-gu (M.&F.)	
/axuxe/?	a-i-u-e		
/uxe/	(u-)u-a-i		
	u-i-e	: u-i (M.&F.)	
/uxexa/	u-e-i-a ?		

Hurrian	Urartian
šawala 'year'	šali 'year'
tiwe 'word'	tiani 'he said'
aweš(e)- 'where, when'	aiše(i) 'somewhere, anywhere'
	aše 'when'
awenne/a 'anyone'	ainie(i) 'someone, anyone'
-we (genitive singular)	-i/e (genitive singular)
-wa (dative singular)	-ie(i) (dative singular)
-ewa (conjunctive mood)	-ie (in present tense ending -*lie*)

[40] The variant *a-i* : *a-ya* suggests the phonemic interpretation /*axe*/, in which case the *ya* sign would here have the value *yí*. It seems more probable, however, that *a-i* is here to be interpreted as /*ax*/.

/uxa/	(u-)u-a u-i-a u-e-a	:	u-a (M.&F.)
/uxaxe/	(u-)u-a-i-e	:	u-a-gi
/uxu/	(u-)u-i-u	:	(u-)u
/xa/ (I.)	a-a ? e-i ? i-a u-a	 : :	 ya ˀa(-a)
/xaxe/ (I.)	u-a-i	:	a-a-i
/xe/ (I.)	a-i ? u-e ?[41] u-i ?[41]		
/xu/ (I.)	a-u ? e-u ? i-u ? u-u ?		

3.5.2.5.3. Summary.--Summarizing this analysis, in a sequence of dissimilar vowels (i and e are dissimilar in this context), if more than two vowels are present, the second, regardless of its nature, represents a consonant, e.g. i-a-i, i-e-i and i-u-e all represent /exe/. If there are only two vowels in the sequence, in other than initial position the consonant is to be "understood" between the vowels. In initial position a sequence of only two vowels probably represents the consonant followed by a vowel. This last assumption rests only upon i-a : ya and u-a : ˀa(-a). Since, except for r, any word-initial consonant can be followed by any vowel, it seems likely that /xe/ and /xu/ are to be expected in this position, as well as the attested /xa/. In some cases where only two vowels are present, the second seems to represent the consonant, with no vowel following. For example, bi-a-na-ú-e : bi-a-i-na-ú-e, for which the most likely interpretation would seem to be /bexanaxe/ : /bexaxnaxe/.[42]

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[41] This interpretation is particularly uncertain; cf. u-i-e*. Since the latter is a complete word, it can hardly be analyzed otherwise than /uxe/. The interpretations proposed in the table only apply if the sequence is immediately followed by a consonant.

The fact that the vowel signs are used indiscriminately to represent /x/ does not rule out the distinct possibility that future investigation may necessitate the subdivision of /x/ into two or more separate phonemes.

3.5.2.5.4. Characteristics of /x/.—Two characteristics of this consonant should be noted.[43]

(1) It may be followed by a vowel, or the vowel may be lacking. Note the following variant spellings:

(i-)i-a-i : i-i	/exe : ex (exe?)/
(a-)a-e/i : (a-)a	/axe : ax/
a-ya : a-i	/axa : ax/
(i-)i-e-i : (i-)i/e	/exe : ex/
(i-)i-e : (i-)i/e	/exe : ex/
(e-)e-i : e	/exe : ex/
(i-)i-a : i	/exa : ex/
(i-)i-u : i	/exu : ex/
(u-)u-i/e : (u-)u	/uxe : ux/
(u-)u-a : (u-)u(-u)	/uxa : ux/
(u-)u-i-u : (u-)u	/uxu : ux/

This same characteristic will be noted for some consonants of the group š, r, l, m, n (see 4.7). There are no data on which to base an opinion as to whether or not the /x/ was preserved in final position, if it ever occurs there.

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[42] It is probable that some occurrences of CV_1-V_1 represent a sequence /CV_1xV_1/. For example, note gi-i : gi-e-i /gexe/; hu-bi-i : hu-bi-gi /hubexe/.

[43] Analogous remarks would apply if two or three consonants were postulated instead of one.

(2) Apparently at the end of a word the syllable /xe/ may be repeated without changing the denotation of the word,[44] e.g.

a-ú-i-e /axexe/ : a-ú-e /axe/ : a-ú-i /axe/

It is very likely, though not certain, that a-ú-i-e-i /axexe/ is another spelling of the same word. This same reduplicative feature also seems to occur with the syllable ni (see 7.2.2 (5)).

3.5.2.5.5. Scribal errors.—It should be borne in mind that rare aberrant spellings may be due to scribal or engraving errors, which are not infrequent in cuneiform texts of all types and periods.

3.5.3. Interpretation of orthographic V and V_1-V_1.—As a result of the defective writing of vowel sequences, a single or geminated vowel bounded by consonants or word boundaries cannot be phonemically interpreted with confidence unless a variant spelling of the word is attested or a parallel construction clarifies the ending, as shown in the following table of the possible interpretations of orthographic single or geminated vowels.

Orthography	Phonemic Interpretation	Variant Spelling	Example
a	/a/	a-a	(see a-a)
	/ax/	(a-)a-i/e	ú-lu-uš-ta-bi : ú-lu-uš-ta-a-i-bi
a-a	/a/	a	uš-ta-a-bi : uš-ta-bi
	/ax/	(a-)a-i/e	[^{d}?a-a]-ru-ba-a-ni-e: ^{d}?a(-a)-ru-ba-i-ni-e
i	/e/	i-i	(see i-i)
		e	^{m}ar-giš-ti-hi : ^{m}ar-giš-te-hi

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[44] Note, for example, the variant spellings ku(-ú)-gu(-ú)-ni, ku-gu-i-ú-ni, ku-ú-i-gu-ú-ni; the stems emerging from these spellings are /kug-/, /kugux-/, /kuxeg-/.

Orthography	Phonemic Interpretation	Variant Spelling	Example
i	/ex/	(i-)i-e-i	a-i-ni : a-i-ni-e-i
		(i-)i-e	$^{\mathrm{GI\check{S}}}$šú-ri : $^{\mathrm{GI\check{S}}}$šú-ri-i-e
		(i-)i-u	qi-ra-e-di : qi-ú-ra-a-e-di
i-i	/e/	i	e-si-i-ni : e-si-ni
	/ex/ (/exe/?)	i-e-i	pi-i-ni : pi-e-i-ni(-e)
		(i-)i-e	gu-mu-ši-ni-i : gu-nu-ši-ni-i-e
		(i-)i-a-i	$^{\mathrm{KUR}}$bi-i-na-a-ú-e : $^{\mathrm{KUR}}$bi(-i)-a-i-na-a-ú-e
e	/e/	e-e	(see e-e)
		i	(see i)
	/ex/	e-e-i	a-i-še : a-i-še-e-i
e-e	/e/	e	te-e-ru-bi : te-ru-bi
u	/u/	u-u	(see u-u)
	/ux/	(u-)u-i	al-su-ni : al-su-ú-i-ni(-e)
	/uxu/	u-i-u	ku-gu-ni : ku-gu-i-ú-ni
u-u	/u/	u	a-tú-ú-bi : a-tú-bi
	/ux/	(u-)u-i	al-su-ú-ši-ni : al-su-ú-i-ši(-i)-ni
	/uxu/	u-i-u	ku-gu-ú-ni : ku-gu-i-ú-ni

CHAPTER IV

PHONOLOGY: CONSONANTS

4.1. /*p*/, /*b*/.--Evidence for the phoneme /*p*/ is contained in the signs *pa* and *pi*; evidence for /*b*/ in *ba*, *be*, and *bi*. The signs *ap*, *ip*, *up*, *pu*, *bar*, *bal*, and *bur* contain evidence for a presumably labial stop, but they can be interpreted with *p* or *b*.[1] Examples of the *p*/*b* contrast include:[2]

pa(-a)-hi-ni	a-ba-a-hi-na
a-li-pi	zi-li-bi

4.2. /*k*/, /*g*/, /*q*/.--Evidence for the phoneme /*k*/ is contained in the signs *ka*, *ki*, *ki*$_4$, and *ku*. Evidence for /*g*/ is contained in *ga*, *gi*, *gu*, and *giš*. Evidence for /*q*/ is contained in *qa*, *qi*, and *qu*. The sign *qar* can also be read with *k* or *g*. The following words, evidently minimal pairs, exemplify the contrasts of *k*/*g*/*q*:[3]

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[1] D'îakonov (*Comparative Survey*) has come to the conclusion that there were three labial consonants in Urartian. This conclusion seems quite likely, in view of the basically triadic structure of the phonemic system. However, his evidence, at least as far as he has published it, is not sufficiently extensive to make the conclusion certain. There seems to be no evidence from the Urartian materials themselves to confirm this conclusion.

[2] Because of the limited material there are few minimal pairs. In such circumstances for the most part analogous pairs must be cited: pairs which show the graphemes in environments so similar as to rule out the possibility of the phones being conditioned variants of each other.

[3] Interchange seems to occur in the proper names ^{m}*ar-qu-qi(-i)-ni* (105:2, 4) : ^{m}*ar-gu-qi-ni* (103 V 22); ^{KUR}*áš-ka-ya-[i]* (82 obv. 29) :

$^{\mathrm{KUR}}$e-ba-ni-ki-di	$^{\mathrm{KUR}}$e-ba-ni-gi-di
ku-ú-li	gu-ú-li
ku-ul-di-a-ni	qu-ul-di(-i)-ni
gu-du-li	qu-du-la-a-ni

The examples of *g* interchanging with the postulated phoneme /*x*/ (listed in 3.5.2.5 (3)) raise the question whether these are two phonemes or one. The phoneme /*x*/ can only be recognized with any certainty between dissimilar vowels. It is probable that it occurs also in other positions, where the writing system lacks the means of indicating it. *g* is attested in various positions. Both *g* and /*x*/ occur intervocalically, but there seem to be no occurrences in which *g* clearly contrasts with /*x*/. There is, therefore, not much evidence that these two are separate phonemes. However, interchange is comparatively rare, as can be seen from the lists in 3.5.2.5 (3). The common stem *agu-* is always so written (except for *a-i-u-ri*); **a-u-* does not occur. If /*x*/ and *g* were submembers of a single phoneme, it would be expected that *g* would be regularly used for that phoneme, rather than being only rarely a variant of /*x*/. Therefore it seems most likely that /*g*/ and /x/ are different phonemes.

4.3. /*t*/, /*d*/, /*ṭ*/.--Evidence for the phoneme /*t*/ is contained in the signs *ta*, *te*, *ti*, *tu*, and *tú*. Evidence for /*d*/ is contained in *di* and *du*; for /*ṭ*/ in *ṭè* and *ṭu*. The sign *da* can also be read *ṭa*, and the signs *at*, *it*, *tar*, *tuš*, and *din* indicate only a consonant of roughly

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$^{\mathrm{KUR}}$*éš-qa-ya-i* (80 IV 54). It does not seem that the land of *Igani* (80 I 11; 103 V 6, 7) is the same as the land of *Iyani* (80 III 47, 56). The former is mentioned in a campaign against *Eriahi* (northwest of Lake Gökce), the latter in connection with a campaign to Manna and Pushtu (south of Lake Rizaiyeh).

dental type, without differentiation.[4] There are several examples of interchange of consonants of this group. The following are variant writings of the same words:[5]

ʔa-al-tú-bi (1) (104:26) :: ʔa-al-du-bi (16) (82 rev. 18)
^{URU}du-uš-pa-[e] (1)[6] :: ^{URU}ṭu-uš-pa-e (49) (103A:13)
su-du-qu-ú-bi (1) (104:27) : su-ṭu-qu-bi (3) (23:28)
te-ri-hi-ni-e (1) (110:6) : ṭè-ri-hi-ni (1) (76B:3)
tú-bar-[du-ni-i] (1) (125 obv. 17) :: ṭu-bar-du-⌈ni⌉[-i?] (1) (124 obv. 21)

On the other hand, there are many examples of contrast. The following pairs are clearly different words:

a-du-li-e	a-tu-li-i-e
du-li-e	tú-li-e

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[4] For the sign *tar* only *tar* and *ṭar* are indicated as values by von Soden (*Das akkadische Syllabar*, No. 11) and Labat (*op. cit.*, No. 12). For *din*, the values *tin*, *din*, and *ṭin* are all attested (von Soden, *op. cit.*, No. 270). For *tuš*, von Soden (*op. cit.*, No. 290) shows values *tuš* and *duš* (the latter only in late Babylonian, however). Labat (*op. cit.*, No. 536) has the same indications and also lists a value *ṭuš* in Neo-Assyrian.

[5] The figures in parentheses represent the number of occurrences. The figures include spelling variants which are shown elsewhere in this paper to be equivalent, even though the variants are not indicated in this list. Where there is more than one occurrence, the reference cited is a typical usage. In addition to the listed pairs, another is possible, but the contexts are not sufficiently clear to make it certain whether they are the same or different words:

áš-du-⌈bi?⌉(1) (122:23) : áš-tú(-ú)-bi (3) (119:3)

The variant ^{URU}*tuš-pa-e* (133 var. 1; *Iraq* XII, 14) is not listed because *ṭuš* is a probable alternate reading for the *tuš* sign (cf. n. 4 above). The variants *za-a-du-ú-a-li* (10:2) :: *za-a-tú-ú-li* (10:33) are apparently not relevant, as this inscription (K. 10) shows frequent interchange of plural and singular forms; *za-a-tú-ú-li* is probably a syncopated form of the plural **zadituli*.

[6] This variant is indicated by Barnett, *Iraq* XII, 13. It is rejected by K (No. 133e), but he gives no explanation for this rejection.

a-du-bi	a-tú-bi
LÚ.GEME$^{}$lu-tú-ni	ku-ṭu-n[i]
nu-du-ú-bi	ku-ṭu-bi

4.4. /*s*/, /*z*/, /*ṣ*/.--Evidence for the phoneme /*s*/ is contained in the signs *sa*, *si*, *su*, *sar*, *sar*$_5$, *sal*, and *sip*?. Evidence for /*z*/ is contained in the signs *zi* and *zu*; for /*ṣ*/ in *ṣi* and *ṣu*. The sign *za* may also be read *ṣa*. As examples of contrast of these sounds the following may be cited:

si-ir-ši-ni-e	zi-ir-bi-la-[ni?]
ar-mu-zi	mu(-ú)-ṣi
ga-la-zi	a-la-ṣi
a-su-ni	a-ṣu-še
e-si	me-ṣi

e-si-a in 82 rev. 17 and *e-di-a* in 119:4 occur in almost identical contexts and seem to be equivalent in meaning. It seems most likely that the words are synonyms rather than orthographic or phonological variants of each other.[7]

4.5. /*š*/.--Evidence for the phoneme /*š*/ is contained in the signs *šá*, *še*, *ši*, *šu*, *šú*, *áš*, *iš*, *uš*, and *tuš*. Several characteristics of /*š*/ indicate that it is more closely related to /*r*/ and /*l*/ than to the sibilant group (/*s*, *z*, *ṣ*/).[8]

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[7] K 110:5 shows *zi-e-i* apparently as a variant spelling of *gi-e-i*, presumably to be interpreted as a scribal error, facilitated by the similarity of form of the signs *zi* and *gi*. However this reading seems somewhat arbitrary, as Schulz (No. 40) seems to show *a-še-e-i* (cf. K, p. 134 n. 3).

[8] If, as seems likely from the other consonant groups, a distinction of voicing existed in Urartian, it is quite likely that *š* represents a voiceless *r*. Some support for this guess is offered by the fact that the place name which regularly occurs in Urartian as *ṭušpa* in Assyrian

(1) Signs for *áš*, *iš*, and *uš* occur in the syllabary, as do *ar*, *ir*, *ur*, etc., while there are no signs ending in sibilants.

(2) *š* frequently occurs as the first element of a cluster, as do *r* and *l*, while no sibilant so occurs.

(3) Like the other groups of consonants, the sibilants do not form clusters with each other. Therefore, the existence of the cluster *šz* is further evidence that *š* does not belong to the sibilant group.

(4) Signs of the type *Ca* or *Cu* do not appear in final position if C is a sibilant, but *šá* and *šú* both occur finally, as do *la*, *ra*, and *ru*.

(5) *š* participates with *r* and *l* in the phonological features discussed in 4.7, which sibilants do not.

(6) The prevailing pattern of Urartian phonemes is groups of three; to group *š* with the sibilants would produce an asymmetry in this patterning.

(7) Verbal bases ending in sibilants are not attested, while there are many verbal bases ending in *š* (see 6.1.1).

There is one apparent case of interchange of *s* and *š*:[9]

ul-gu-si-ya-ni (133 var. 1[10]) :: ul-gu-ši-ya-ni (112a)

On the other hand, there are many examples of contrast of *š* with sibilants, including:

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annals is spelled *ṭurušpa* (e.g. Paul Rost, *Die Keilschrifttexte Tiglat-Pilesers III* [Leipzig, 1893], Bd. 2, pl. XXXIII [= Bd. 1, pp. 46-47], 23-24; Bd. 2, pl. XXI [= Bd. 1, pp. 52-53], 36, 38; F. Thureau-Dangin, *Une Relation de la Huitième Campagne de Sargon* [Paris, 1912], line 150). Cf. also n. 14 below.

[9] Possibly *sa-li-[e]* (122:10) is a variant spelling of *šale*. However, *sali* is attested as a word distinct from *šale*.

[10] K assigns a number to this inscription but does not offer the text. The text appears in *Iraq* XII, 14.

e-ši	e-si
šú-i-ni-ni	ṣu-i-ni-ni
šu-si-ni	su-si-ni
a-šú-ni	a-su-ni
šá-a-li(-e)	sa-li(-e)
šá-tú-ni	za-tú-me

4.6. /r/, /l/.--The phoneme /r/ is contained in the signs *ra*, *ri*, *ru*, *ar*, *ár*, *ir*, *ur*, *bur*, *bar*, *qar*, *tar*, *sar*, *sar*$_5$, *šur*, and *har*. The phoneme /*l*/ is contained in the signs *la*, *li*, *lu*, *al*, *el*, *il*, *ul*, *bal*, *sal*, and *hal*. Examples of the contrast of *r*, *l*, and *š* include the following pairs of different words:

ma-nu-ri	ma-nu-li
(GIŠ)šú-ri(-e)	šú-li(-e)
a-ru-ú-še-e	a-lu-ú-še
?a-ri	a-li
a-ru-ni	a-šú-ni
ma-nu-li	ma-nu-še

4.7. /*š*/, /*r*/, /*l*/, /*m*/, /*n*/ as a group.--There are a number of phenomena which appear only in the neighborhood of *š*, *r*, and *l*, and a few which occur adjacent to *m* and *n* as well as *š*, *r*, and *l*.

(1) *l*, *r*, and *š* occur as first members of consonant clusters which also occur in variant spellings with a vowel after the *l*, *r*, or *š*.[11]

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[11] Note also the proper names $^{\text{URU}}$*e-ri-di-a-ni*, $^{\text{URU}}$*ir-⌈di⌉-ya*; $^{\text{URU}}$*ir-e-pu-ni-e-di*, $^{\text{URU}}$*ir-pu-ni-e-di*; ^{m}*e-ri-ku-a-hi*, ^{m}*ir-e-ku-a-hi*, ^{m}*ir-ku-a-hi*; ^{m}*ka-a-ma-ni*, ^{m}*ka-am-ni-ú-i*. A similar fluctuation occurs with the postulated phoneme /*x*/ (see 3.5.2.5.4 (1)). Possibly

ˀa-al-du-ú-ni (1) : ˀa-la-du-ni (1)

al-su(-ú)-i-ni
al-su-ú-i-ni-e
al-su-ni (40) :: al-a-su-ú-i-ni-e (1)

⌜zi⌝-il-bi-i (1) :: zi-li-bi (3)

ni-ir-bi (1) : ni-ri-bi/e (8)

še-ir-du-li-i-e
še-ir-du-li(-e) (6) :: še-ri-du-li-e (2)

ar-ni (2) :: ar-a-ni (1)

ši-di-iš-tú(-ú)-ni (23) :: ši-di-ši-tú-ni (4)

$^{\mathrm{URU}}$ṭu-uš-pa(-a)-e
$^{\mathrm{URU}}$ṭu-uš-pa(-a)-i
$^{\mathrm{URU}}$ṭu-uš-pa(-a) (49) :: $^{\mathrm{URU}}$ṭu-uš-ú-pa-a-e (1)

áš-zi-⌜e⌝ (1) : a-šá(-a)-zi-e (2)

(2) There is one example of the insertion of a vowel before *r*, lacking in other occurrences of the same word:

$^{\mathrm{d}}$e-li-ip-ú-ri-e (2) : $^{\mathrm{d}}$e-li-ip-ri(-i)-e (2)

(3) Sequences of VC or CVC followed by vowel signs are rare. Every example occurs adjacent to one of the group of consonants here under consideration. Some of them occur in variant spellings without the vowel.

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metathesis has occurred in $^{\mathrm{KUR}}$qu-ma-ha-ha-li-i, $^{\mathrm{KUR}}$qu-ma-ha-al-hi-⌜e⌝. Note also the intrusion of an orthographic *g* (/x̣/?) after *r* in *šurgini* : *šurini*. Such anaptyctic vowels are well attested in Akkadian: *GAG*, 14, 19 [cf. I. J. Gelb, *BO* XII (1955) 100]; Arno Poebel, *Studies in Akkadian Grammar* (Assyriological Studies No. 9, Chicago, 1939), 61-62; S. C. Ylvisaker, *Zur babylonischen und assyrischen Grammatik* (Leipziger Semitische Studien V, 6, 1912), 15-16; I. J. Gelb, *A Study of Writing* (Chicago, 1952), 151-52. Familiarity with alphabetic writing may have been a factor in these spellings but, especially with *r*, such spelling occurs earlier than the dissemination of alphabetic writing. Furthermore, in Urartian at least, the limited distribution of this phenomenon requires a phonological explanation rather than an orthographic one. Familiarity with alphabetic writing was probably a considerable factor in influencing the Urartians to use vowel signs to reinforce the vocalic content of syllabic signs.

(a) after r

u-bar-a-du-ụ́-ya-a-[li]

tar-a-⌈e⌉ (1)

⌈tar⌉-a-i-[nu]-⌈ú⌉-a-di (1)

tar-a-i-ú-e-di (1)

tar-a-i-e (7)

tar-a-i-ú-hi (1)

tar-a-mu? (1)

tar-aya-⌈e⌉ (1)

ar-a-ni (1) : ar-ni (2)

e-ir-⌈a⌉ (1)

i-ir-i (1)

(b) after l

al-a-su-ú-i-ni-e (1) : al-su(-ú)-i-ni
al-su-ú-i-ni-e
al-su-ni (40)

(c) after š

áš-ú-la(-a)-bi (2)

⌈iš?-e⌉-ya-me

^{URU}ṭu-uš-ú-pa-a-e (1) : ^{URU}ṭu-uš-pa(-a)-e
^{URU}ṭu-uš-pa(-a)-i
^{URU}ṭu-uš-pa(-a) (49)

(d) after m

am-ú-⌈e⌉ (1)

(e) before r

^{d}ta-la-ap-ú-ra-a (2)

^{d}e-li-ip-ú-ri-e (2) : ^{d}e-li-ip-ri(-i)-e (2)

(4) Not only do these phonemes occur in a greater variety of clusters than other types of phonemes, but r is the only consonant to

occur geminated. Sounds of this group are the only ones which form consonant clusters in which both elements belong to the same group.[12]

(5) With the exception of *mat* (one occurrence) and possibly *sip*, every sign of the type CVC ends in *š*, *r*, *l*, or *n*. This fact is presumably to be connected with the feature discussed in 4 above.

(6) Sounds of this group and the dentals appear before all vowels in final position, whereas velars and sibilants do not occur before final *a* or *u*.

(7) The only consonants occurring in final position are *š* and *n* in the following words:[13]

$^{\ulcorner d\urcorner}$hal-di-iš (1) : ^{d}hal-di(-i)-še
^{d}hal-di-i-še-e

^{m}iš-pu-ú-i-ni-iš (4) : ^{m}iš-pu-ú-i-ni-še (32)

e-din (1) : e-di(-i)-ni (25)

4.8. /*m*/, /*n*/.--The phoneme /*m*/ is contained in the signs *ma*, *me*, *mu*, *am*, *man*, *mat*, and *kam?*; /*n*/ is contained in *na*, *ni*, *nu*, *an*, *din*, and *man*. Examples of the contrast of *m* and *n* include:

a-ma-ni	i-na-ni, cf. bur-ga-na-ni
mu-ú-ṣi	nu-ú-še

---

[12] That is, there are no clusters of such types as *dt*, *zs*, *gq*, etc., but *rš*, *rr*, *rl?*, *rm*, *rn*, *šl*, *šm*, *šn*, *lm*, *mn* occur (see 2.4.2). The one example of *rr* is in the name of a deity, so it may be a borrowed word. Possibly interchange of *rš* and *š* is involved in *[qa-ap-qa]-ar-šú-⌈l⌉a?-la-a-ni* (18b:3) and *qa-ap-qa-šú-la-⌈la?⌉-ni* (21:10), if the first is correctly restored. Cf. *qa-ap-qa-ru-li-ni* (104:22), *qa-ap-qa-ri-li-ni* (10:25), *qa-ap-qa(-a)-ru-lu(-ú)-bi* (80 VI 17; 80 IV 80; 103 II 58). Perhaps haplography is involved, but more likely these forms reflect on the sound indicated by *š* (cf. n. 8 above).

[13] Possibly final *š* also occurs in *ú-šú-ul-mu-uš*, or this may be only part of a word--the following area is illegible. It is barely possible, but unlikely, that *a-lu-uš* occurs (see n. 16 to 2.3).

4.9. /*h*/.--The phoneme /*h*/ is contained in the signs *ha*, *hi*, *hí*, *hu*, *har*, and *hal*. For some forms of the name of Haldi there occur variants without *h*. These all occur in the Kelishin bilingual (K 9), but the Assyrian text of this inscription has the usual spelling with *h* in all cases. The spelling with *h* also occurs in the Urartian text of this same inscription (in all occurrences of the name after line 22).[14] The clearest occurrences are:

^{d}al-di (9:16)	::	^{d}⸢hal⸣-di (9:25)
^{d}a⸢l⸣-d[i]-⸢na⸣ (9:12)	::	^{d}hal-di-na (76B:5)

4.10. /*x*/.--The evidence for the phoneme /*x*/ is presented in 3.5.2 above. It can only be clearly recognized between dissimilar vowels.[15] There is some evidence for its occurrence between identical vowels. Note, for example:

gi-e-i (e.g. 129:4)	::	gi-i (e.g. 91:7)	/gexe/
hu-bí-gi (126:17)	:	hu-bi-i (126:6)[16]	/hubexe/

It seems likely that it occurs also in other positions where the writing system is unable to indicate it. The interchanges of /*x*/ with *g*[17], *y*, and *?* are listed in 3.5.2.5.

4.11. /*?*/.--The grapheme *?* occurs in only a single sign, which can be interpreted with any vowel preceding or following the consonant.

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[14] *al-di-ni(-i)-i/e*, which also occurs, is a different word.

[15] There is also some evidence for its occurrence in consonant clusters: ^{GIŠ}*šur-gi-ni* (103 V 26) is probably equivalent to ^{GIŠ}*šurini* to judge from the meaning (though the latter occurs only once, as genitive). The simple stem is attested in many occurrences as *šuri*. It is not clear why /*x*/ or /*g*/ should appear in the form cited.

[16] This equivalence seems likely on the basis of meaning but is uncertain, since the contexts are quite different.

[17] See also 4.2.

The data are not sufficient to establish or deny the phonemic status of ʔ. The only cases of spelling variation are:

^{d}ʔa(-a)-ru-ba-i-ni-e
^{d}ʔa-ru-ba-ni : ^{d}ú-a-ru-ba-ni-e

e-ʔa : e-ya

It seems evident that ʔ is a distinct consonant. This is clear from the fact that ʔa(-a)-še$^{(MEŠ)}$ and a-še are different words. There are no cases of minimal contrast with /x/; on the other hand, even such a common word as e-ʔa never occurs in a variant spelling *e-a or the like.[18] Therefore, it seems most likely that /ʔ/ is a phoneme distinct from /x/.

4.12. y.--The grapheme y occurs in the signs ya and aya. In 3.5.2.5 (1) the variant spellings in which y seems to stand for /x/ were listed. There does not seem to be any case of contrast of these two, and the considerable number of spelling interchanges favor the conclusion that y is not a phoneme, but only a graphic representation of the phoneme symbolized in this paper by /x/.

4.13. Summary of phonemes.--

p	t	k	s	š
b	d	g	z	r
(ṗ?)	ṭ	q	ṣ	l

x h ʔ

m n

e u

a

---

[18] e-ya occurs only once, 124:11. It is barely possible that the word division should be other than e-ya ar-⌜di⌝-[i-še].

CHAPTER V

MORPHOLOGY: GENERAL

5.1. Word classes.--The morphological classes of Urartian are verbs, nouns, and indeclinables (particles).

Pronouns are represented by only a few forms, therefore it cannot be stated definitely whether the independent forms belong morphologically to the class of nouns or constitute a separate class. Pronouns will be treated below under a separate heading, to bring together independent and suffixal forms, but this arrangement is based on meaning (or, more accurately, on translation) and not on form.

Adjectives are morphologically indistinguishable from nouns, as far as can be judged from the available material.[1] They can be distinguished syntactically, to some extent. The term "noun" will be used to include the syntactic (and semantic) adjectives. When it is desirable to refer to the separate syntactic (or semantic) classes, the term "substantive" will be used as excluding "adjectives."[2]

5.2. Terminology.--In discussing morphology, the word stem will be used to mean the morpheme or sequence of morphemes to which the last morpheme is added to create the form.[3] Apparently the inflectional ending or the formative of an extended stem is regularly preceded by a stem-forming vowel (occasionally Ø), which seems to be a morpheme, though its meaning cannot yet be defined. The morpheme or sequence of morphemes to which this vowel is added will be called the base. At the present stage of our knowledge of Urartian, only a few bases can be shown to be made up of combinations of two or more morphemes. Where this is obvious, the nucleus of the base will be called the root. The following will serve as examples of the usage of these terms:

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[1] This is true according to the analysis used in this paper, but it is not true of other schemes of analysis which have been proposed. For further discussion see 7.2.2.

[2] It will occasionally be necessary to use the term "adjective" in reference to the syntactic (or semantic) classes or when referring to previous literature, in which the word is freely used, but never defined.

Form: ^{m}rusahinili
Stem: rusahini-
Base: rusahin-
Root: rus-

If rusahini- is the form under discussion, then its stem is rusahi-, and its **base** rusah-, etc.

5.3. "Singular" and "plural".—Urartian apparently recognizes two numbers only, singular and plural. The number categories of the language, however, do not correspond completely with the singular/plural sense dichotomy. In the nominal system, for example, one number class apparently includes all the nouns singular in sense. The other class seems to include only nouns plural in sense, though some of them convey ideas which may be rendered by singulars in English. However, there are many nouns plural in sense which inflect according to the pattern of the "singular."[4] Examination of the lists in Chapter VII will make this quite apparent. In verbs also, the specification of plurality seems to be optional. There are a number of examples of verbs singular in form which have plural subjects.[5] Examples of this are cited in 6.4.2, 6.4.4, 6.5.2. For lack of a more satisfactory term, the unspecified number category will be called "singular," but it should be kept in mind that it includes many words which are plural in sense, according to the number categories of Western languages.

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[3] Eugene A. Nida, Morphology (Ann Arbor, 1949), 83.

[4] These include many logograms and a few syllabically written words followed by the plural determinative MEŠ. There is no evidence

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that MEŠ is ever used in Urartian merely to indicate that the preceding word is a logogram, not necessarily plural (see n. 30 to 2.7). In most cases where MEŠ appears the context and sense indicate plurality, and in the remaining cases there is no reason to prefer interpretation of the word as singular. The fact that the plural indicator MEŠ is sometimes omitted, even in contexts where the form is clearly plural in sense, is probably another reflex of the optional nature of the plural category. Another clear evidence of this optional nature is the existence of a rare plural allative ending in -ašte, while the "singular" allative ending -(e)di is usually used, even after nouns marked as plural (e.g. KUR.KUR.MEŠ-di).

[5] The reverse never occurs, of course.

CHAPTER VI

MORPHOLOGY: VERB

6.1. Verb base.--The Urartian verbal form consists of verb base + vowel + ending. There are a few cases of verbal forms without linking vowel from bases ending in /*r*/ or /*x*/.

Verb bases show great diversity in form. Bases of the type CVC are the most common. Fairly numerous are examples of the types C, VC, VCC, CVCC, and CVCVC. Other types occur less frequently. Following are the recognizable verbal bases:[1]

Base	Class	Orthography
V[2]		
a	I	a
C		
d	I	d
h	I	h
k	I?,II?	k
m(?-man)	irr.	m
š	I	š
t[3]	I	t

Base	Class	Orthography
VC		
ab?	II	ab
ad?	I	ad
ag, ax	I	ag, ai-
am?	I	am
an?	I	an
ar	I	ar
aš	I	aš
at	I	at
ax(cf. ag)	II	a-

---

[1] For the convenience of both writer and reader, the slant lines which should enclose the items in the first column are omitted. All bases in this list are phonemically symbolized, though in some cases further analysis seems indicated. The "orthography" column indicates in normalized form the spelling actually occurring. After bases ending in a vowel, a hyphen is written as a reminder that another vowel follows immediately: broken-vowel writing.

[2] Possibly a verbal base *u* is involved in some or all of the forms *uli* (97:7), *uni* (18b:6; 98A:8, 11; 98B:9, 12; 110:8), and *uše* (98A:3), but the meanings are uncertain.

[3] There are at least two different stems from the base *t*: *te*- and *tu*-, and possibly a third: *ta*-, all Class I.

Base	Class	Orthography
VC (cont.)		
er	I	ir
ul	I?,II	ul
ur	I	ur
CVC		
ʔah?	I	ʔah
bed[4]	I	bid
ded?	I	did
ged?	II	gid
haš	I	haš
hax	I	hay, ha-
huš	I	huš
hux	I	hu-
kar	I	kar
kug(-kugux,kuxeg)	I	kug
kul	I	kul
kuš	I	kuš
kuṭ	I	kuṭ
kux(-kug)	I	ku-
lak	I	lak
lut[5]	I	lut
man	irr.	man
meš(=mešex)	I	meš
nah	I,II	nah
nud?	I	nud
nun	II	nun
par	I	par
pet	I	pit
pur?	I	pur
šat	I	šat
šed	I	šid
šep(-šepux)	I	šep
šex	I,II	ši-
šuk?	I	šuk
tan	I	tan
teg?(-teq?)	I	⌈t⌉eg

Base	Class	Orthography
CVC (cont.)		
teq(=teg?)	I	teq
ter	I	ter
teš	I	teš
tex(=texax)	I	ti-
tur	I	tur
xex[6]	I	uiy
zad	I	zad
zaš	I	zaš
VCC		
ašd?(=ašt?)	I	ašd
ašg	I	ašg
ašh?	I	ašh
ašt[7]	I,II	ašt
eph	I	iph
ept	I	ipt
erb	I	irb
ešt	II	išt
uld?	I	uld
ulh	II	ulh
urp	I	urp/b
ušt	I,II	ušt
CVCC		
ʔald/t(=ʔalad)	I	ʔald/t
durb	I	durb
kuld	I	kuld
nuld	I	nuld
šerd(=šered)	I	šerd
tamh	I	tamh
tašm	I	tašm
terd	I	terd
zašg	I	zašg
zeld	I	zeld

---

[4] See K, p. 62, n. 8.

[5] The base lut is clearly of nominal origin, cf. ^{GEME}lutu$^{(MEŠ)}$ 'women.' See also n. 24.

[6] See n. 27.

[7] ašt occurs only in the forms áš-tú(-ú)-bi and áš-tú-ú-li. These occur only after ^{LÚ}pura/ÈR, and the combination is possibly to be read as a single word (see 6.1.1 (1)).

Base	Class	Orthography
CVCVC		
ʔalad(=ʔald/t)	I	ʔalad
bedex	II	bidi-
hašex	II	haši-
haxed	I	haid
hutex	II	huti-
kedan(?=kexedan)	I	kidan
kugux(=kuxeg)	I	kugui-
kuxeg(=kugux)	I	kuig
kuţex[8]	II	kuţi-
lakud	I	lakud
luruq	I	luruq
makul?	I	makul
mešex(=meš)	I	meši-
selux	II	silu-
suduq(=suţuq)	I	suduq
suţuq(=suduq)	I	suţuq
suxed	I	suid
šepux(=šep)	I	šepuy
šered(=šerd)	I	šerid
terul	II	terul
texax(=tex)	I	tiya-
xeled	I	uelid
xešex	I	ueši(u)-
VCVC		
ašul	I	ašul
ered	I	irid
esed?	I	esid
ezed	I	izid
urul	I	urul
CVCCVC		
batgul	I	batgul
batqed	I	batqid
nepsed	I	nipsid
qapqar	I	qap/bqar
seprug?	I	sip/brug
CVCVCC		
gupušt	II	gup/bušt
kulupš	II	kulup/bš
nulušt	I	nulušt
CVCVCC (cont.)		
sulušt	II	sulušt
šedešt	I	šidišt
ţubard	I	ţubard
VCCVC		
epšad	I	ipšad
erşed	I	erşid
ešpux(=ešpuxex)	I	išpu-
ušhan	I	ušhan
CVCVCVC		
kexedan(=kidan?)	I	kieidan
luruqud	I	luruqud
suxedul	I	suidul
xedexad	I	uediad
VCVCC		
amašt	I	amašt
axešt	II	aišt
VCVCVC		
abeled	I	abilid
uratar?	I	uratar
CVCCVCVC		
qapqarul	I	qap/bqarul
qapqašul	I	qap/bqašul
VCCVCC		
ašhašt	I	ašhašt
VCVCCVC		
ubardud	I	ubardud
VCVCCVC		
uluštax	II	ulušta-
VCCVCVC		
ešpuxex(=ešpux)	I	išpui-

---

[8] Cf. K, pp. 215-16 and 192 s.v. He has not observed that the bases of the Class I and II forms of this root are different: *kuţeadi* base /*kuţex*/, *kuţubi* base /*kuţ*/.

Base	Class	Orthography	Base	Class	Orthography
VCCVCVC			VCVCVCVC		
atqanad	I	atqanad	ubaradux	I	ubaraduy
CVCCVCC			CVCCVCCVC		
harharš	I	harharš	qapqaršul (=qapqarul?)	I	[qa]p/bqaršul[9]
CVCVCVCC					
šepuxard	I	šepuyard			

6.1.1. Composite bases.—It seems apparent that many of these bases are made up of combinations of morphemes. An element -d (compare the base d-) seems to emerge from such pairs as:

er	ered	lak	lakud
hax	haxed	luruq	luruqud
kul	kuld	ter	terd

Similarly an element -l emerges from:

aš	ašul	suxed	suxedul
qapqar	qapqarul	ter	terul

A number of bases differ only by the addition of a syllable containing /x/. In some cases the addition seems to make no difference in meaning, in other cases a change of class results:

bed I	bedex II	kuṭ I	kuṭex II
h I	hax I	šep I	šepux I
haš I	hašex II	tex I	texax I
k I	kux I		

---

[9] qapqaršul- seems to occur in two forms, but both are damaged:

[qa-a]p-qa-ar-šú-l[u-bi] (28 obv. 25)
[qa-ap-qa]-ar-šú-⌈l⌉ a?-la-a-ni (18b:3)

These look like variant spellings of qapqarulubi and qapqašulalani. For a possibly related orthographical phenomenon see n. 8 to 4.5. Cf. also n. 12 to 4.7.

A large number of bases end in -*š* (*aš*, *haš*, *harharš*, *huš*, *kuš*) and many in -*št* (*ašt*, *ešt*, *amašt*, *ušt*, *gupušt*, *nulušt*, *sulušt*, *ulušt*, *šedešt*, *ašhašt*). There is no case of a base ending in a sibilant (*s*, *z*, or *ṣ*). Reduplication seems to be involved in *qapqar*, *harharš*.

The data available at present do not seem to be adequate for a detailed analysis of the composition of these bases.[10]

6.1.1.1. Compound bases.--Sometimes where one element of a root occurs, or seems to occur, as an independent word, there is considerable doubt as to whether a compound is present or two words. Even if both elements occur separately, doubt may still remain.

(1) Friedrich considers $^{\text{LÚ}}$*puraštubi* and $^{\text{LÚ}}$*purašt uli* each to be a single word, despite the fact that ÈR *aštubi* seems to be a variant of $^{\text{LÚ}}$*puraštubi*:[11]

BUZÚR $^{\text{KUR}}$uelikuhi karubi ÈR aštubi (119:2-3)

'I fought the king of U.; I made (him) subject.'

BUZÚR-ni $^{\text{URU}}$puinalhi $^{\text{LÚ}}$pura aštubi (103 VI 17)

'I made the king of P. subject.'

$^{\text{LÚ}}$*pura* seems to be a separate word in

$^{\text{LÚ}}$pura naditu išhi manu (104:6)

but the meaning of the passage and the word division are uncertain; at least it does not contain a form of a verb $^{*\text{LÚ}}$*puraštu-*.[12] The forms *aštubi* and *aštuli* do not occur except in these expressions. However,

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[10] The analysis attempted by Ts., *RA* XXXIII, 91-95 and some of the implications of the arrangement of K's glossary seem somewhat premature and contain much surmise.

[11] *Cauc.* VIII, 143-50; *ArO* III, 261, 262.

[12] K divides the words $^{\text{LÚ}}$*pu-ra-na-di* *tú-i-iš-hi* and restores the equivalent in 102 rev. 7.

aštadi is well-attested, and *aštubi* would be related to it in the same way that *nahubi* is related to *nahadi*. It seems unlikely that ÈR *aštubi* is not two words, therefore that analysis is followed in this paper. ${}^{\text{LÚ}}$*pura* as an object would be comparable in construction to ${}^{\text{GEME}}$*lutu* in ${}^{\text{GEME}}$*lutu ištini šiubi* 'I carried off women from there,' for example. The use of two direct objects after a verb expressing causation does not raise any difficulty. That *pura* is an independent word is confirmed by the occurrence of ${}^{\text{LÚ}}$*purani* (124 rev. 31).

(2) A similar case is *uelidubi*, with plural object suffix *ueliduli* (never with any determinative). The form ${}^{\text{LÚ}}$*ueli* occurs as a separate word.[13] *dubi* does not occur as a separate word, but it would be the expected first person singular past form corresponding to the third person singular present *dulie*. Interpretation of the combination as a single word is, therefore, a matter of preference only until further evidence is available. The same remarks apply, in general, to *uediadubi*. *uedia* does not occur, but ${}^{\text{LÚ}}$*uediani*${}^{\text{(MEŠ)}}$ does.

(3) Another uncertain combination is *šeridulie*. The form *šeri* occurs, but the meaning is somewhat doubtful. Friedrich takes it as an adverb meaning 'aside, apart.'[14] Also attested separately is *dulie* meaning 'he causes to be done(?).' *šeridulie* apparently means 'he conceals,' which could arise from these two elements. The occurrence of the variant spelling *šerdulie* seems to favor considering the combination a compound, since *r* is not attested finally in Urartian

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[13] in 80 IV 79 and 103 V 16. K connects *ueli* to the word which follows, which does not seem likely.

[14] *Cauc.* VII, 82-83.

words. Interpretation as one word will be followed for lack of any convincing evidence to the contrary.

6.2. "Tenses."--There are two "tenses." They will be called "past" and "present" for convenience, but there is no certainty that the distinction between them is one of time; it may equally be aspectual or modal.[15] The present is recognizable only in the third person singular of Class I verbs.

6.3. Conjugational classes.--The ending of the verbal form (unless an object suffix is present) indicates the person and number of the subject. Due to the nature of the material, the only attested finite forms are first person singular and third person singular and plural. The forms of the personal endings fall into two sets, and Urartian verbs can be divided into two conjugational classes according to which set of endings is used. The verb man- 'to be' exhibits some anomalies, so it is best treated as constituting a class by itself until its structure has been further clarified. Most verbal bases belong to one class or the other, only a few are attested in both classes:[16]

	Class I	Class II
/ašt-/	áš-tú(-ú)-bi 'I made'	áš-ta-a-di 'I set out(?)'
	áš-tú-ú-li 'I made them'	

---

[15] In JAOS LIX (1939) 309-17, Speiser considered forms with -lewə to be conditional or potential forms in Hurrian; p. 316 n. 76 he compares the Urartian forms in "lē." In IH, 156-58, he clarified his analysis somewhat, considering lewa to be a combination of cohortative -il- and conditional -ewa, and he called the mood marked by the latter "conjunctive." K has presumably been influenced by this analysis, for he calls the Urartian forms in -lie "Konjunktiv." See also n. 41 below.

[16] There is possibly also a contrast of stems ka- and ku- exemplified by the forms ka-a-di (95:5), ku-ú-li (103 V 15), ku-ú-li-e (117: 15). The last form is analyzed by K as syncopated from *kululie.

	Class I		Class II	
/nah-/	na-hu(-ú)-bi	'I took away'	na(-a)-ha-a-di na-ha-di	'I went'
	na-hu-ni	'he brought'	na-ha-bi	'he went'
/šex-/	ši(-i)-ú-bi	'I removed'	ši-a-di	'I went'
	ši-ú-li-i-e	'he removes'	ši-a-bi	'(it) came'
	ši-ú-li-a-li	'he removes them'[17]		
/ul-/	ú-lu-ú-li-e ú-lu-li(-e)	'he takes(?)'		
			ú-la(-a)-di	'I went'
			ú-li-i	'go!'
/ušt-/			uš-ta(-a)-di	'I went'
	uš-tú(-ú)-ni	'he brought'	uš-ta(-a)-bi/e	'(it) went'
	uš-tú(-ú)-ri	'was brought'	uš-ta(-a)-li	'they went'

The difference of meaning seems to be frequently that the Class II verb expresses a causative or factitive variant of the action expressed by the Class I verb (e.g. II: 'go,' I: 'cause to go, take, bring').

6.3.1. Class I.—Verbs of this class correspond generally in meaning to verbs usually considered "transitive" in Indo-European languages. They have the potentiality of being accompanied by a direct object, but the object may be left unexpressed. In one case (alie 'he says'), the object seems to be a series of sentences rather than a single word or phrase.

The linking vowel of this class is usually -u-, though -a-, -i/e-, and ∅ also occur. In the list given above of verbs occurring in both classes it will be noted that the Class I form usually has -u-.

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[17] It is uncertain whether šú-u(´)-ni (95:5, 111a:5, 111b:5) belongs to the same root.

Therefore it seems apparent that this vowel is, in general, characteristic of the class. Forms using other vowels may be the result of phonological processes not now reconstructible, or the different vowel may indicate a nuance of meaning which we are not in a position to define. The morphemic status of the stem vowel, however, seems established by such pairs as šiubi 'I removed,' šiabi '(it) came.' There seems to be one case of the same verb having different stem vowels in different forms: tiani, tiulie.[18] Following are the forms of this class having stem vowel other than -u-:

a-subclass

ar-di-la-ni	/ardel-a-/
áš-ú-la(-a)-bi	/ašul-a-/
du-ur-ba-bi	/durb-a-/
har-har-šá-bi[19]	/harharš-a-/
hu-a-li	/hux-a-/
qa-ap-qa-šú-la-⌈la?⌉-ni [qa-ap-qa]-ar-šú-⌈l⌉a?-la-a-ni	/qapqa(r)šul-a-/
še-pu-ya-li-e[19]	/šepux-a-/
ti-a-ni	/tex-a-/
ú-e-ši(-ú)-a-li	/xešex-a-/
ú-i-ya-bi	/xex-a-/

---

[18] The vowel fluctuation may be a phonological phenomenon due to the form of the base, which ends in /x/. Many verbal bases are not attested in forms which show a distinctive stem vowel.

[19] har-har-šá-bi is a variant spelling of the more common har-har-šu(-ú)-bi, ha-ar-ha-ar-šú(-ú)-bi, har-ha-ar-šú-bi, ha-ar-har-šú(-ú)-bi: /harharš-u-/. še-pu-ya-li(-i)-e is evidently equivalent to še-pu-li(-i)-e: /šep-u-/ (/šepux-Ø-/?, cf. n. 21 below).

e-subclass[20]

e-si-di-ni	/esed-e-/
si-ip-ru-gi-ni	/seprug-e-/
te-li-i-e	/t-e-/

Ø-subclass[21]

a-li(-e/i)	/a-Ø-/
ú-ra-tar-bi	/uratar-Ø-/

6.3.2. Class II.--Verbs of this class correspond generally in meaning to verbs considered intransitive in Indo-European. They never occur with expressed direct objects. The linking vowel is characteristically -*a*-, as exemplified by the forms of the verbs inflected in both categories listed above. However, forms with linking vowel -*i*/*e*-, -*u*-, or *Ø* do occur in the following cases:

e-subclass

a-i-iš-ti-bi	/axešt-e-/
iš-ti(-e)-di iš-te(-e)-di	/ešt-e-/
ku-lu-up-ši(-i)-bi	/kulupš-e-/
su-lu-uš-ti(-i)-bi	/sulušt-e-/

u-subclass

te-ru-lu-bi (?)	/terul-u-/
ul-hu-di	/ulh-u-/

---

[20] Bases which show -*i*- only in 3rd pl. past are not listed here, as this manner of formation is regular for certain bases (see 6.5.3). Possibly *[a]-ri-bi-e* is another example, but it is uncertain.

[21] Forms which have no vowel in 3d pl. past, where other forms of the bases have -*i*-, are not listed here, as this type of formation seems to be regular for certain bases (see 6.5.3). Possibly the form *še-pu-li(-i)-e* should be analyzed as /*šepux-Ø*-/, but this is uncertain (cf. n. 19 above).

Ø-subclass

ú-lu-uš-ta(-[a])-bi
(: ú-lu-uš-ta(-a)-i-bi) /uluštax-Ø-/

6.4. Inflections of Class I.--The attested declarative[22] past endings of Class I are:

1st sg.	/be/
3rd sg.	/ne/
3rd pl.	/tu/

6.4.1. First person singular.--The following examples of first person singular past declarative forms occur in bilingual texts:

ˀa-al-du-bi (122:20)	: Ass.	al-ti-ˀi-šú 'I looked after(?) him'
a-ru-ú-⸢bi⸣ (122:22)		a-ti-[din] 'I gave'
te-ru-ú-bi (122:20)		aštakan(GAR-an) 'I placed'
zi-el-du-bi (122:30)		ú-si-iq 'I sacrificed'

The identification of the meaning of the form is strengthened by the contexts in which it occurs. The phrase "so-and-so says," after which first person verbs are to be expected, is regularly followed by one or more sentences whose verbs are of this type if transitive.[23] These forms frequently occur with the expressed subject *ieše*, which is clearly the first person subject pronoun, 'I.'

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[22] The term "declarative" is used to refer to the ordinary narrative mood in preference to "indicative," which has more specific connotations in connection with Indo-European grammar. It was used in this sense by H. H. Paper, *The Phonology and Morphology of Royal Achaemenid Elamite* (Ann Arbor, 1955).

[23] On the general form of Urartian inscriptions see Melikishvili, *Nairi-Urartu*, 375-97, esp. 377 for the function of *alie*. See also Fr., *Cauc*. VII, 78. In 12:2-3 *alie* is followed by a third person narrative, apparently because the actors in the narrative include other persons besides the narrator. In 10:25 ff. the action immediately following the *alie* is apparently not stated in active form; the meaning is not clear. In line 27 a third person narrative with compound subject resumes.

The following are the identifiable first person singular past declarative forms:

ˀa-al-du(-ú)-bi
  ˀa-al-tú-bi

a-bi-li-du(-ú)-bi
  a-bi-li-du-ú-bi-e

a-gu(-ú)-bi, a-gu-ú-bi-e

a-ma-áš-tú(-ú)-bi

a-mu-⸢ú⸣-bi

[a]-ri-bi-e (?)

a-ru(-ú)-bi

a-šú-ú-bi

a-tú(-ú)-bi

áš-du-⸢bi?⸣ (?)

áš-gu(-ú)-bi

áš-tú(-ú)-bi

áš-ú-la(-a)-bi

ba-at-gu-lu(-ú)-bi

du-ur-ba-bi

e-ir-ṣi-du(-ú)-bi

ha(-a)-ú-bi, ha-u-bi

har-har-šá-bi

ha-ar-ha-ar-šú(-ú)-bi
  har-ha-ar-šú-bi
  har-har-šú(-ú)-bi
  ha-ar-har-šú(-ú)-bi

ha-šú-bi

hu-šú-bi

iš-pu-ú-i-ú-bi

ka-ru-bi

ki-da-nu-bi

ku-ṭu(-ú)-bi
  ku-ṭu(-u)-be

$^{\mathrm{GEME}}$lu-tú-bi[24]

na-hu(-ú)-bi

nu-du-ú-bi[25]

nu-lu-uš-tú-ú-bi

pa-ru(-ú)-bi
  pa-a-ru-ú-bi

qa-ap-qa-ru-lu(-ú)-bi
  qa-ap-qa-a-ru-lu-ú-bi

su-du-qu-ú-bi
  su-ṭu-qu(-[ú])-bi

su-ú-i-du-lu-bi
  su-ú-i-du-lu-ú-bi-[e]

---

[24] In 106:6 $^{\mathrm{GEME}}$*lu-tú-bi* is the way the signs read. M (No. 160) postulates an omission: *lu-tú* (*pa-ru)-bi*, which seems to be quite unnecessary.

[25] The word division and meaning of 80 I 6 are uncertain. M (No. 127) reads *mannudubi*, but gemination of *n* is not attested in Urartian. Arut͡iun͡ian, *EV* VII, 86 and n. 7, takes *nu* as a logogram for a negative particle. K reads BUZÚR-*nudubi* 'I enthroned.' He compares BUZÚR-*nuadi* (80 VI 13), which he translates 'I became king.'

su-ú-i-du(-ú)-bi[26]

ša-tú-ú-bi

ši-di-iš-tú(-ú)-bi
  ši-i-di-iš-tú-ú-bi-e

ši-du(-ú)-bi

ši(-i)-ú-bi

ta-am-hu-bi

ta-áš-mu-ú-bi

te-e-ru(-ú)-bi
  te-ru(-ú)-bi

tú-ru(-ú)-bi

ú-e-di-a-du-bi

ú-e-li-du(-ú)-bi

ú-i-ya-bi[27]

ú-ra-tar-bi

za-áš-gu(-ú)-bi
  za-[a]-áš-gu-ú-bi-e

za-a-du(-ú)-bi
  za-du(-ú)-bi

za-šú(-ú)-bi

zi-el-du-bi

GIBÍL-bi

KÚ-bi

NÍG-bi

6.4.2. Third person singular.--The following forms identifiable as third person singular past declarative occur in bilingual texts:[28]

a-ru-n[i] (9:12)	: Ass. i-⌈ti⌉-din 'he gave'
na-hu-ni (9:10)	na-ši 'he brought'
te-ru-[ú]-⌈ni⌉ (9:6)	ištakan(GAR-an) 'he established'

The meaning identification of the form is strengthened by the fact that a past verb after an expressed singular noun subject ending in -še is always of this type, unless an object suffix is added to the verb.

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[26] The forms su-ú-i-d[u]-bi (80 III 31) and su-ú-i-d[u-ú-bi] (80 V 2) are in sequences of first person forms, so almost certainly they belong to this form category, but the meaning is uncertain. In 80 V 2 -d[u-lu-bi] would seem to be a possible alternative restoration, but there hardly seems room for such a restoration in 80 III 31.

[27] The word division is uncertain (80 VI 15); the preceding signs are MU.MU, but it is not clear whether they belong with uiyabi or not, and whether they are to be read syllabically or logographically.

[28] The damaged text of 9:24 is perhaps to be restored ha-⌈ú⌉-[ni], with the corresponding Ass. probably ⌈našū⌉(⌈ÍL⌉-[ú]) 'they brought.' The subject is plural. The Urartian form would be sg. used for pl.

The verbal form ending in -*ni* is also occasionally used after a plural subject, instead of the more usual form in -*tu*. The interchangeability is clearly shown by the parallel texts of inscription No. 10. The subject is IS *and* MI; lines 34, 86, and 87 have the verb *te-ir-tú* (the plural form), but the corresponding lines 2, 27, and 28 have *te-ru-ni*.[29] Examples of verbs in -*ni* with plural subjects are:[30]

še-di-iš-tú-ni (8:2, 7; 12:6, 38) (base *šidišt*-, cf. *šidištubi*)
te-ru-ni (10:2, 27, 28, 29 [twice])

The following are the forms identifiable as third person singular past declarative:

ˀa-al-du-ú-ni, ˀa-la-du-ni
a-gu(-ú)-ni
a-nu-ni (?)
a-ru(-ú)-ni
a-šú-ni
ar-di-la-ni
at-qa-na-du-ni
bi-du-ni
du-ni (?)
e-si-di-ni (?)[31]
ha-$\overset{(\acute{})}{\mathrm{u}}$-ni
i-zi-du-ni
ka-ru(-ú)-ni
ku-gu-i-ú-ni
  ku-gu(-ú)-ni
  ku-u-gu-ú-ni
  ku-ú-i-gu-ú-ni
ku-šú-ú-ni
ku-ṭu-n[i]

---

[29] If -*ni* were interpreted as a singular object suffix (cf. 6.4.2.1, 6.9, 8.2), then another interpretation would be possible: *teruni* correlates only with the object, *tertu* only with the subject (Meshchaninov, *Dva i͡azyka*, 362-63). This seems very unlikely.

[30] Uncertainty of restoration deprives two examples from bilingual texts of any force: *ha-⌈ú⌉-[ni]* (9:24) : Ass. ⌈*našū*⌉(⌈*ÍL*⌉-[*ú*]) 'they brought' (see n. 28), and *ši-di-iš-t[ú-ú-ni]* (9:5) : Ass. [*uš*]-⌈*ṭú-bu*?⌉ 'they prepared.'

[31] So the signs read in 81 left$_{d}$ (M 128 A4) ll. K (p. 103 n. 1) believes the final -*ni* should be read $^{\underline{d}}$. The following word (*iniriaše*) does not always have that determinative (e.g. 10:12, 52).

ma-ku-lu-⸢ni⸣ (?)[32]

na-hu-ni

si-ip-ru-gi-ni

šá-tú-ni

ši-di-iš-tú(-ú)-ni
  ši-di-ši-tú-ni
  ši-i-di-iš-tú-ú-ni

šú-ú-ni

ta-lu-su-ni (?)

te-e-qu-ú-ni, te-qu-ni

te-ru(-ú)-ni

⸢ti⸣-a-ni

ṭu-bar-du-⸢ni⸣-[i?]

ú-bar-du-du-ni

uš-ha-a-nu-ni
  [uš-ha]-nu(-ú)-ni

uš-tú(-ú)-ni

za-a-du(-ú)-ni, za-du(-ú)-ni
  [za-a-d]u-ni-i

GIBÍL-ni

6.4.2.1. The force of -ni.—Some uncertainty remains as to whether or not -ni in these forms really is a personal ending. The expression of the object of a verb will be discussed in more detail later (6.9), but it should be noted here that a verb frequently takes an object suffix even if there is an expressed nominal object. This is clearest in the plural forms, such as KÁ-li šidištual[i] (48:9) 'he built the gates,' or inili KÁ zaduali (10:2) 'they built these gates.' However, compare KÁ-li ... kašuni (113:5-6) 'he . ? . the gates,' ⸢KÁ⸣-[li] ... šidištubi (119:4-5) 'I built the gates.' It was mentioned above that the plural category seems to be optional. Therefore the -ni ending of these forms might be an object suffix (singular), rather than a personal ending, whether the object is singular or plural. There is at least one form which apparently shows -ni as an object suffix on a verb form other than third person singular.[33] There are no examples of recognizable third person singular past declarative forms without -*ni* except those having plural object suffixes or dative suffixes.[34] The fact that -*ni* is lost before a plural object suffix is no argument in favor of its being an object suffix, since the first person singular personal ending -*bi* is also lost under the same circumstances, and the plural ending -*tu* is only rarely preserved.[35] To interpret the -*ni* of these forms as an object suffix would imply that the third person singular form must always have an object suffix, while other verbal forms do not need such a suffix. If -*ni* were an object suffix, it is also surprising that there are no combinations of it with first person singular forms, corresponding to the many occurrences of such forms with plural object suffixes.

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[32] It is possible that the ma- goes with the preceding word (so K 123:3).

[33] ku-ú-li-tú-ni, ku-li-e-tú-ú-ni (6 rev. 50, 126:47 'may they destroy him.' Very uncertain is an example from a bilingual text:

It seems most likely that this -*ni* is a suffix of neutral meaning, serving primarily a phonological function, perhaps merely as a terminal element after the stem vowel. The force of third person

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[še-ir?]-⸢tú?⸣-li-i-ni (9:32) : Ass. *ú-pa-za-ar* '(whoever) hides (it).' Possibly in 6:49, rev. 31 we should restore *ha-ši-tú-ú-[ni]* 'they heard(?) [it].' Possibly *te-ir-di-la-ni-ni* (117:12) is to be interpreted as a subordinate verbal form with third person singular suffix (G, *RHA* 24, 279), but the interpretation is very uncertain (see 6.6.3). The form *ku-ú-i-tú-ú-ni* was shown by *CICh* 15 (= K 7) obv. 4 and was restored in 34 and rev. 4 (Textband I, Col. 36-38). This form was cited by Fr., *Cauc*. VIII, 141, and by Meshchaninov, *Dva i͡azyka*, 362. The photographs of the inscription (*CICh* pl. 43-44) do not support this reading, but show only *ku-ú-i-tú-ú*, and it is so read by K. M follows the reading of Fr. and also shows the same form (with -*ni*) as clear in 22:4 (= K 6:4), which his Photo 2 does not seem to support. See 6.9.1 and n. 73.

[34] e.g. *arume* 'he gave to me,' *karuali* 'he fought them.' See 6.9.

[35] An example for the first person is LÚ.A.SI.MEŠ *uelidul i* 'I mobilized the soldiers.' The cases where -*tu* is preserved are listed in 6.9. The more usual treatment is exemplified by *inili* KÁ *zaduali* 'they built these gates,' where the verb is probably to be interpreted as a singular form used for the plural.

singular subject or object is probably not conveyed by the -*ni*, but by the absence of one of the more distinctive endings.[36]

6.4.3. Third person plural.—The following declarative third person plural past forms occur in bilingual texts:

[at-qa]-⌈na⌉-di-tu (9:28) :	Ass. a-na e-qu-te ú-sa-li-ku 'they brought for dedication'
ti-⌈ya⌉-i-tú (9:28)	[iq-ti-bi]-⌈ú⌉ 'they said'

The meaning identification is confirmed by the fact that plural subjects (including compound subjects in -*še*) are usually followed by verbs of this type.[37]

The following identifiable forms of this type occur:

a-ti-[tú]
[at-qa]-⌈na⌉-di-tu
ha-a-i-tú(-ú)
ha-ši-tú-ú[38]
ir-bi-tú
ku-ṭè-i-tú, ku-ṭí-tú

ku-ú-i-tú-ú
pa-ar-tú(-ú)
su-ú-i-du-tú
še-i-ri-du-tú-[ú]
te-ir-tu(´)
ti-⌈ya⌉-i-tú

It is apparent that there are three types of formation here: (1) -*tu* added to the stem (e.g. *šeridutu*); (2) -*tu* added to the base without any stem vowel (e.g. *partu*, cf. *parubi*); (3) -*tu* added after an /-*e*-/ replacing the original stem vowel (e.g. *haitu* /*haxetu*/, cf. *haubi*, stem /*haxu*-/. On the basis of this last change some scholars have analyzed the ending as -*itu*,[39] but the other types of formation are not readily described on this basis. The case formation can be symbolized as $/(\underline{i}, V_1, \underline{\emptyset} \leftarrow V_1)\underline{tu}/$.

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[36] Compare the very similar colorlessness of -*ni* with nouns, especially as the ending of the general case (7.2.2).

[37] However, a singular verbal form may be substituted. See 6.4.2.

[38] The space after this form (6:49, rev. 31) is illegible. Possibly -[*ni*] should be restored, creating a form like *kuletuni* (see n. 33 above).

6.4.4. Third person singular present.--The following present declarative(?) third person singular forms occur in bilingual texts:

du-li-i-e (9:31, 35)	: Ass. [i]-⌈ta⌉-mar 'he sees'[40]
ha-šu-li-⌈i⌉-[e] (9:33)	iniššūni(ÍL-⌈ú⌉-[ni]) 'he takes'
ha-ú-li-i-e (9:29)	i-si-me 'he hears'
ip-hu-li-i-e (9:38)	[i-hap]-pu-ú-ni 'he breaks'

The meaning identification of this form is confirmed by its regular use in conditional clauses after *aluše* 'whoever.'[41]

There is one example of a form of this type with a plural subject (*alie* in 12:2, [18], ⌈34⌉).

The following are the identifiable forms of this type:[42]

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[39] e.g. Fr., *Einf.*, 6; M, *VDI* 1953,1, 276.

[40] This is the bracketing of Ass. line 30. The relevant portion of Ass. line 35 is now mostly effaced by a bullet scar, all that remains is -*ma*[*r*]; *i?-ta?-mar?* was read by previous editors. Despite this equivalence, the contexts seem to favor the meaning 'he causes to do/be done' for *dulie*. It occurs in the curse formula as a reprehensible act. Perhaps the meaning is 'see' in the sense of 'look on with approval.' *amāru* sometimes seems to have this connotation in Akkadian. In any case, the translations are not always literal. Note in this same list *haulie* : *isime* 'he hears.' From the contexts it is quite clear that *hau*- means 'to seize.'

[41] Most of the occurrences of this form are in conditional clauses after *aluše* 'whoever,' and probably on this basis K has applied the name "conjunctive" (cf. n. 15 above). However it does appear in other contexts. *alie* seems to be simple present declarative. In 41:31 a form of this type appears in a clause introduced by *aše* 'when'; in 62a:6 one appears in a clause introduced by *ali* 'who/which.' Conversely, *aluše* does appear before a declarative past form (124:23-24), but here it has a definite antecedent. Probably the ending consists of two morphemes, a subject indicator and a "tense" indicator, but data are not available on which to base a division.

[42] Possibly *a-du-li-e* (117:10) is a form of this type also.

⌈?a?⌉-hu-li-e

a-li(-e/i)

du-li(-e), du-li-i-e

ha-ú-li-e, ha-a-ú-li-i-e

ha-ar-ha-ar-šú-li-i-e

ha-šu-li-⌈i⌉-[e]

hu-a-li[43]

hu-li-i-e

hu-šú-li(-i)-e

i-ri-du-l[i-e]

i-ru-ú-li (?)

ip-hu-li(-i)-e

ip-tú-li-i-e

ku-ú-li-e

la-ku-du-li-e

lu-ru-qu-du-li

lu-ru-qu-ú-li-⌈e⌉
  [l]u-ú-[ru-ú-qu-ú-li-e]

pi-i-tú(-ú)-li-i-e
  pi-tú-li(-i)-e

su-ú-i-du-li-i-e
  su-u-i-du-li(-e)
  su-ú-i-du-li-e

še-pu-ya-li-e, ⌈še⌉-pu-li-i-e

še-ri-du-li-e, še-ir-du-li-i-e

ši-ú-li-i-e

te-li-i[44]

ti-u-li
  ti(-i)-ú-li-e
  ti(-i)-ú-li-i-e

tú(-ú)-li-i-e, tú-li-e

ú-bar-a-du-ú-ya-a-li[45]

ú-e-ši(-ú)-a-li

ú-lu-l[i], ú-lu(-ú)-li-e

ú-ru-li-e

The spelling -li-i-e for this ending is quite common. Very frequent is the spelling -li-e, while spelling without the final vowel sign is quite rare. It seems apparent that this ending is bisyllabic, to be symbolized as /-*lexe*/.[46]

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[43] hu-a-li occurs in 60:8. G (RHA 22, 181), followed by M (No. 63), restored [hu-l]i-a-li, attributing the meaning "whoever brings them," and referring to CICh No. 53 n. 3. The text of CICh here shows a-lu-š[e h]u-a-li, with a note that the [h]u might be [l]i. The photograph (CICh Tf. 47) shows there is not room to restore as G does.

[44] The form occurs in 126:40. The word division is a little uncertain. Possible it should be divided as te-li-i-e.

[45] Both the occurrences of this form are damaged:
ú-bar-a-du-ú-ya-a-[li] (124:21)
[ú-bar-a-du-ya]-a-li (125 obv. 17)

6.4.5. Medio-passive.—The following are apparently forms of Class I verbs:[47]

a-ga(-a)-ú-ri :: a-i-u-ri (/agaxure/ :: /axure/)
ši-da-gu-ri :: ši-da-ú-ri :: ši-i-da-⸢a-ú⸣-ri-e (/šedaxure/)
šú-ku(-ú)-ri (?)[48]
uš-tú(-ú)-ri

From the contexts in which these forms appear, they seem to have a medio-passive significance.[49] All seem to be third person singular. In other forms the stems of these verbs appear as *agu-*, *šidu-*, and *uštu-*. There seem to be two different types of formation involved: (1) addition of -*ri* after the stem vowel; (2) addition of /-*xure*/ with the vowel *a* replacing the usual stem vowel. These can by symbolized as /-*re*/ ~ /(*a* ← V_1)*xure*/.

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[46] This ending, therefore, though occasionally orthographically identical to the third person plural past ending /-*le*/ and the object suffix /-*le*/ is phonemically distinct from them. Cf. n. 105 below.

[47] Possibly *ka-ú-ri* (104:7) is another example of this category.

[48] Translation as an adjective seems called for (103 III 31, V 16).

[49] G, *RHA* 24, 266-69; Fr., *ArO* IV, 64-66; *Einf*., 8; *WZKM* XLVII, 194-98; Ts., *RA* XXXIII, 98-100. Gamkrelidze, *VDI* 1956,4, 143-45, starting from the observation that forms of this type occur only in conjunction with the negative particle *ui* concludes that the ending marks specifically the negative passive, the affirmative passive being unknown. The use of a verbal inflection which includes negation is very rare in languages generally. Since no contrast of negative and affirmative passive can be shown, and since *ui* itself indicates the negation, there does not seem adequate reason to consider negation to be included in the force of the ending. Since the affirmative is not attested, it seems more likely that the use of these forms only in negative clauses in the extant material is accidental. If *šukuri* is correctly analyzed as belonging to this category his observation would not be correct, since it occurs in 103 III 31 without *ui* (in 103 V 16

6.5. Inflections of Class II.--The identified declarative endings of Class II verbs, all apparently past in sense, are:

1st sg.	/de/
3rd sg.	/be/
3rd pl.	/le/

6.5.1. First person singular.--The following first person singular past declarative form occurs in a bilingual text:

[uš]-⌈ta-di⌉ (122:15) : Ass. ⌈ana-ku⌉ ... [lu]-⌈ú a-ta-l⌉[a-ka]
'I went'

The identification of the meaning of the form is confirmed by its occurrence in narratives after the phrase "so-and-so says," where first person forms are to be expected. It does not occur with an expressed subject.

The following are the identifiable forms of this type:

a-ba(-a)-di (?)
a-ú-di (?)
áš-ta-a-di
bi-di(-i)-a-di
hu-ti(-i)-a-di
iš-te(-e)-di, iš-ti(-e)-di
ka-a-di (?)
ku(-ú)-ţè-a-di, ku-ţè-i-a-di
na(-a)-ha-a-di, na-ha-di
[nu]-na-⌈a⌉-di
si-lu-a-di
ši-a-di
ú-la-di, ú-la-a-⌈di⌉-[e?]
ul-hu-du
uš-ta(-a)-di

The ending is clearly -di added after the stem vowel, which is usually a.

6.5.2. Third person singular.--The following third person singular past declarative form occurs in a bilingual text:

---

it stands after ui). manuri is also a form of this type, but the root man is being treated as a separate verbal class (see 6.8).

nu-na-be (9:17) : Ass. illik(DU)-an-ni 'he came'

Expressed singular nominal subjects not ending in -še (i.e. ending in a vowel, including those ending in -ni) are regularly followed by verbal forms of this type. In one passage, somewhat damaged, a form of this type is apparently used with a plural subject:

> [nu]-na-a-⌈bi iš-ti-ni-ni⌉ [20 LIM] 4 ME 80 ⌈x x⌉ [x x LIM] 4 ME 60 LÚ.MEŠ-še GAZ.MEŠ (7 rev. 25-27)[50] 'there came from there 20,480 men? . . ., 460 soldiers . . . .'

The following are the identifiable third person singular past declarative forms of Class II verbs:

a-iš-ti-bi

⌈gi⌉-da-bi (?)

ku-lu-up-ši(-i)-bi[51]

na-ha-bi

nu-na(-a)-be, nu-na(-a)-bi

su-lu-uš-ti(-i)-bi

ši-a-bi

te-ru-lu-b[i][52]

ú-lu-uš-ta(-a)-i-bi
  ú-lu-uš-ta-bi

uš-ta(-a)-be, uš-ta(-a)-bi

6.5.3. Third person plural.--The following third person plural past form occurs in a bilingual text:

> ⌈nu⌉-na-a-⌈li⌉ (9:26) : Ass. il-lik-ú-ni-[ni] 'they came'

---

[50] The accuracy of most of the restoration is confirmed by 7:20-21.

[51] M reads this word as kuluaršibi. He regularly reads the up sign as ár, which seems particularly unlikely in this word.

[52] This form is usually considered to be first singular past Class I (e.g. K 103 II 59, M 155E 53). This is possible, but it is immediately preceded by another verb in -bi (suluštibi) which is third person singular Class II. No new subject is specified, another third person verb follows terulubi, and there is no specified object. Therefore, it seems most likely that this verb also is third person singular Class II. (Cf. Ts., NHI, 49.)

Verbs of this type occur regularly after expressed compound subjects not ending in -*še* (i.e. ending in a vowel, including those ending in -*ni*). They also occur after plural subjects.

The following are the identifiable forms of this type:

gu-pu-uš-ta-li (?)[53]

⌈nu⌉-na-a-⌈li⌉

uš-ta(-a)-li

6.6. Other forms derived from verb bases.--There are a number of other forms from verbal bases which do not occur enough times or in sufficiently clear contexts to establish their meaning with certainty.[54] The descriptions given below are therefore highly tentative in most cases.

6.6.1 Active imperative.--The following forms seem to be active imperatives:

2nd sg.	tú-ri(-e), tú-ú-⌈ri-i⌉
	ú-li-i (⌈ú⌉-[li-e] : Ass. a-⌈lik⌉ 'go!')
3rd sg.	tú(-ú)-ri-ni-ni
	SUM-ni-ni
3rd pl.	[tú-r]u-ti-ni-e-ni

The second person singular form seems clearly identifiable.[55] It is probably to be analyzed as verbal base + /*e*/. The third person singular forms are, on the contrary, quite doubtful. They occur in apodoses of conditional sentences. The contexts would seem to allow interpretation as future passive, or perhaps as passive participles, but the latter function is suggested for another type of form (6.6.5). The forms are probably to be analyzed as verbal base + /-enene/. turutineni, if that is the correct restoration, occurs once (74 rev. 11), in a formula which regularly has turinini. It may represent a plural form instead of the usual singular; perhaps it has an object suffix. The endings, then, would be:

---

[53] Possible two words (so K 117:9). It seems to have a compound subject ending in -*ni*, so probably it belongs to this form category.

[54] A valiant attempt to interpret most of these forms was made by G, *RHA* 22, 195-98; 24, 269-80. His interpretations are generally reasonable, but in some cases there seem to be other possibilities which would account for the data equally well, if not better.

[55] L-H, *Klio* XXIV, 152-56; Fr., *Cauc*. VIII, 143-45.

2nd sg.	/-e/
3rd sg.	/-enene/
3rd pl.	/-utenenene/ (?)

6.6.2. Passive imperative.—The following forms seem to constitute a form category. The meaning of the forms is not clear, but a passive imperative force seems to suit the contexts in which they appear, insofar as they are comprehensible.[56]

ha-i-di-a-ni
ku-ul-di-a-ni
la-ku-ya-ni
še-pu-ya-ar-di-a-ni
ú-ru-li(-i)-a-ni

All seem to be third singular, from Class I bases. None of these bases occurs in any other form unless ha-i-du-še is infinitive of the same base as *ha-i-di-a-ni*. They are apparently to be analyzed as formed by adding /-*exane*/ to the base.

---

[56] These forms were analyzed by G (RHA 22, 188-95) as prohibitives. He also includes in this class the forms manuni and kuletuni which are of quite different form. The latter he interprets as a plural. manuni is interpreted below (6.8) as third singular active; kuletuni is probably third plural past with an object(?) suffix.

6.6.3. Subordinate (?).—The following form appears in a rather uncertain context (117:12):

te-ir-di-la-ni-ni

It appears to be from a Class I verb. It is included by Goetze (*RHA* 24, 276-80) in a class of forms used in subordinate clauses "with final force." The following probably belong to a related category, but all are of uncertain meaning:

ha-ba-la-a-ni

ha-i-la-a-ni, ha-ya-la-a-ni

pa-a-ra-la-a-ni

qa-ap-qa-šú-la-⸢la?⸣-ni, [qa-ap-qa]-ar-šú-⸢l⸣a?-la-a-ni

The ending is apparently -*lani(ni)*, and there seems to be a change of stem vowel in some cases to *a*. More data will be necessary before this can be analyzed. Goetze cites as further examples of the class *ar-di-la-ni*, *ma-gu-ú-la-ni*, and *qu-du-la(-a)-ni*. The first can be interpreted as third person singular past declarative, and it is so treated above. The form *magulani* is based upon an erroneous reading.[57] The form *qudulani* may not even be a verb; in any case its meaning is quite uncertain.[58]

6.6.4. Verbal noun.—The following forms seem to be nouns designating the action indicated by the verbal base:[59]

---

[57] Corrected by Fr., *Acta Jutlandica* IX, 521.

[58] Cf. the translation by K, 8:4, 9 (p. 41); it seems to function as a noun.

[59] LÚ*tašmuše* (23:17) appears to be a form of the same type (cf. *tašmubi* 103 I 10), but it does not seem to be a verbal noun in meaning.

a-ru-ú-še-e

ha-i-du-še

iš-pu-i-še

ta-a-še

za-du-⌈še⌉(?)

They seem to be derived from Class I verbal bases by adding /-*še*/ after the stem vowel.

6.6.5. Passive participle (?).—The following forms, with one exception, occur in contexts relating to the specification of various acts which are to be performed, especially cultic observances:

Simple forms

me-šú-li

ta-nu-li

te-šú-li-e

ur-pu-li

-ni forms[60]

áš-hu-li-ni

ba-at-qi-du-li-ni (?)

di-du-li-ni (?)

me-ši(-i)-ú-li-ni

ni-ip-si-du-li-ni

pu-ru-li-n[i] (?)

qa-ap-qa-ru-li-ni[61]

ta-nu-li-ni

te-ir-du-li-ni

ul-du-li-ni (?)

ur-pu-li(-i)-ni
  ur-pu-ú-li(-i)-ni

All these forms are evidently from Class I verbs. The only other forms of any of these bases which occur are *ni-ip-si-di-ʾa-a-li* and *ur-pu(-ú)-a-li*, *ur-pu-li*, *ur-pu-a-ṣi*, *ur-pu-ú-e*. In the contexts in which these forms appear it is quite uncertain whether the sense is imperative, precative, or simply statement referring to future or habitual action. The form remains unchanged regardless of whether the thing affected by the action is singular or plural. The one example which offers more hope of interpretation is:

---

[60] Possibly *zi-du-li-ni* (124 rev. 23) belongs to this category, but the context is lost. These signs may be only the end of a word.

[61] *qapqarilini* (10:25, 82) seems to be a different word, not a passive, but a noun.

> ištidi ulhudi $^{\mathrm{URU}}$meliṭeani *qapqarulini* nunabi ^{m}hilaruadani kauke suluštibi (104 22-23)
>
> 'I went, I commanded(?). Meliṭea ______. Hilaruada (king of Meliṭea) came before me, he paid homage.'

A very similar passage occurs in 103 II 58-59:

> $^{\mathrm{URU}}$halpani . . . haubi $^{\mathrm{URU}}$paralani URU BUZÚR-nusi *qapqarulubi* šiabi kauki suluštibi
>
> 'Halpa . . . I captured. Parala, the royal city, ______. He (the king) came before me, he paid homage.'

In these passages *qapqarulini* and *qapqarulubi* seem to be parallel. The latter is clearly first person singular past, probably meaning 'I attacked.' Somehow *qapqarulini* must convey a similar idea, so it can hardly be imperative.[62] To fit all the occurrences, the most likely interpretation would seem to be that the form in -*lini* is an invariable passive participle, or something of the sort, having no reference to time. In the example cited, *qapqarulini* is probably to be translated '(was) attacked.' This interpretation also fits the following:

---

[62] Forms of this type are interpreted by G (*RHA* 24, 269-75) as 3rd sg. passive imperatives. He interprets the combination *ulhudi* $^{\mathrm{URU}}$*meliṭeani qapqarulini* as meaning "I intended: 'let Melite be attacked!'." This interpretation seems rather forced. There is no example in all these texts of any expression of feeling or intent in the first person. Even such a form as "I said" is not attested. The first person forms which occur all represent actions. The closest parallel to the type of construction proposed would be "he says," and the verb form used for this is transitive, while *ulhudi* is intransitive.

[3 UDU ^{d}haldi]e urpuali (10:92)

'3 sheep for Haldi they shall kill'[63]

GU$_4$ 3 UDU ^{d}haldie urpulini (41:25-26)

'an ox, 3 sheep, for Haldi (shall be) killed'

The formation is apparently characterized by /-ule(ne)/ added to the verbal base. It is not clear what the relationship between the two types of formation is, as far as meaning is concerned. Probably the forms in -ni are somewhat stronger or more definite.

6.6.6. Verbal adjective.--The following forms seem to be derivatives from verbal bases with adjectival meaning. They seem to differ in meaning from the passive participle in emphasizing the state rather than the action.[64]

du-ur-ba-i-e (/durbaxe/)[65]

te-ra-gi : te-ra-i-e (/teraxe/)

šú-a-i-e (/šuxaxe/)

Apparently a plural form also occurs (9:22):

te-ra-[a]-⌈i-ni⌉-[li] : Ass. [šak]-na-te 'placed'[66]

---

[63] The parallel text (10:31) shows that urpu- means 'kill,' since it has the logogram TAK. It also certainly establishes the restoration. The same group occurs in 10:93 with context clear but with partially restored ur[pu]ali. urpuali is differently interpreted by G, RHA 24, 276 (see n. 77 below).

[64] Cf. K, p. 219.

[65] K, p. 101 n. 2, considers it to be "a passive" (without further specification).

[66] Cf. n. 75.

The ending seems to be /-*axe*/, pl. /-*axenele*/ added directly to the base. The one plural form is probably based on an expanded stem in -*ni*, rather than being the regular plural of the form in /-*axe*/.

6.7. Summary of verbal inflections.--The endings discussed in the preceding paragraphs can be summarized as follows:[67]

		Class I	Class II
Past Declarative			
	1st sg.	/-be/	/-de/
	3rd sg.	/-ne/	/-be/
	3rd pl.	/-tu/	/-le/
Present			
	3rd sg.	/-lexe/	
Medio-Passive		/-re/ ~ /-(a ← V_1)xure/	
Active Imperative			
	2nd sg.	/-(∅ ← V?)e/	/-e/ (added to base)
	3rd sg.	/-(i ← V?)nene/ (?)	
	3rd pl.	/-(u ← V?)tenene/ (?)	
Passive Imperative			
	3rd sg.	/-xane/	
Subordinate(?)		/-lane(ne)/ (?)	
Verbal noun		/-še/	
Passive Participle(?)		/-(u ← V)li(ni)/	
Verbal Adjective, sg.		/-(a ← V)xe(ne?)/	
pl.		/-(a ← V)xenele/	

---

[67] A category of infinitives in -*de* has been claimed, including the form *arede* (see n. 5 to 2.1). The evidence for it seems extremely weak. Cf. Fr., *Einf*. 8; Ts., *NHI*, 71; M, *VDI* 1953,1, 282.

6.8. Forms of *m(an)*-.—The following forms of the root *man*-, *m*-(?) occur:[68]

Active			
	1st sg.	ma-nu-di : Ass. ⌜a⌝-tú-[ši-ib]	
	3rd sg.	ma-a-nu(-ú), ma-nu[69]	ma(-a)-ni (?)[70]
		ma-a-nu-ú-ni, ma-nu(-ú)-ni	ma(-a)-ni-ni
	3rd pl.	ma-nu-li(-e)	
Medio-passive			
	3rd sg.	ma-nu(-ú)-ri	
Infinitive		ma(-a)-nu(-ú)-še	

The meaning of the root seems to be approximately "to be, be located." The precise meaning of the third person singular forms in particular remains somewhat uncertain. Goetze interprets *manu* as relative (*RHA* 24, 266-67), *manuni* as prohibitive (*RHA* 22, 195), and *manini* as imperative (*RHA* 22, 198). It has been suggested in this paper that the ending -*ni* in most cases has very little, if any, marking force.[71] Therefore, it seems likely that *manu* and *manuni*, *mani* and *manini* are pairs only slightly differentiated in meaning. It must be admitted that there seem to be no cases of interchange, but it is frequently impossible to detect any difference in meaning between the form with -*ni* and the form without it.[72] Just what the difference in meaning is between *manu* and *mani* is likewise obscure.

---

[68] The forms of this root are discussed by Fr., *Cauc*. VII, 83-86. Perhaps also connected with this root are the uninterpreted forms *ma-ni-du* (103 I 34; see *RHA* 24, 278) and *[m]a?-na-ni* (16 up. 8; these signs may be only the end of a word). *manunini* possibly occurs in Inc. 11 obv. 2.

[69] In 125 obv. 28 *ma-nu* seems to have a plural subject: KI.MEŠ *quldini manu* 'the lands were unproductive.'

[70] There appears to be also a root *ma*-, with inflectional forms *mani* and *manini* used as third person pronoun (cf. Fr., *Cauc*. VIII, 131-34; *Einf*., 17, 45). The form *mani* is nowhere demonstrably a verbal form, though in some occurrences a verbal meaning seems suitable. However, if *manini* is accepted as a verbal form, it would seem almost certain that *mani* also is sometimes verbal.

[71] See 6.4.2.1, 7.2.2.

6.9. Verbal forms with pronominal suffixes.—At least if the object is plural, a verb may bear a suffix relating it to the object, but the use of the suffix is optional. For example:

karu*ni* $^{\text{KUR}}$manani LÚ.A.SI.MEŠ-ie (80 V 13-14) 'he fought the soldiers of Mana'

karua*li* 4 BUZÚR.MEŠ (103 III 59) 'he fought four kings'

LÚ.A.SI.MEŠ uelidu*bi* (81 left 18) 'I mobilized the troops'

LÚ.A.SI.MEŠ uelidu*li* (80 III 49) 'I mobilized the troops'

The following verbal forms apparently have suffixes referring to the object of the verb:

Form with suffix	Corresponding form without suffix
6.9.1. Third person singular direct object(?)[73]/-*ne*/	
third person plural past verb (Class I)	
ku-ú-li-tú-ni, ku-li-e-tú-ú-ni	
6.9.2. Third person plural direct object /-*le*/	
first person singular past verb (Class I)	
áš-tú-ú-li	áš-tú(-ú)-bi

---

[72] ali $^{\text{LÚ}}$*tašmuše bedi manu biduni* (23:17) and *apsiei bauše bedi manuni* (124 rev. 10) may be analogous, but the meaning of neither passage is certain.

[73] Other possible examples of third person singular direct object suffix -*ni* (cf. n. 33 above), all uncertain, are:

ha-ši-tu-ú-[ni?]	Verb: 3d pl. past
[še?-ir?]-⌈tú?⌉-li-i-ni	3d sg. present
[tú-r]u-ti-ni-e-ni	3d pl. imperative
te-ir-di-la-ni-ni	subordinate (? see 6.6.3)

ip-šá-du-li-[e]	
ki-e-i-da-nu-ú-li, ki$_4$-da-nu-ú-li	
ku-ú-li	
nu-ul-du-ú-li[74]	
šá-tú-ú(-ú)-li	šá-tú-ú-bi
ši-e-du-li-[e], ši-du-ú(-ú)-li	ši-du(-ú)-bi
ši-di-iš-tú-ú-li	ši-di-iš-tú-bi
t[e-g]u-ú-li	
ú-e-li-du-ú-li	ú-e-li-du(-ú)-bi

third person singular past verb (Class I)[75]

⌈áš?⌉-gu-a-⌈li⌉	
ka-ru-a-li	ka-ru(-ú)-ni
nu-ul-du-a-li	
šá-tú-a-li	šá-tú-ni
ši-i-di-i-iš-tu-a-li, ši-di-iš-tú(-ú)-a-li[76]	ši-di-iš-tú-ni etc.
te-e-qu-ú-a-li(-e), te-qu-a-li	te-qu-ni etc.

---

[74] The form occurs in 122:29. In form it is clearly 1st sg. (contrast *nu-ul-du-a-li*), 119:8, which is 3rd sg.), and the context demands 1st sg. The corresponding Ass. is *ir-ti-[ʔi]*, from the root *r^{c}y*, which could be either first or third person singular, but in the context it must be 1st sg..

[75] The form *te-ra-[a]-⌈i-ni⌉-[li]* occurs in 9:22. It has been interpreted as third singular past with plural object suffix. There are no attested cases of third singular forms preserving -*ni* before a suffix. The corresponding Ass. is *[šak]-na-te*, a verbal adjective. It seems likely that *terainili* also, assuming the correctness of the restoration, is a verbal adjective (cf. 6.6.6.).

[76] *ši-di-iš-tú-ú-a-li* in 12:9 has a compound subject. Evidently here again a singular verbal form is being used instead of the plural. This interpretation is confirmed by the occurrence of the third singular verbal form *zaduni* in 12:6 with the same subject.

ur-pu(-ú)-a-li[77]

za-šú-a-li

za-a-du-ú-a-li za-a-du(-ú)-ni etc.

third person plural past verb (Class I)[78]

áš-ha-áš-tú-li

har-har-ši-tú-l[i]

ni-ip-si-di-ˀa-a-li[79]

ši-di-iš-tú-li[80]

za-a-tú-ú-li[81]

third person singular present verb (Class I)[82]

nu-ul-du-a-li (?) (verb is probably a past form)

ši-ú-li-a-li

---

[77] This form is interpreted by G, _RHA_ 24, 276 as plural passive imperative. In form it clearly belongs to this group, and the meaning of the group is suitable to the context (precative, like _nipsidiˀali_, n. 79 below). In the context it is apparently to be translated "let them kill them," and would be a singular form used for the plural.

[78] Barely possible is the restoration _[za?-tú]-⌈me⌉-li_ in 122:31, which would be 3d pl. + indirect object suffix + pl. direct object suffix, "they grant them to me." In 6a:19 Fr., _Einf_. 52, restores _[su-ú-i-du-tú-l]i_, accepted by M (21:19), but the restoration is quite uncertain (cf. 6 obv. 29, rev. 10).

[79] G, _RHA_ 24, 280, interprets this form as plural "final" passive, meaning "in order to . . . ." However, except for the change in stem vowel (cf. _nipsidulini_), which is not completely unparalleled, the form seems to fit the pattern here under consideration. The meaning "let them sacrifice them" seems suitable in the context (10:3, 35), the past being used with precative force, which has many parallels. G assigns similar force to _arnuyali_ and _zašili_; it is even uncertain whether the former is a verb, and the latter is evidently a misreading (6 rev. 31, read _ha-ši-tu-ú_, as clearly in obv. 49).

[80] This form is probably syncopated from *_šidištituli_ (like _zatuli_ from *_zadituli_, see n. 81).

[81] This form (10:33) is probably syncopated from *_zadituli_. Cf. n. 80.

[82] See n. 43 above.

6.9.3. First person singular indirect object /-*me*/

third person singular past verb (Class I)

a-ru(-ú)-me, a-ru-me-[e?]	a-ru(-ú)-ni
te-ru-me-(⌜e?⌝)	te-ru(-ú)-ni
uš-ha-nu(-ú)-me	uš-ha-a-nu-ni

third person plural past verb (Class I)

ar-tú-me

za-tú(-ú)-me[83]

third person plural past verb, Class II

ha(-a)-ši-al-me, ha-ši(-a)-al-me-e[84]

6.9.4. Structure of verbal forms with object suffixes.--The attested forms do not provide enough evidence on which to base an analysis which will not be somewhat arbitrary. The examples of supposed third singular objects are so uncertain that they cannot be seriously considered (cf. 6.4.2.1). The one probable example simply adds -*ni* to the full personal form. The one example of an apparent third person plural Class II verb with indirect object suffix does not afford enough data to set up any general principle. It is unknown, for example, whether the final -*i* of the personal ending -*li* is lost before all suffixes or only before -*me*. It is apparent that the first person indirect object suffix cannot be subsumed under the same principles as the third person plural object suffix. The following principles can be extracted from the forms:

---

[83] Apparently from the base *zad-* by syncopation from a fuller form *_zaditume_ (cf. n. 81).

[84] G, *RHA* 24, 280-81, interprets this form as 3d pl. passive final, "in order that they might be obeyed." He does not adequately account for the final -*me*. The form seems much more likely to be 3rd pl. intransitive with indirect object suffix, "they listened to me."

(1) The direct object suffix for third person plural is -li. The indirect object suffix for first person singular is -me.

(2) The first person singular personal ending -bi is dropped before any object suffix.

(3) If the verb has the force of third plural, the full verbal form (in -tu) of third person plural may be used, or a form identical with that of the third person singular may be substituted.

(4) Even where the personal ending is not retained, the verb still shows an inflection for person before the direct object suffix. The first person singular combining form is the bare stem (with the stem vowel retained). The third person singular combining form adds the suffix /-xa/ after the stem vowel; the combining form shows no similarity to the full personal form.

(5) Before the first person singular indirect object suffix there is no differentiation of the verb for person, except for third person plural verbs.

(6) On the basis of a single example, the third person singular present verb seems to change the final vowel of the personal form to a before the suffix.[85]

6.9.4.1. Summary of verbal forms with object suffixes or without.

	If subject indicator is final	If direct object indicator is final		If indirect object indicator is final	
	subj. ind.	subj. ind.	obj. ind.	subj. ind.	obj. ind.
Past					
1st sg.	/-be/	/0/	/-le/	?	?

---

[85] Whether a formation without personal marker occurs is rather uncertain, as nulduali is probably a past tense form rather than a present. It occurs in titulary and seems to mean "he rules them" (119:8; the passage is cited in 6.10).

	If subject indicator is final	If direct object indicator is final		If indirect object indicator is final	
	subj. ind.	subj. ind.	obj. ind.	subj. ind.	obj. ind.
3rd sg.	/-ne/	/-xa-/	/-le/	Ø	/-me/
3rd pl.	/-tu/	/-tu-/	/-le/	/-tu-/	/-me/
		or /-xa-/	/-le/	Ø	/-me/
Present					
3rd sg.	/-lexe/	/-lexa-/	/-le/	?	?

6.10. On the so-called passival character of the verb.--There are frequent references in the literature to the "passive" character of the Urartian verb.[86] Similar interpretations, based on similar data, have been put forth with regard to Hurrian, the Caucasian languages, and a number of others.[87] Most of these theories are stated in rather obscure language and do not adequately define the meaning of the terms used.

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[86] L-H, *Ber.*, 633 n. 2; *ZDMG* LVIII, 850 n. 1; Fr., *Cauc.* VII, 57, 74; *Einf.*, 19, 24, 34 (cf. Deeters, *ZDMG* XL, 463-65); Speiser, *JAOS* LIX, 289-324 *passim*; Ts., *RA* XLVIII, 192-96 (retracting his earlier disagreement). Dissenting opinions by G. Tsereteli, *UPMG* 5-8 = 15-18 = 25-28; Ts., *RA* XXXI, 34-37; XXXIII, 96, 129-32. Cf. also Meshchaninov, *Ĭazyk* II, 288-91 and notes.

[87] Fullest statement of the theory is that for Hurrian: E. A. Speiser, "Studies in Hurrian Grammar," *JAOS* LIX (1939) 289-324; *IH*, 206-209. Fr. agrees but considers that Speiser has carried the theory to extremes: *Or.* XII, 223 n. 2. For the Caucasian languages: Hugo Schuchardt, *Über den passiven Charakter des Transitivs in den kaukasischen Sprachen* (Sitzungsberichte der Wiener Akademie der Wissenschaften, CXXXIII, 1 [1896]). Among other languages, such an interpretation has been proposed for Elamite: George G. Cameron, *Persepolis Treasury Tablets* (Chicago, 1948), 18 n. 116; Speiser, *Language* XXXII (1956) 554-55. It has also been suggested for early Indo-European: C. C. Uhlenbeck, "Agens und Patiens ins Kasussystem der indogermanischen Sprachen," *Indogermanische Forschungen* XII (1901) 170-71; H. Schuchardt, "Über den aktivischen und passivischen Charakter des Transitivs," *ibid.* XVIII (1905-1906) 528-31; cf. F. N. Finck, "Der angeblich passivische Charakter des transitiven Verbs," *KZ* XLI (1907) 209-282. References are made to a number of languages in this connection by W. K. Matthews, "The ergative construction in modern Indo-Aryan," *Lingua* III (1952-53) 391-406. Such an analysis of the Hurrian verb has been criticized by A. Goetze, "The

Any term referring to a linguistic feature can have meaning only within the framework of a particular language system. A term applicable to one linguistic structure cannot be arbitrarily applied to another structure without misrepresenting, to a greater or less degree, the structure of the language being studied. Nevertheless, much of the literature dealing with the question of passival verbal structure treats various languages together. Therefore, it seems advisable to make some general remarks about the considerations involved before examining the structure of the Urartian verb in particular.[88]

Hurrian verbal system," *Language* XVI (1940) 125-40. For Georgian it has been criticized *particularly* by Hans Vogt, "Un aspect du probleme actif-passiv dans le verbe," *Grammaire et Psychologie* (Paris, 1950), 128-36; by G. Tsereteli, *loc. cit.*; and by R. P. Blake in a review of IH, *JAOS* LXVII (1947) 227-29. Doubts are expressed with respect to several Caucasian languages by A. Dirr, *Einführung in das Studium der kaukasischen Sprachen* (1928), 62-65, 71-74, 75-76, *et p.*

[88] General considerations relevant to the problem being discussed appear in many works, including: B. Bloch and G. L. Trager, *Outline of Linguistic Analysis* (Special Publications of the Linguistic Society of America, 1942), 60-61, 68-70; Leonard Bloomfield, *Language* (New York, 1933) 264-80, esp. 268; C. C. Fries, *The Structure of English* (New York, 1952), 54-74, 173-201; Otto Jespersen, *The Philosophy of Grammar* (New York, 1948), 164-72; A. Meillet, "Sur les caractères du verbe," *Revue Philosophique* LXXXIX (1920) 1-22, reprinted in his *Linguistique historique et linguistique générale* I (Collection linguistique publiée par la Société de Linguistique de Paris, VIII [1921]), 175-98, esp. 180-181, 193-198; Edward Sapir, *Language* (New York, 1921), 94-126, esp. 115 n. 26, 120-123; Margaret Schlauch, *The Gift of Language* (New York, 1955), 133-69, esp. 141-61; H. Velten, "On the origin of the categories of voice and aspect," *Language* VII (1931) 229-41; J. Vendryes, *Language* (London, 1925), 90-114, esp. 102-108; B. L. Whorf, "Grammatical categories," *Language* XXI (1945) 1-11, reprinted in his *Language, Thought and Reality* (1956), 87-101. Note also the judicious remarks of Henri Maspero regarding the somewhat similar verbal structure of the Tibeto-Birman languages in A. Meillet and Marcel Cohen (Eds.), *Les Langues du Monde* (Paris, 1952), 539-42.

As the term is generally used in reference to Indo-European (IE) languages, an active construction is one in which the grammatical subject is identical with the agent causing the action expressed by the verb (agens); in a passive construction the grammatical subject is the goal affected by the action (patiens). The passive voice is a structural device for inverting the order of ideas or changing the emphasis of the corresponding active. The IE languages are atypical in making extensive use of the passive construction where the agent is known or where more parties than one are involved (giving rise to such unreal passive constructions as "She was given the book"; compare "He gave her the book," "The book was given to her."). If a language has only one "voice," that is, if it is neutral with respect to active or passive, the use of the term "passive" is not justified. In linguistic description, as in any other type of classification, for a class to be subdivided there must be at least two parallel subdivisions, contrasting in content. If there is a "passive," there must also be an "active," or something of the sort, for the terms to have any meaning as categories. In any case, they are subcategories within the verbal system, and "passive" applied to the entire system has no real meaning.[89]

In an inflected IE language, the system of agreement relates the verb only to the grammatical subject of that verb, and the forms of the subject and object are dictated by their relation to the verb. The grammatical subject of the verb is unequivocally marked as such by the nominative case ending and the grammatical object by the accusative ending. To expect that such structure will be present in non-IE languages, or to interpret these categories as universal or logical ones, would be rather naive. To determine whether a construction is active or passive it is first necessary to identify the "grammatical subject" and the "real subject." The latter is, of course, discovered by examination of the sense of the sentence, while the former must be discovered by analysis of the linguistic structure. If the linguistic structure does not clearly mark the category of grammatical subject, then the terms "active" and "passive" have no meaning for the language being studied.

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[89] Therefore V. Pisani wishes to rename the structure, though retaining the theory in essence, as applied to Etruscan: Archivio Glottologico Italiano XXXIV (1942) 116-17.

If the grammatical subject and the real subject are identical, that is, if the construction is active, in a language showing agreement of verb and subject any change in the real subject will be reflected in a change in the form of the verb. Conversely, if the verb shows agreement with the real object the construction is passive. Thus, in English, the passive sentences

The houses are built by me.

The houses are built by him.

show no change in the verbal form with the change in agent, while the corresponding active sentences

I build the houses.

He builds the houses.

show a change in the verbal forms with change in subject, the real and grammatical subjects being identical.[90]

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[90] On the English passive, see, for example, Paul Roberts, Understanding Grammar (New York, 1954), 126-31, 272-73.

The upholders of the passive theory seem generally not to be really analyzing the language under study itself. Rather they are either simply comparing the structure with that of an IE language, or else they are referring to the origin of the verbal structure rather than to its actuality. The literal translations and explanations offered for the examples they quote make it apparent that the authors are treating the case forms and verbal forms of the language under study as though they corresponded almost exactly to forms found in IE languages, and they come to the conclusion that the structure of the verb in these languages is most nearly analogous to that of the IE passive. This view may have some truth in it, but it really offers no concept useful in understanding the verbal structure of the language being studied. But they go even further and make the unwarranted statement that the structure is passive. This seems to imply belief in the existence of some sort of universal or ideal language system having active and passive from which the languages in question have chosen to use the passive construction to the exclusion of the active. Any valid linguistic category must be based on contrasting structures within the language system, not on supposed universal or logical categories, since linguistic categories and logical ones are rarely parallel; in any case there is no ground for equating the categories of IE with logical ones. Each language has its own way of segmenting reality and of expressing the segments in linguistic symbols. Furthermore, the categories of a language system change over the course of time. Therefore the origin of a verbal structure is not a reliable guide to its structure in the language as it is attested in the period under study. Some of the arguments about the "passive" nature of the

Urartian verb seem to refer more to a hypothetical proto-Urartian than to the language of the Urartian inscriptions.[91]

The fullest statement of the theory for Urartian is that of Friedrich, who cites as examples (underscoring not in the original):[92]

ini pili agu*bi*	This canal was brought *by me*.
ini pili agu*ni*	This canal was brought *by him*.
^{m}*menuaše* ini pili agu*ni*	This canal was brought *by Menua*.
^{m}*menuaše* inili KÁ.MEŠ šidištua*li*	These gates were built *by Menua*.[93]
inili KÁ-li šidištua*li* ini É.GAL šidištu*ni*	These gates were built, this fortress was built *by him*.[93]

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[91] This is particularly clear in the case of Ts., *RA* XLVIII, 192-96. He argues at length for a passive interpretation of the Urartian verb. Yet he admits (p. 194) to supposing that the Urartians *felt* their verbal forms to be active. If this is so, then they *are* active, whatever their origin may have been, since the relevant description of a language is identical with the subconscious structural feeling of the speakers of a language as expressed in their usage (cf. Bloomfield, *Language*, 263; K. L. Pike, *Phonemics* (Ann Arbor, 1947) 64b, 160b; E. A. Nida, *Morphology* (University of Michigan Publications, Linguistics, II, 2d ed., 1949), 56-57, 86-87; K. L. Pike, *Language* I (Glendale, Calif., 1954), 21-27). The whole argument of Ts. in this matter, as well as much of his analysis in general, must be rejected, since it corresponds neither to sound method nor to common sense. If two forms differ in meaning and have an overt formal difference, we can only operate on the assumption that the two differences are related (cf. Nida, *op. cit.*, 54; *Language* XXIV (1948) 415, 427-30). On the contrary, Ts. frequently rejects the overt formal difference as irrelevant and assigns the difference in meaning to a covert feature which has disappeared in most of the attested forms. It seems inconceivable that any language could function practically on such a basis. Many of his other conclusions are based on his interpretations of passages which are, to say the least, unclear. The article by Matthews referred to above (n. 87) also fails to distinguish between the origin of the forms and their function in the present language system.

[92] The examples cited appear in *Cauc.* VII, 74; *Einf.*, 19, 24.

[93] Fr. interprets the ending of the verb as *-ali* (*Einf.*, 7, 74). This ending includes the suffix *-li* referring to the plurality of the object (see 6.9).

^{m}išpuiniše ^{m}sardurihiniše ini É-e zaduni	This temple was built by IS.

In other words, the agent noun is considered to be marked by the suffix -še and the verbal inflections are -bi 'by me,' -ni 'by him,' -ali 'by him' if the object is plural.

However, it will be noted that the Urartian sentences cited show a change in the form of the verb with a change in real subject, that is, they show the mark of an active construction:

ini pili agubi	I brought this canal.
ini pili aguni	He brought this canal.

This fact can be forced into a passive theory only by supposing that the endings are instrumental suffixes rather than subject ones. That interpretation does not seem likely and has few, if any, clear parallels in better-known languages. Such an explanation seems even more forced with forms having plural objects, such as

nulduli ^{KUR}luluinil[i] (122:27)	I ruled Luluini.
^{KUR}biainili nulduali (119:8)	He ruled Biaina.[94]

Here again the verb takes a different form with the change in real subject; the objects are structurally equivalent, and in a true passive construction there would be no change in the verbal form. Compare the English sentences

They are ruled by me.	I rule them.
They are ruled by him.	He rules them.

These data can be explained as agreeing with the passive theory only by denying that the Urartian verbal endings relate to the subject at all, and Friedrich's whole system, like the analysis used in this paper, is built up on the supposition that the verbal endings refer to the subject, which is certainly the most reasonable assumption.[95] Under the passive theory it seems almost impossible to account for such forms as

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[94] Other examples of the same contrast, though in less clearly parallel contexts are: šatuli (124 rev. 2) 'I seized them' : šatuali (104:24) 'he seized them'; šidištuli (118:15) 'I built them' : šidištuali (59a:4) 'he built them.'

harharšituli	they destroyed them
kuletuni	they destroyed him[96]

These forms are clearly inflected to agree with the real subject, "they," and also have suffixes indicating object:

harharš- (cf. harharšubi) + -itu- 'they' + -li 'them' (obj.)

kul- + -etu- 'they' + -ni 'him' (obj.)[97]

There seems to be no reasonable analysis consistent with the other verbal forms of Urartian which can interpret -*etu*- as an agent suffix and -*li* or -*ni* as a suffix indicating the grammatical subject.

Friedrich (*Einf*. 19) sets forth another argument, namely that the "accusative object" has the same form as the intransitive subject, often ending in -*ni*, sometimes without any suffix, while the transitive subject does have a particular case suffix (-*še*). The argument implies that Urartian, like IE, should have a particular case marking all grammatical subjects, or at least that subjects should be marked differently from objects. But in Urartian there is no case corresponding to the nominative or accusative of IE; the general case marks neither object nor intransitive subject inherently. Its force as indicating an object arises only when it stands in contrast to the marked transitive subject. When only a subject is present, that is, with an intransitive verb, no such contrast can exist, and the general case functions as subject, without being distinctively marked as such. It is essentially a neutral case, which can be employed wherever some other case is not required.[98] The -*še* case really indicates the initiator of an action affecting another noun (the object), while the general case indicates that no other noun is directly affected by the action. These cases indicate relation between nouns rather than of noun to verb.[99]

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[95] That is, when an overt formal difference distinguishes two forms which also differ in meaning, we can only assume that the difference in meaning is conveyed by the formal difference. Cf. n. 91 above.

[96] In the actual occurrence the force is precative, "may they destroy him," but the form is past declarative. Similarly difficult to explain under the passive theory is the present form with plural object suffix, *Šiuliali* 'he removes them.'

[97] Other forms from this base do not occur, but the form of the base can hardly be doubted on the basis of the structure of the Urartian verb, cf. e.g. *kuţetu*, base *kuţ*- (cf. *kuţubi*). The -*ni* itself does not necessarily convey the meaning 'him'; it may be some sort of terminal element used where there is no expressed pronominal object, the third person object being conveyed rather by the absence of an object marker (cf. 7.2.2).

Friedrich (*Einf*. 19) states as an argument for the passive character of the Urartian verb that the verb takes a different form with a plural object than with a singular one:

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[98] The same is true of the similar cases, so-called "nominatives," of many Caucasian languages: Louis Hjelmslev, *La catégorie des cas* (Acta Jutlandica VII, 1 [1935]; IX, 2 [1937]), I, 150, 176; II, 21, 47, 60. A similar situation probably prevailed in original IE; cf. J. Gonda, "Defining the Nominative," *Lingua* V (1955-56) 288-97.

[99] *aluše* 'whoever' is also an ergative (transitive subject) form. In most of the phrases in which it appears (e.g. *aluše* *ini* DUB-*te* *tulie* 'whoever destroys this inscription') interpretation as agentive is very cumbersome. The rendering would have to be 'he by whom . . . .' Cf. Ts., *RA* XXXIII, 96.

šidištuni	He built (it).
šidištuali	He built them.

He interprets the sentence ^{m}*menuaše* *inili* KÁ.MEŠ *šidištuali* as "these gates were built by Menua." His analysis of the ending of *šidištuali* (*Einf*., 7, 34; cf. *Cauc*. VII, 72) is not entirely clear. He refers to the forms in -*li* as showing agreement with the object.[100] Apparently he considers -*ali* an object suffix, a redundant reference to the plural object—most of his translations treat it so. But it is not possible to treat the ending as an inflection indicating concord of verb and object comparable to that between noun and adjective (e.g. ^{d}*haldinili* KÁ-*li* 'the Haldi gates'). For one thing, the addition of -(*a*)*li* to the verb is not consistently carried out (cf. É.GAL.MEŠ *ištini* *šidištubi* 'I built fortresses there' (103 II 21)). For another thing, there is no trace of such agreement in the singular. That the ending is a pronoun seems quite clear from such an example as

> ^{KUR}aništergae ^{m}qubzanini ^{m}ultuzaini KUR-nie *tequali* ^{m}argišti kai (80 I 18) 'The land(s) of A., Q., (and) U.—he brought them before Argishti.'

Here the verb has the ending -(*a*)*li* referring to a compound object, but no component of the object has that ending. Friedrich considers that the -*ni* of such a form as *šidištuni* is a personal ending, not an object suffix (*Einf*., 21; *Cauc*. VII, 61-62; VIII, 142-43). Therefore, it is not quite clear what forms he is comparing when he refers to the form of the verb with a plural object as being different from that with a singular object. If -*ali* is an object suffix it is not really part of the basic verbal form (e.g. *šidištu-* would be the verbal component of *šidištuali*). A form with this ending cannot be legitimately compared as a whole to a verbal form without object suffix. If we are comparing *šidištuni* and *šidištu-*, we merely recognize the latter as a special combining form before the suffix, which, of course, would prove nothing at all. If the -*ni* of *šidištuni* is considered to be merely a terminal element, not itself conveying the sense of third person singular subject, then the basic verbal forms would be identical: *šidištu-*. The forms cited rather support the view that -*ni* itself is not the subject marker. In any case, Friedrich's argument would have weight only if there were no agreement with the real subject, and Friedrich himself cites the forms *šidištuli* 'I built them,' and *šidištuali* 'he built them,' which clearly show agreement with the subject--the characteristic of an active construction.[101] The forms cited favor interpreting the suffix as -*li* rather than -*ali*. By this analysis the stem of *šidištuali* would be *šidištua-*, while the stem of *šidištuni* would be *šidištu-*. The difference in stem form cannot be interpreted as showing agreement with an object, however, since a first person verbal form before a plural object has stem form *šidištu-*. The -*a*- of *šidištua-* evidently differentiates the person of the subject rather than referring to the object. Evidently even when an object is present the agreement of the verb is with the subject. This fact is shown even more clearly by such forms as *harharšituli* 'they destroyed them' and *kuletuni* 'they destroyed him,' which add an object suffix to a full personal form of the verb.

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[100] The inflection of verbal forms to agree with the object is, of course, not uncommon. On this somewhat unhappily named "objective conjugation" see Louis Hjelmslev, *Principes de Grammaire Générale* (Det Kgl. Danske Videnskabernes Selskab, Historisk-filologiske Meddelelser XVI, 1 [1928]), 144-46 and references there cited. Such agreement would prove nothing at all about the passive nature of the verb except to one who expected the IE type of construction to be universal.

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[101] Cf. Meshchaninov, *Dva i͡azyka*, esp. 362-63.

A further argument is suggested but not developed by Friedrich (*Einf.*, 19), and an argument for Hurrian upon similar grounds is set forth by Speiser.[102] This rests upon observation of the fact that a transitive verb with a plural object ends in -*li* and that the third person plural of the intransitive verb also ends in -*li*:

šidištua*li* (base: šidišt-)	He built *them*.[103]
harharšitu*li* (base: harharš-)	They destroyed *them*.
ušta*li* (base ušt-)	*They* went.

Speiser concludes: "since it [the third person plural intransitive subject marker] is the same suffix that marks the logical plural object of transitive verbs, the simplest solution is to regard the transitive verb as passive." However, there is no reason why the categories of verbal endings and pronominal object suffixes should not have one or more elements of identical form (they can hardly be called "the same"). The element -*li* seems to be a general plural marker, also used with nouns and adjectives, so its occurrence in both verbal inflections and pronominal suffixes is not at all surprising.[104] If the transitive verb really were passive, then on the pattern of the plural forms above, corresponding to the third person singular intransitive form *uštabi* 'he/it went' there should be a transitive form

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[102] *JAOS* LIX, 293-94.

[103] For an example from a base not ending in -*t*, cf. *tequali* 'he brought them.'

[104] The elements common to nominal and verbal endings, including -*li*, were the basis of the analysis by Ts. referred to in n. 91 above.

*_ŠidiŠtuabi_ 'he built it.' The form which actually occurs is, of course, _ŠidiŠtuni_, clearly showing that the intransitive personal endings and object suffixes are unrelated sets.[105] In any case, the forms _ŠidiŠtuali_ and _harharŠituli_ show inflection for subject. *_harharŠitu_ would mean 'they destroyed (it),' just as _haitu_ (base _ha_-) means 'they captured (it).'[106]

In conclusion, it seems apparent that the differences between the Urartian and IE verbal systems are not due to any passive character of the Urartian verb but to the difference in the case systems of the two language types. The relevant Urartian cases do not indicate specifically and exclusively "subject" and "object," that is, grammatical relationship to the verb, but rather they indicate primarily relation to another noun. Furthermore, there is no evidence for a contrasting "active" construction, which would have to exist for the passive concept to have any relevance. On the contrary, there are forms in Urartian (ending in -_ri_) which seem to be passive, contrasting with the active nature of the forms discussed above.

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[105] Ts. (_RA_ XXXI, 36; XXXIII, 130-31) puts forward an argument based on the occurrence of -_li_ also as the ending of the 3rd sg. present transitive. However, this ending occurs only very rarely written simply -_li_, the usual form is -_li-e_, and -_li-i-e_ also occurs. This ending is therefore to be analyzed as /-_lexe_/, not as /-_le_/. Note the striking similarity in form to Hurrian -_lewa_, which offers additional support for this analysis. That the forms are analogous was pointed out already by Speiser, _JAOS_ LIX, 316 n. 76, cf. _IH_ 156-58 (see n. 15 above). The general sense of the argument by Ts. remains, that if ^{m}_menuaŠe_ is agentive, as the passive theory postulates, it is rather awkward to find a real subject for the phrase ^{m}_menuaŠe alie_ 'Menua says,' and the expression of the real subject would have to be different from its expression in the past tense.

[106] The base is established by the forms _harharŠubi_ 'I destroyed' and _harharŠulie_ 'he destroys.'

Almost any linguistic system, especially one for which only limited data are available, can be described in more than one way, no one of which is necessarily more "correct" than another. It is perhaps theoretically possibly to describe Urartian in such a manner that the verbal structure will be "passive," that is, analogous in structure to an IE passive. The description of the system of verbal inflections proposed by Friedrich is, however, not consonant with his theory of the passival nature of the verb. Any consistent description built up on this basis would be much more complex than an analysis based on interpretation of the primary verb forms as active, and much less reasonable. A theory of passivity of the verb contributes nothing to our understanding of the verbal system of Urartian and actually misrepresents the basic structure. Therefore the primary Urartian verbal forms (those discussed in 6.4 and 6.5) will be interpreted in this paper as basically active in structure.

CHAPTER VII

MORPHOLOGY: NOUN

7.1. Vowel classes.--The Urartian nominal form consists of base + stem vowel + case ending. The stem vowel for the majority of nouns is /*e*/; a fair number have /*a*/ and a few have /*u*/. Most nouns belong to a single vowel class, a few show variation. It seems likely that there was a tendency toward using /*e*/ for all nouns; the *u*-class, being uncommon, would be particularly subject to such levelling, giving rise to such variant spellings as:

e-gu-ru-hu :: e-gu-ru-hí
$^{\text{É}}$ú-ri-iš-hu :: $^{(\text{É})}$ú-ri-iš-hi

In the plural, except for the general case, the stem vowel is regularly /*a*/.

7.2. Stem formation.--There are a number of stem formatives. Many of these sufformatives alter the meaning of the stem in a way which can be recognized; presumably all these formatives once had recognizable force. These prolonged stems frequently give the appearance of simple stem + case ending.

7.2.1. Stem formative -*še*.--Compare, for example, *^{d}haldi-še* and *gunu-še*. The first is a simple stem with ergative case ending -*še*. The second is an object (i.e. is in general case). The -*še* in the second word is interpreted as a stem formative because further suffixes may be added to it (e.g. *gunušinini*), while the ergative -*še* can be followed only by an object suffix. The form *gunuše* therefore is to be interpreted as made up of stem *gunuše* + case ending *Ø*. In some cases such evidence is lacking and the choice of analysis must then be made on the basis of convenience, simplicity, and consistency, rather than clear evidence. Most of the stems ending in -*še* seem to have the force of abstract nouns.

7.2.2. Forms in -*ni*.--The interpretation of forms in -*ni* is particularly difficult. There is no question that -*ni* is used as a stem formative (compare, for example, ^{d}*haldiniše* with ^{d}*haldiše*). It has, however, also been considered a case suffix, marking (1) intransitive subject, (2) object, and (3) ablative (including instrumental).[1]

7.2.2.1. Intransitive subject.--There are at least two examples of the same root appearing as intransitive subject with and without -*ni*, in similar contexts:

qi-i-ú-ra-a-ni-e qu-ul-di-i-ni-e ma-a-ni (81 rev. 18)

'the earth was barren(?)'

[i]š-ti-ni *qi-ú-ra-a* qu-ul-di-[ni ma-nu] (97:6)

'the earth there was barren(?)'

uš-ta-bi ^{m}*me-nu-a-ni* ^{m}iš-pu-ú-i-ni-e-hi (21:5-6)

'MI went forth'

⌜nu⌝-na-a-⌜li⌝ ^{m}⌜iš⌝-pu-ú-i-⌜ni⌝ [^{m}sa]r$_5$-duri-e-hí ^{m}*me-nu-a*

^{m}⌜iš⌝-pu-ú-i-n[i-e-hí] (9:26-27) 'IS, MI came'

There are, furthermore, a number of examples of intransitive subjects lacking the -*ni* element, though they seem to be very rare with expressed verbs other than forms of *man*-.[2]

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[1] On its use as intransitive subject see Fr., *Cauc*. VII, 58-61; *Einf*., 11; Ts., *RA* XXXII, 36; Gamkrelidze, *VDI* 1956,4, 141; as object: Fr., *Einf*., 10-11; Ts., *RA* XXXII, 39; Gamkrelidze, *VDI* 1956,4, 141; as ablative: Fr., *Einf*., 13; Ts., *RA* XXXII, 39-40; Gamkrelidze, *VDI* 1956,4, 141. Fr. groups (1) and (2) under the caption "*ni* case."

nu-na-a-be iš-t[i]-ni-[ni] . . . [20] *a-ti-bi* 5 LIM UDU.M[EŠ]

(7:20-24) 'there came from there . . . [20]5,000 sheep'

^{m}me-nu-a-i *pi-i-li* ti-ni (30e:3)

'"Canal of Menua" (is its) name'

It is also noteworthy that nouns in -*hi(ni)* (including those used as substantives, e.g, land names) never have the ending -*ni* when used as intransitive subjects.[3] This is obvious in the royal titulary, e.g.

^{m}sar$_5$-du-ri-ni ^{m}*ar-giš-ti-hi* BUZÚR *DAN-NU* (105:7-8)[4]

'SA, great king'

7.2.2.2. Objects.--There are many examples of objects not bearing the -*ni* suffix, including:

^{m}me-nu-a-še ^{m}iš-pu-ú-i-ni-hi-ni-še i-ni ^{NA_4}*pu-lu-si* ku-gu-ú-ni

(13:2-3) 'MI dedicated this stele'

^{LÚ}*ir-di* iš-ti-i-ni a-šú-ú-bi (103 III 39-40)

'I placed a governor(?) there'

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[2] The force of -*ni* on the form ^{KUR}*ebaniukani* (80 III 7, 31) is not clear. It is somewhat uncertain whether *uldi* is object of an active verb or subject of a passive form (though the latter seems more likely) in

a-še ^{GIŠ}ul-di te-šú-li-e (41:24) 'when the vineyard is harvested(?)'

[3] Fr., *ZA* VI, 264-65. Cf. Gamkrelidze, *VDI* 1956,4, 138 n. 1.

[4] The nominal forms used in the titulary are those of the intransitive subject. An example with expressed verb is

uš-ta-bi ^{m}sar$_5$-du-ri-*ni* ^{m}ar-giš-ti-e-hi (104:5) 'SA went forth'

The apparent exception to the rule, the ^{m}*me-nu-a-hi-ni* shown by Barnett and Watson, *Iraq* XIV, 136 n. 1, is an error. M 144 shows the correct form, without -*ni*.

i-e-še i-ni $^{\text{GIŠ}}$*ul-di-e* te-ru-bi (126:10-11)

'I established this vineyard'

In at least one case the same root appears as object in similar contexts with and without -*ni*:

pa-ru-bi $^{\text{LÚ.GEME}}$*lu-tú-ni* $^{\text{KUR}}$lu-lu-i-na-ni KUR-ni-i-⌈ni⌉

(128:3) 'I carried off women of/from the barbarian(?) land'

ʔa-še $^{\text{GEME}}$*lu-tú* pa-ru-bi $^{\text{KUR}}$bi-a-i-na-di (103 I 39:40)

'I carried off men, women to Biaina'

It should be noted that nouns in -*hi(ni)* when used as objects rarely, if ever, have the final -*ni*.[5]

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[5] The discussion of forms in -*hi(ni)* by Fr. (*ZA* VI, 264-70) is based on the assumption that these forms are adjectives or adjectives used as nouns (he never specifies the criteria by which he defines the class of adjectives). Certainly these forms can be used as substantives, e.g.

uštabi . . . ^{m}diauehiniedi KUR taraiuedi (23:2)
'He went to D., mighty(?) land.'

But in a construction like

uštadi ^{m}eriahinine KUR-niedi (80 V 48)
'I went to the land of E.'

it is hard to see how ^{m}*eriahinine* can be anything but a genitive noun (contrast Fr., *ZA* VI, 272-73; yet he accepts as genitive some forms of much the same type, *Cauc*. VIII, 116-17). Fr. cites such an expression as

haubi ^{m}eriahi KUR-nie (80 V 48) 'I conquered the land of E.'

as an example of the accusative of ^{m}*eriahi*. It is very doubtful that such examples are valid. ^{m}*eriahi* can equally well be a genitive noun, as is clearly the case with many names in equivalent constructions, e.g.

karubi . . . ^{m}ešumai KUR-ni ^{m}kamniui $^{\text{KUR}}$ebani (103 V 22-23)
'I fought . . . the land of E., the land of K.'

(Fr., *Cauc*. VIII, 115-16 recognized proper names of this latter type as genitive.) There is no example of a land name followed by the word for "land" in which the proper name is certainly an adjective (syntactically). Therefore, most of the evidence adduced by Fr. in his analysis carries no weight. There is no clear example of the objective use of this formation. However, when used as intransitive subject this form regularly lacks -*ni* and the form used as object should be identical.

7.2.2.3. Instrumental.--Instrument is expressed by a form ending in -*ni*. There seems to be no case of interchange with a form without -*ni*. However, since the -*ni* has been shown to be not essential to the other cases, it seems most likely that the same is true here.[6]

7.2.2.4. Genitive.--Forms in -*ni(-i/e)* with apparent genitival force occur frequently, in contexts similar to those in which forms without -*ni* appear:[7]

ha-ú-bi ^{m}ar-qu-qi-*ni* KUR-ni-e (105:4)

'I conquered the land of A.'

ha-ú-bi ^{m}e-ri-a-h*i* KUR-ni (88:3)

'I conquered the land of E.'

It is tempting to cite as examples of genitives with and without -*ni* the following phrases:

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[6] Fr. (*Einf.*, 11 n. 1; cf. *ZA* VI, 274-76) contrasts the ablative -*ni* and -*ni* used as marker of the object on the grounds that the ablative -*ni* also occurs on plural forms, the accusative -*ni* only on singular ones. He cites as an example of the ablative plural ^{d}*haldinani* KÁ. This is correct as far as the sense is concerned, but it is not clear that ^{d}*haldinani* is formally plural. The other examples he cites are not ablative according to the analysis used in this paper, but postpositional uses before *edini*. In any case there are certainly objects plural in sense ending in -*ni* (e.g. $^{LÚ.GEMÉ}$*lutuni* 128:3, ^{GU_4}*pahini* 103 VI 21, etc.). It seems apparent that the ablative-instrumental is not distinct from other functions of the general case in form. *kuruni* seems to be generally instrumental, but in 7:13, 43, rev. 14, 15 it is evidently intransitive subject.

[7] Fr.'s treatment of the genitive (esp. *Cauc.* VIII, 114-18) admits some forms in -*ni* as genitive, others he considers to be adjectives (e.g. *ZA* VI, 272-73; cf. *Cauc.* VIII, 127-31), without making clear why the two groups are to be distinguished. In *Cauc.* VIII, 128-30 (cf. *ArO* III, 260) he interprets ^{d}*haldini* in such phrases as ^{d}*haldinini ušmašini* 'through the strength of Haldi,' ^{d}*haldinini alsuišini* 'through the greatness of Haldi,' as ablative or instrumental adjectives. This is possible, but not really necessary if the existence of a genitive in -*ni* is admitted (cf. G, *JAOS* LV, 298-99). Cf. n. 17, 70 below.

^{d}hal-di-ni ^{GIŠ}šú-ri-*ni* ku-ru-ni (1 occ. only, 103 I 29)

^{d}hal-di-ni ^{GIŠ}šú-ri ku-ru-ni (25 occ., e.g. 103 II 44-45)[8]

'through the strength of the weapon of Haldi'[9]

^{d}hal-di-*ni* ku-ru-ni (7 occ., e.g. 6:7)[10]

^{d}hal-di ku-ru-ni (26 occ., e.g. 21:4)

'through the strength of Haldi'

However, this interpretation of these phrases is made somewhat doubtful by the phrase

^{m}me-nu-a ku-ru-ni hu-ra-di-na-a

which occurs only in 6:14, 6a:12, 7:13, ⌜7 rev. 15⌝, [7:43]. Here *^{m}me-nu-a* is not genitive in form, but general case or dative, while

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[8] Note that *^{d}haldi* (without -*ni*) never occurs in this phrase. The count of occurrences given in this group of examples includes various spelling variants not affecting the contrast of -*ni* and lack of -*ni*.

[9] The translation 'weapon' for $^{(GIŠ)}$*šuri* (D'i͡akonov, *EV* VI, 107-108; cf. Kapant͡si͡an, *ArO* XVII, 1, 366-71; Fr., *Einf*., 46) seems somewhat more likely than 'chariot' (K, *AV* IX, 33-35), though either is possible in the contexts. The logogram GIŠ.GIGIR(.MEŠ) 'chariot(s)' occurs seven times in the Urartian texts; GIŠ.TUKUL 'weapon' is not attested at all. One possible word for 'weapon,' *urišhi*, is known (cf. Fr., *AfO* XVII, 367-68), but it is not very common, and another term for 'weapon' (or some variety of weapon) would not be unexpected. $^{(GIŠ)}$*šuri* in its various forms occurs some 65 times. If it really means 'chariot,' it is certainly surprising that the logogram is never substituted. Comparison of Urartian expressions with Assyrian ones must be done with caution, but if the meaning 'weapon' is attributed to $^{(GIŠ)}$*šuri*, then the phrase ^{GIŠ}*šurgini* *kaini* *kulupšibi* *šatuni* ^{KUR}*uškiani* ^{KUR}*bamni* (103 V 26-27) would closely parallel a common expression in the Assyrian annals, e.g. Annals of Aššurnaṣirpal II, 81-82 (Y. Le Gac, *Les Inscriptions d'Assur-Naṣir-Aplu III* [Paris, 1907], 73 = E. A. Wallis Budge and L. W. King, *Annals of the Kings of Assyria I* [London, 1902], 324: *nišē ammar ištu pan kakkē* (variant *kakkē-a*) *ipparšidu ana šadāni eliuni* 'the men who had fled from before (my) weapons (and) had climbed into the mountains.' On the intrusion of *g* in ^{GIŠ}*surgini* see n. 15 to 4.10.

[10] All 7 occurrences are grouped in three inscriptions of the same period (K 6, 6a, 7).

^{d}haldini can hardly be dative. This lends some support to translating these phrases as 'the weapon of Haldi is strong,' and 'Haldi is strong' respectively, as has been suggested.[11] The remainder of the context, however, might be a reason for a different construction in the last example.[12] But it seems not unlikely that in ^{m}menua kuruni we have another example of the dative form used for the genitive (see 7.4.4): "through the strength (which is) to Menua."[13]

It should be noted also that nouns in -hi(ni) rarely have the -ni ending in the genitive.[14] However, there are occurrences of such forms apparently used as substantives:

URU BUZÚR-nu-si $^{[m]}$ú-i-ṭè-ru-hi-ni-i (80 I 12)

'royal city of U.'

Most of these forms in -(i)ni used to qualify substantives are analyzed by Friedrich as adjectives (adjektiva der Zugehörigkeit).[15]

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[11] The translations which have been suggested for ^{d}haldi kuruni include: "durch den gewaltigen Haldi" (Ts., NHI, 3, 26, 28, etc.); "Haldi (ist) stark(??)" (Fr., Einf., 46, 49-50, etc.); "Khaldi moguch" (M, VDI 1953,4, 179, etc.); "mit dem Schreckensglanz des Haldi" (K, p. 38, etc.). Those suggested for ^{d}haldinini ^{GIŠ}šuri kuruni include: "mit dem gewaltigen Heere des Haldi" (Ts., NHI, 3, 26); "die dem Haldi eigene Schar(??) (ist) stark(??)" (Fr., Einf., 46, 49-50, etc.); "oruzhie(?) boga Khaldi--moguchee" (M, VDI 1953,4, 179 etc.); "mit dem Schreckensglanz des Wagens des Haldi" (K, p. 38, etc.).

[12] K (p. 38) translates: "es war dem Menua Schreckensmacht an Gefolgen . . . ."

[13] Cf. n. 98.

[14] Fr., ZA VI, 265-67.

[15] Cauc. VIII, 127-31; ZA VI, 272-73 (cf. n. 7 above). The same position is taken by Gamkrelidze, VDI, 1956,4, 139-41, with presentation of considerable data. Doubts are expressed by Ts., RA XXXI, 41. Note the perplexity expressed by Fr. (Cauc. VIII, 117-18) over the form KUR.AŠŠUR-ni-i (102 III 10; cf. similar forms in 16 up. 16, 80 IV 36, 82 obv. 12) which is clearly genitive in sense in its context, and the

The class of adjectives in Urartian can only be defined as made up of those modifiers which agree in case with the substantive modified (e.g. DINGIR.MEŠ-áš-te ^{KUR}bi-a-i-na-áš-te, where biainašte is clearly an adjective. That is, adjectives can be defined as a syntactic or semantic class, but not as a morphological one. Certainly there are (syntactic) adjectives with stems ending in -ni, e.g. ^{d}haldinili šeštili (49b:3). In most constructions of substantive and qualifier, however, the case forms are not sufficiently distinctive to show whether the qualifier is an adjective or a substantive. There are examples of similar constructions where the qualifier can only be a substantive in the genitive or dative, e.g.

uš-ta-di ^{KUR}pu-zu-ni-a-i-ni-e ^{KUR}e-ba-ni-e-di (103 V 11)

'I went to the land of P.'

uš-ta-di ^{m}ar-gu-qi-ni-e KUR-ni-di (103 V 22)

'I went to the land of A.'

The -ni form of the qualifier is the usual one with place names, but forms without -ni, likewise clearly genitive, also occur, such as

te-ru-ni ^{d}hal-di-i URU t[i-ni] (58:7)

'I established "city of Haldi" (as its) name'

GU$_4$ 2 UDU DINGIR.MEŠ ^{d}hal-di-ni URU (10:56)

DINGIR.MEŠ ^{d}hal-di-ni-ni URU-ni GU$_4$ 2 UDU.MEŠ (10:15)

'an ox, 2 sheep for the gods of the city of Haldi'

The last two can be interpreted as adjectival constructions. There is certainly room for suspicion, however, that the presence or absence of

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-ni can hardly be considered part of the root. Perhaps the -ni was added to such foreign words in order to assimilate them to the patterns of Urartian.

-*ni* is dependent upon factors other than a distinction between substantives and adjectives. Note the following labels on pieces of equipment:[16]

^{m}me-nu-a-i ú-ri-iš-hi (40B)
^{m}ar-gi-iš-ti-i ú-ri-iš-hi (101a)
^{m}sar$_{5}$-du-ri-i/e ú-ri-iš-hi/u (112B,C)
^{m}ru-sa-a-i-ni-e $^{(\text{É})}$ú-ri-iš-hu-si(-e) (130B)
^{m}me-nu-a-i-ni(-e)-i ú-ri-iš-hu-si-ni(-e-i) (40A)
^{m}ar-gi-iš-ti-ni ú-ri-iš-hu-si-ni

But contrast 130A:

^{m}ru-sa-a-i ^{m}ar-giš-te-hi-ni-i $^{\text{É}}$ú-ri-[iš-hu-si-ni]

The forms in -*aini* seem to be derived from genitive forms (in -*ai*) of substantives, and to have the force of adjectives. However, it is not certain that all forms in -*aini* are adjectives.

It seems apparent that substantives and adjectives are not formally distinct classes in Urartian. Even the forms in -*hi*(*ni*) are used both as adjectives and as substantives. There seems to be considerable freedom to treat forms originating as genitive substantives syntactically either as substantives or as adjectives. There is no clear evidence that forms without -*ni* of substantival origin can ever be construed as adjectives. Place names as qualifiers seem to be regularly treated as substantives. The treatment of names of persons and deities seems to vary, probably due to features of syntax or stylistic considerations not yet understood.[17]

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[16] On the translation of *urišhi*, *urišhusi*(*ni*) see Fr., *AfO* XVII, 367-68; cf. K, p. 71 n. 8. Possibly a genitive substantive with -*ni* occurs in 121:11:

[te]-ru-bi LÚ.TUR-še ^{URU}ṭu-uš-pa-i-ni [URU]

'I established young men of [the city of] Tushpa.'

-*še* is usually restored at the end, but there is no attested case of the name of Tushpa not followed by URU, and there is not room for both.

In view of the interchangeability of forms with -*ni* and forms without -*ni* in identical contexts, and since such variations have been shown for several nominal functions, there seems no good reason to deny the possibility of interpreting these forms as substantives in the genitive.

7.2.2.5. Forms in -*ni-ni*.--A number of nouns have the ending -*ni-ni*. There are several examples of such forms occurring in contexts identical or very similar to those in which forms in -*ni* occur.[18]

(1) Genitive:

DINGIR.MEŠ ^{d}hal-di-*ni-ni* URU-ni GU$_4$ 2 UDU.MEŠ (10:15)
GU$_4$ 2 UDU DINGIR.MEŠ ^{d}hal-di-*ni* URU (10:56)
'an ox, 2 sheep for the gods of the city of Haldi'

(2) Intransitive subject:[19]

[i-ú i-ú] . . . ⌈^{URU}a⌉r-di-ni-di nu-na-li ^{m}iš]-⌈pu⌉-ú-i-*ni-ni*
^{m}s[ar$_5$-duri-e-hí] . . . ^{m}me-⌈nu⌉-[a-ni ^{m}iš]-⌈pu-ú-i⌉-ni-hí (9:1-5)

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[17] The conclusion of Gamkrelidze, *VDI* 1956,4, 140, that the attribute is a genitive substantive where the determined word is in unmarked case, and the attribute is an adjective where the determined word is in any case except the unmarked case, does not cover the construction of place names, as the examples cited above show. It also does not seem to account for the constructions with *urišhi* and *urišhusi(ni)* listed above.

[18] *gunušini* and *gunušinini* never interchange; the latter is ablative (instrumental), the former probably dative with the case ending defectively written.

[19] For a better preserved example of a form in -*ni-ni* as intransitive subject, cf.

uš-ta-li ^{m}iš-pu-ú-i-*ni-ni* ^{m}sar$_5$-du-ri-e-hi ^{m}me-i-nu-ú-a-ni
^{m}iš-pu-ú-i-ni-e-hi (6:41-44) 'IS, MI went forth'

⌈i-ú⌉ i-ú . . . [$^{\text{URU}}$a]r-di-ni-di ⌈nu⌉-na-a-⌈li⌉ $^{\text{m}}$⌈iš⌉-pu-ú-i-⌈*ni*⌉
[$^{\text{m}}$sa]r$_5$-duri-e-hí $^{\text{m}}$me-nu-a $^{\text{m}}$⌈iš⌉-pu-ú-i-n[i-e-hí] (9:25-27)

'when IS, MI came to Ardini'

(3) Object:

ya-⌈ra-*ni*⌉-*ni* ši-di-iš-t[ú-ú-ni] (9:5)

'they built a chapel(?)'

$^{\text{URU}}$še-be-te-ri-a $^{\text{d}}$hal-di-i ⌈i⌉-a-ra-*n[i]* ⌈ši-di-iš-tú-ni⌉ (25:13-14)

'In Š. he built a chapel(?) for Haldi'

(4) Ablative-instrumental:

a-lu-še gi-e-i i-ku-ka-ni e-si-*ni-ni* ši-ú-li-i-e (80 VIII 11-12)

'whoever removes(?) anything from that place'

a-lu-še e-si-i-n*i-e* su-ú-i-du-li-i-e (56:15-16)

'whoever removes (it) from (its) place'

⌈$^{\text{d}}$⌉hal-di-ni $^{\text{GIŠ}}$šú-ri-[i k]u-ru-*ni-ni* (103 IV 9-10)
$^{\text{d}}$hal-di-ni $^{\text{GIŠ}}$šú-ri ku-ru-*ni* (103 II 44-45)

'through the strength(?) of the weapon of Haldi'[20]

7.2.2.6. Conclusion: -*ni* is a stem formative.—The examples of apparent interchangeability of forms with -*ni* and forms without -*ni* seem to justify the conclusion that the suffix -*ni* on nouns is always a stem formative and never a case marker. It is noteworthy that -*ni* may precede the recognizable case endings but cannot follow them. It would be beyond the scope of this paper to attempt to determine precisely the force of the -*ni* element. It probably has basically emphasizing or particularizing force, perhaps roughly equivalent to a definite article. The use of a form without -*ni* for the oblique cases of forms in -*hi(ni)* suggests that the -*hi* itself may have enough defining force to make the -*ni* superfluous in such contexts. Such an interpretation would also account for the extreme rarity of the -*ni* suffix on nouns qualified by demonstratives or other modifiers implying definiteness, and the fact that it is not used after case endings.[21] Forms ending in -*ni* should be considered to have case ending -*Ø*.

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[20] On the translation see 7.2.2.3.

7.2.3. Other simple stem formatives.

(1) Similarly to /*ne*/ and /*še*/, /*he*/ is also used as a stem formative. The only suffix attested after the /*he*/ element is /*ne*/ + case ending; this is sufficient to establish that /*he*/ is a stem formative rather than a case ending.[22] The forms ending in -*hi* should be interpreted as having case ending -*Ø*.

(2) In these formatives, after *h* and *š* only the vowel /*e*/ is attested. The element *n*, however, occurs in the form /*na*/ and possibly /*nu*/, in addition to the much more common /*ne*/.

(3) The element -*a-i-ni* must also be included among stem formatives. This is presumably the ending of the genitive form of *a*-stem substantives with added -*ni*. The resulting form is usually treated syntactically as an adjective rather than as a substantive. There is no evidence for the use of forms in -*a-i* (without the final -*ni*).

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[21] D'iakonov has apparently arrived at a very similar conclusion with regard to -*ni*. His list of case endings (*Comparative Survey*, 4) includes no -*ni* ending. He also gives (*ibid*., 4-5) a summary of the uses of the ending -*ni*. The Urartian evidence seems to suggest for -*ni* an interpretation much like that put forth for Hurrian -*ne* by Blake (*JAOS* LXVII [1947] 229): "-*ne* is a particle, weakly demonstrative in nature, not properly deictic or anaphoric, which is on its way to becoming a definite article but has not yet finished its journey." It is probably related in origin to the demonstrative pronoun *ini* (Gamkrelidze, *VDI* 1956,4, 138).

[22] Cf. n. 5 above.

otherwise than as genitive substantives. The following forms are of stems in -*aini*:

me-li-a-i-ni
^{m}me-nu-a-i-ni(-e/i), ^{m}me-nu-a-i-ni-e-i
^{m}ru-sa(-a)-i-ni-e[23]
$^{\text{[URU d]}}$ṭe-i-še-ba-i-ni
$^{\text{URU}}$ṭu-uš-pa-i-ni (?)[24]

A form of this type seems to be, to some extent, replaceable by a genitive substantive:

^{m}ru-sa-a-i-ni-e $^{\text{É}}$ú-ri-iš-hu-si (130B)
^{m}ru-sa-a-i ^{m}ar-giš-te-hi-ni-i $^{\text{É}}$ú-ri-[iš-hu-si-ni] (130A)
'the storehouse(?) of R(A)'

The genitive of an *e*-stem substantive with added -*ni* can presumably also serve as an adjective, but such forms have the appearance of being formed from the simple stem, since the genitive of *e*-stems is not distinctive. Forms of this type were discussed in 7.2.2.4.

7.2.4. Composite stem formatives.--Stems can also be formed by using combinations of the simple elements discussed in the preceding paragraphs. The assumption that the more complex formative is a combination of simpler ones is supported by examples of the same root in various combinations with the simpler formatives, e.g.

^{m}sar$_5$-du-ri ^{m}sar$_5$-du-ri-hi ^{m}sar$_5$-du-ri-hi-ni

But in many cases some of the simpler stems are not attested; for example, *dirušie* occurs, but not **diru*. The following list of simple and complex formatives is therefore tentative in some respects.[25]

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[23] Compare ^{m}*ru-sa-a-ni-i* URU TUR-*gi* (130C) with ^{m}*ru-sa-a-i* URU TUR (129:7) 'Rusa's small city(?).'

[24] See n. 16 above.

7.2.5. List of stem formatives.

Formative Element	Example containing formative	Example lacking formative
h	^{m}sar$_5$-du-ri(-e)-*h*i	^{m}sar$_5$-du-ri-še
hin	^{m}ru-sa(-a)-*hi-n*i-še	^{m}ru-sa(-a)-še
hinin	tú-*hi-ni-n*a-a	tú(-ú)-hi
n	^{KUR}lu-lu-i-*n*i-li	^{KUR}lu-lu-e
nan	^{KUR}lu-lu-i-*na-n*i	^{KUR}lu-lu-e
nin	^{KUR}e-ba-*ni-n*a-ú-e	^{KUR}e-ba-ni(-e)-li[26]
nišin	ṣu-i-*ni-i-ši-n*i	ṣu-e
š	di-ru-*š*i-i-e	di-ru-ni
šin	gu-nu-*ši-n*i-i-e	gu-nu-ú-ni
šinan	ar-ni-ú-*ši-na-n*i	ar-ni-ú-ši-ni(-e)-li
šinin	gu-nu-*ši-ni-n*i	gu-nu(-ú)-še
/xen/ (*in* after *a*)	^{m}ru-sa-a-*i-n*i-e	^{m}ru-sa-a

7.3. Structure of the nominal form.—The wide distribution of the element -*ni* makes it difficult to set up a simple ranking by orders

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[25] Other possible combinations of the basic elements, for which no simpler forms are attested, are:

nah	^{m}e-ri-me-*na-hi*
nahin	^{m}e-ri-me-*na(-a)-hi-n*i-še, etc.
nun	a-gu-*nu(-ú)-n*i, etc.

[26] Another example is [^{URU}*ar-di*]-⸢*ni*⸣*-ni-na-še*. This form occurs in 9:41, but it has been misread by all editors, who have omitted from one to three signs in this region, despite the basic accuracy of Belck's copy (*Anatole* I). The simplest form of the root attested is *ardini*, therefore the formative here is probably *nin* rather than *ninin*. In 10:56 ^{URU}*ṭu-uš-pa-na-ú-e* appears as the equivalent of ^{URU}*ṭu-uš-pa-ni-na-ú-e* (10:14). Perhaps the omission of *ni* in 10:56 is a scribal or engraving error.

of the elements added to the base. They can be tentatively summarized as follows:

1st order:	stem vowel (/a, e, or u)[27]
2nd	/ne/, /na/
3rd	/he, /še/, /xene/
4th	/ne/, /na/
5th	/ne/, /na/, case ending

A word probably containing all five orders is:

^{m}išpu-i-ni-hi-ni-še
1 2 3 4 5

7.4. Case inflections.—The recognizable case endings are:

	Singular	Plural
General	(unmarked)	/-le/
Ergative	/-še/~/-š/	?
Genitive	/-∅/~/-xe/	/-(a←V)xe/
Dative	/-xe/~/-∅/	
Allative	/-xde/~/-xede/?	/-(a←V)šte/
Locative	/-xa/~?/-(∅←e)a/	/-xaşe/~/-şe/(?)

The term "case" will be used in this paper to refer to the classes listed above. The basic criterion for setting up a case is a characteristic form. A case category is not set up on the basis of meaning alone, if the meaning difference is not accompanied by a formal difference. Words formally identical may be placed in different cases only if other words in the language do have a formal distinctiveness corresponding to the semantic category. For example, genitive singulars of *e*-stems are separated from the formally identical general case because the genitive of *a*-stems is formally distinct from the general case. Although the cases are set up primarily on the basis of form, they have been named, as is traditional, according to function. The names are not intended to imply identity of functions with cases similarly named in describing other languages. The names only indicate the broad general function (or one of the functions) which seems to be associated with that particular case.[28] Where a particular type of form serves for more than one semantic function, these functions will be referred to collectively as a "form category" or simply as a "category" (e.g. stem category, -*ni* category).

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[27] It seems apparent that the stem vowel is a morpheme, although its meaning cannot be specified. Cf., e.g., the different words $^{\text{KUR}}$bi-a-i-na-še (121:7) and $^{\text{KUR}}$bi-a-i-ni-še (126:41).

There is some variation in case endings according to the nature of the stem vowel. In all the singular cases and in the general case plural any vowel may appear as stem vowel, but the same vowel is used in all these cases from a given stem. In the other plural cases the stem vowel is regularly *a*.[29]

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[28] Most current nomenclature is based partly on form, partly on function (e.g. Fr.'s "*še*-case" (form), "genitive" (function)). Use of the term "case" for both types (such categories are obviously not mutually exclusive) sometimes leads to confused or confusing analysis of nominal forms, e.g. Gamkrelidze, *VDI* 1956,4, 141: "The subject with intransitive verbs and the direct object in Urartian stand in a case with the ending -*ni*. In these same functions the unmarked case is used, characterized by zero suffix. These cases interchange, without clear syntactical regularity, which indicates their complete functional identity. This makes clear that the nominative case is derived from the unmarked case by the addition of the ending -*ni* to the base . . . ." The names used for cases in this paper are all descriptive of function. The term "general case" is used in preference to the "absolute case" used by some Soviet Urartiologists because in prevailing linguistic usage an absolute case is one which is unmarked, that is, the term is descriptive of form rather than function.

[29] Fr., *ZA* VI, 273, suggested that such a phrase as ^{m}*e-ri-a-hi-ni-ni-e* KUR-*ni-e-di* should be interpreted as exemplifying phrase inflection. It

7.4.1. General case, singular.—The stem form (ending in the stem vowel) is used in several functions: (1) as an intransitive case (subject of an intransitive verb or object of a transitive verb), (2) as ablative and instrumental, (3) to describe local and temporal circumstances, (4) before postpositions, and (5) as genitive of *e*-stems. The last has presumably arisen from the fusion of the stem vowel with the genitive marker /-*e*/, but evidently in the language of the inscriptions the genitive of *e*-stems is not formally distinct from the intransitive or other functions of the stem form. It will be treated below in the same section as the genitive of *a*-stems (7.4.5), since the latter is distinctive in form. Each of the functions will be analyzed separately in order to show clearly the form corresponding to the function, and it will be seen that only one form category is

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is suggested above (7.2.2.4) that phrases of this type are better interpreted as genitive substantive + *allative substantive*. In *ZA* VI, 286, he suggested a similar interpretation for ^{d}*haldina* KÁ-*kai* ^{m}*argištikai* ^{m}*menuahinie*, etc. However, if *kai* is analyzed as a separate postposition rather than a suffix, these phrases are readily explained. Ts., *RA* XXXII, 46-47, also proposed a similar feature. All of his examples involve -*ni*, and if the -*ni* is interpreted as a stem formative rather than a case ending they offer no problem. One might cite as an example of phrase inflection:

^{d}haldini ^{GIŠ}šuri(ni) kurunini (103 IV 9-10)
^{d}haldinini ^{GIŠ}šuri kuruni (103 V 7, VI 3)

where the second -*ni* is added to either ^{d}*haldi* or to *kuruni*, never to both. However the writing with the second -*ni* is very rare (the cited references are the only occurrences). The usual writing of this common phrase is ^{d}*haldini* ^{GIŠ}*šuri* *kuruni*. In one place (103 I 29) we meet ^{d}*haldini* ^{GIŠ}*šurini* *kuruni*, which looks like an attempt to link consecutive words by repeating an ending rather than like phrase inflection. In any case, if *ni* is not considered a case ending inflection is not involved at all. Both of these phenomena are very rare. Examination of the Urartian texts as a whole does not offer any evidence that either of these phenomena represents a structural feature of Urartian. In the rare cases where they seem to occur, they presumably are due to stylistic features of which we are unaware or are the incidental results of morphological structures.

involved. Forms ending in -ni (/-ne/) are listed separately, in order to further emphasize the use of such forms in the same functions as forms without -ni, as discussed above (7.2.2).

7.4.1.1. Intransitive use of the general case.--The following forms are clearly identifiable as either (1) subject of a Class II verb, (2) object of a Class I verb, (3) complement of the verb man-, or, (4) subject of a nominal sentence, e.g. in royal titulary.

Examples of these uses are:

(1) uštabi ^{m}argištini ^{m}menuahe (85:4-5) 'AM went forth'

(2) ieše ini ^{GIŠ}uldi terubi (126:10-11)

'I established this vineyard'

(3) URU BUZÚR-nusi ^{m}abianini agunuri manu gunuše haubi (103 VI 14)

'The royal city of A., (which) was fortified, I took by storm.'

(4) ^{m}menuai pili tini (30e:3) '"Canal of Menua" (is its) name.'

7.4.1.1.1. e-stems.

$^{(É)}$ʔa-ri, ʔa-a-ri

ʔa-še$^{(MEŠ)}$, ʔa-a-še

a-lu-si(-e), a-lu-ú-si(-e)

a-qar-qi

a-⸢šá-di⸣

a-še ('shield')

a-ši-hu-ú-si-e

a-ti-bi

al-su-i-še(-e)

ar-da-i-e

ar-di-še, ar-⸢di⸣-[i-še]

^{m}ar-gi-iš-ti-e-hi
  ^{m}ar-giš-ti(-e)-hi
  ^{m}ar-giš-te-hi(-⸢e⸣)

ar-hi(-e)

be-di, bi-di(-i), bi-e-di[30]

di-id-gu-ši(-i)

e-gu-ru-hí (: e-gu-ru-hu)

^{m}e-ri-me-na-hi

e-ti-bi

---

[30] Most of the contexts are unclear; in the few clear ones this word seems to function intransitively.

ga-zu-li[31]

gu-nu(-ú)-še

ha-e-ri-e, ha(-e)-ri (?)[32]

i-gi-e

^{d}i-ni-ri-a-še

i-si-ú-še

ip-šú-ú-še-e[33]

$^{\text{LÚ}}$ir-di$^{(\text{MEŠ})}$

^{m}iš-pu-ú-i-ni(-e)-hi
  ^{m}iš-pu-ú-i-ni(-e)-hí
  ^{m}iš-pu-u-i-ni(-e)-hi
  ^{m}iš-pu-u-ni(-e)-hi

ka-pi

ku-bu-še-e

$^{\text{KUR}}$lu-lu-e

^{m}me-nu(-ú)-a-hi
  ^{m}me-nu-a-hi-e

ma(-a)-si-e

me(-e)-še

mu(-ú)-ṣi

ni-ri-bi, ni-ri-be, ni-ir-bi

pa-a-ri(-e), pa-ri(-e)

pa-a-ta-ri(-e)
  pa-a-ta-a-[ri-e]
  pa-ta-ri

pi-i-li(-e), pi-li(-e)

pi-i-ṣu-ú-še
  pi-ṣu(-ú)-še
  [pi]-i-[ṣu-ú-še]-e

$^{(\text{NA}_4)}$pu-lu-si
  $^{(\text{NA}_4)}$pu-lu-si-e
  $^{\text{NA}_4}$pu-lu-ú-si(-e)

qar-me-hi

$^{\text{URU d}}$qu-e-ra-i-ta-a-še-e

qu-ul-di

^{m}r⸢u-sa⸣-a-hi

sal-ma-ʾat-hi(-e)[34]

sal-zi

^{m}sar$_5$-du-ri-e-hí(?)
  ^{m}sar$_5$-duri-e-hí
  ^{m}sar$_5$-du-ri-hi

⸢$^{\text{LÚ}}$si⸣-e

---

[31] gazuli occurs clear in 9:9; the corresponding Ass. is ⸢damqu (SIG$_5$)⸣. The substantive it modifies is niribi, which is not overtly plural. However, gazuli is probably to be restored also at the beginning of the same line, [ga-zu]-li, and here it corresponds to Ass. SIG$_5$.MEŠ (plural). It seems unlikely, however, that gazuli is formally plural.

[32] The contexts are not sufficiently clear to be certain whether ha(-e)-ri (6 obv. 49, rev. 32) is properly divided, or if it is equivalent to ha-e-ri-e (103 II 14). Possibly [ha]-ri-e is to be restored in 89:21.

[33] So clearly on the photograph (CICh Tf. XXX A$_1$); K in plate and transliteration (102 I 29) has $^{\text{UDU}}$šú-ú-še-e.

[34] Possibly an adverb; K (pp. 221-22) translates "seitwärts, beiseite."

su-si(-e)[35]

ṣi-ra-ba-e

ṣu-e

še-ha-di-e

še-e-hi-e-ri-e
še-hi(-e)-ri
še-hi-ri-⌜e⌝

$^{\text{LÚ}}$ši-a

šú-hi(-e), šú-hí, ⌜šú⌝-ú-hi-e

$^{\text{UDU}}$šú-še$^{(\text{MEŠ})}$
$^{\text{UDU}}$šú-še-e$^{\text{MEŠ}}$

tar-a-i-e
tar-a-⌜e⌝, tar-aya-e

tú(-ú)-hi[36]

ṭè-ru-si, ṭí-ru-si[37]

ú-a-ni-še

ú-e-di

ú-ri-iš-[hi-e]

$^{(\text{GIŠ})}$ú-še[38]

$^{\text{GIŠ}}$ul-di(-e)

ul-gu(-ú)-še

up-še$^{(\text{MEŠ})}$

uš-ti-ip-te

$^{(\text{GIŠ})}$za-a-ri(-e)
$^{(\text{GIŠ})}$za-ri(-e)

zi-li-bi
⌜zi⌝-il-bi-i, [zi-il?]-be

The following are probably, but not certainly, also of this type:

ba-ú-še

$^{\text{LÚ}}$e-ri-e-li

e-ši-me-ṣi (2 words?)

el-mu(-ú)-še

ha-ra-ri

hu-bi

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[35] su-si-i-[e] is restored in 12:6; it is clearly an object, but probably the restoration is erroneous.

[36] See Appendix I.

[37] In 103A:10, 125 rev. 23 ṭerusi seems to be object, but after a numeral, so its construction is somewhat uncertain. On the meaning of the term see M, VDI 1953,4, 192-93, 249; D'îakonov, EV IV, 105-106.

[38] This reading seems more probable than GIŠ.Ú.ŠE, which would involve a very unlikely sequence of determinatives and logogram. This latter reading is adopted by Ts., RA XXXIII, 99, etc. and by M, 281:11, etc. The reading used in this paper is that of G, RHA 24, 267; Fr., WZKM XLVII, 190, etc. In 124 obv. 40 and 126:11 some scholars (e.g. K) have read $^{\text{GÁN.GIŠ}}$ú-še; in 121:19, 125:29: $^{\text{GÁN}}$ú-še. GÁN is not ordinarily used as a determinative, it means 'field' rather than 'garden,' the determinative GÁN.GIŠ seems very unlikely. It seems better to take GÁN in these passages as a logogram.

hu-ri-iš-hi
i-iš-hi (division uncertain)
iš-pu-i-še
ka-am-na-a-hi(-e)
ki-ri
ku-⌈ú⌉-[še][39]
mu-ri-e
pa-a-ni-it-hi-e
qar-bi
šú-gu(-ú)-ki[40]
šú-ú-ki
ta-a-še
tar-a-i-ú-hi
⌈mü⌉-e-di-ip-r[i]-⌈i⌉

The following logograms with phonetic complements, obviously representing e-stem nouns, are also used intransitively.[41]

BUZÚR-nu(-ú)-si, BUZÚR-si
DUB-te(-e)
É-e
GU$_4$-še
GU$_4$.ÁB-še
KASKAL-e
LÚ.MEŠ-še
LÚ.A.SI.MEŠ-i-e[42]
LÚ.⌈ERIM⌉.GÌR.MIN.MEŠ-e-i[43]
LÚ.TUR-še
LÚ.TUR.MEŠ-ni-še (?)
MA.NA-e (?)

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[39] The restoration (124 obv. 8) is a guess, but it occurs in a series of forms ending in -še. M (276:8) restores ku-[ú-i]. The preceding word is a-ru-ú-še-e. K reads after this e-ku-⌈ú-še⌉, but there is only one e present, as K's own copy shows. The e could, of course, be placed with the second word, but the one e cannot be on both words.

[40] K considers šú-gu(-ú)-ki and šú-ú-ki to be variants of the same word. This is phonologically possible, and the contexts are not entirely clear. However, the former appears in 124 obv. 7 and 125 obv. 20 (identical contexts) and the latter in 124 obv. 43 and 125 obv. 31 (identical contexts), but the contexts of the two words are quite different. Further evidence will be necessary before they can be equated.

[41] See n. 152 below.

[42] 80 V 14; it seems to be clearly an object.

[43] 103A:5, in a list of booty, where the general case is regularly used.

PIT-HAL-LU.MEŠ-e-i[44]

UDU-še[45]

It will be noted that most of these forms end in either -*Ci/e* or -*Ci/e* + a simple reinforcing vowel. The few exceptions are readily explained by the form of the base:[46]

ar-da-i-e	/ardaxe/	base /ardax-/
^{KUR}lu-lu-e	/luluxe/	/lulux-/
ṣi-ra-ba-e	/ṣerabaxe/	/ṣerabax-/
ṣu-e	/ṣuxe/	/ṣux-/

Therefore the ending is clearly to be analyzed as /-*e*/, the stem vowel.

The absence of ^{GIŠ}*šurie* from this list will be noted. The very common phrase ^{d}*haldini* *uštabi* *masinie* ^{GIŠ}*šurie* has often been translated something like "of Haldi there went forth his weapon(?)," taking ^{d}*haldini* as genitive and ^{GIŠ}*šurie* as subject of the intransitive verb.[47] If this interpretation is correct, the word order is certainly odd, for one thing. Furthermore, in this phrase the spelling ^{GIŠ}*šú-ri* occurs only once, $^{(GIŠ)}$*šú-ri-e* occurs 21 times, and ^{GIŠ}*šú-ri-i-e* 10 times. This consistent spelling demands the analysis: /*šurexe*/. As genitive,

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[44] Occurs in 103A:4, in the same list of booty as LÚ.ERIM.GÌR. MIN.MEŠ-*e-i* (n. 43 above).

[45] M and Arutĵunĵan (*EV* VII, 100) both show UDU-*še* at the end of 80 III 43 (M 127), which is what Schulz's copy has (Pl. I, No. IV). K's transliteration shows ^{UDU}*šú-še* as clear; his plate seems to indicate a restored *šú*. In 125:26 UDU-*še* seems a more likely reading than K's UDU.ŠE.

[46] The same bases emerge from analysis of other forms of /*lulux*-/ and /*ṣux*-/. No other forms of the other bases occur.

[47] K, p. 38, etc.: "Es fuhr aus des Haldi eigener Wagen"; Fr., *Einf*., 46: "Die dem Haldi eigene ...e Schar(??) zog aus"; Ts., *NHI*, 3, etc.: "Es zog die Heeresmacht des Haldi." The interpretation here suggested is that followed by M (e.g. *VDI* 1953,3, 234): "Bog Khaldi vystupil (v pokhod) s svoim oruzhiem(?)."

šú-ri occurs twice, $^{\text{GIŠ}}$*šú-ri-i* 24 times--the spelling *-ri-e* never occurs as genitive. The genitive form is to be analyzed /*šure*/, and the stem must also be /*šure*/. Therefore, the ending of /*šurexe*/ is presumably a case ending. It will be shown below that /-*xe*/ is the ending of the dative case of *e*-stem nouns. It is suggested, therefore, that in the above sentence $^{\text{d}}$*haldini* should be interpreted as the subject of the intransitive verb (cf. $^{\text{d}}$*haldini* *uluštaibi* 'Haldi went ahead') and /*šurexe*/ should be interpreted as a comitative dative, 'with his weapon(?).' This is certainly more in accord with the word order. Unfortunately only one parallel, somewhat uncertain, for the use of the dative case with comitative sense in Urartian can be adduced.[48]

7.4.1.1.2. *ne*-stems.

a-gu-nu(-ú)-ni

a-ni-ya-ar-du-ni[49]

al-su(-ú)-i-ni, al-su-ni
  al(-a)-su-ú-i-ni-e

an-da(-a)-ni

$^{\text{m}}$ar-gi-iš-ti(-i)-ni
  $^{\text{m}}$ar-giš-ti(-i)-ni

⌈a⌉r-ṣi-bi-ni

$^{\text{KUR}}$ba-a-[ba-ni-e]

bar-zu-di-bi-du(-ú)-ni
  bar-zi-di-bi-du-ni
  bar-zu-di-i-bi-i-du(-ú)-ni

bur-ga-na-ni

$^{\text{KUR}}$e-ba(-a)-ni
  $^{\text{KUR}}$e-ba(-a)-ni-i
  $^{\text{KUR}}$e-ba(-a)-ni-i-e
  $^{\text{KUR}}$e-ba-ni-e

e-ši-ni-ni

gu-nu-ši-i-ni-e, gu-nu-ši-ni-i[50]

$^{\text{d}}$hal-di(-i)-ni

i-a-ra-ni

i-bi-i-ra-a-ni, i-bi-ra-ni

i-na(-a)-ni

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[48] Cf. 103 V 16: *uštadi* $^{\text{LÚ}}$*ueli* *šusinie* $^{\text{KUR}}$*uelikunigidi* 'I went with the whole(?) army to U.' K writes as one word: *uelišusinie*.

[49] The division is a little uncertain (103 II 48). Cf. G, *RHA* 24, 268; Fr., *WZKM* XLVII, 196.

[50] Possibly *gu-nu-ši-ni-ni* is an object in 102 rev. 31, 104:18.

i-na-a-i-ni(-⌈i⌉), i-na-i-ni(-e)

i-ni(-i), i-ni-e

^{m}iš-pu-ú-i-ni

^{m}iš-pu-ú-i-ni-ni

ku-ru-ni (?)[51]

$^{\text{LÚ.GEME}}$lu-tú-ni

me-e-ši-i-ni

^{m}me-i-nu(-ú)-a-ni, ^{m}me-nu(-ú)-a-ni

$^{\text{GU}_4}$pa(-a)-hi-i-ni-e$^{\text{MEŠ}}$
$^{\text{GU}_4}$pa-a-hi-ni, $^{\text{GU}_4}$pa-hi-ni$^{\text{(MEŠ)}}$

pa-ha-ni

$^{⌈\text{LÚ}⌉}$pu-ra-⌈ni⌉

qar-qa-ra-ni

qi-ú-ra-a-ni, qi(-ú)-ra-ni

qu-ul-di-i-ni(-e), qu-ul-di-ni

^{m}ru-sa(-a)-ni

^{m}sar$_5$-du-ri(-i)-ni

šá-ni

šú-ga-ba-ra-a-ni

$^{\text{LÚ}}$ta-ar-šú-a-na-ra(-a)-ni

$^{\text{LÚ}}$ta-ar-šú-a-ni$^{\text{(MEŠ)}}$
$^{\text{LÚ}}$ta-ar-šú-a-ni-e$^{\text{([MEŠ])}}$
$^{\text{LÚ}}$ta-ar-šú-ú-a-ni

tar-gi-ni

ti(-i)-ni

ti-ni-ni

tú-hi-ni, tú-[hi-ni]-i[52]

ṭè-ri-hi-ni, te-ri-hi-ni-e

$^{\text{GEME}}$ú-e-di(-i)-a-ni
$^{\text{LÚ}}$ú-e-di-a-ni$^{\text{(MEŠ)}}$

ú-me-ši-ni

$^{\text{ANŠE}}$⌈ul-ṭu⌉-ni$^{\text{MEŠ}}$

ya-ra-ni-ni

The following also are probably, but not certainly, of this type:

ba-di-ni-ni

di-ru-ni

gu(-ú)-ni

hi-i-ni-e[53]

ip-ṭu-ú-ni[54]

ka-am-ni

na-hi-di-ni

ṣu-i-ni-i-ši-ni

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[51] *kuruni* in most occurrences seems to be instrumental, but it seems to be general case in 7:13, 43, rev. 14, 15.

[52] See Appendix I.

[53] Cf. *hi-ni* (Inc. 32:2, 4) in an uncertain context.

[54] K separates as two words: *ip-ṭu* *ú-ni* (98A:9)

tú-bar-[du-ni-i] ṭu-bar-du-⌈ni⌉-[i]

ṭu-lu-⌈ú-ri⌉-[ni] ^{LÚ}ú-di-gu-ni[55]

The following logograms with phonetic complements also are of this type:

BUZÚR-ni

GAL-ni

KI-ni

KUR-ni(-i), KUR-ni(-i)-e

KUR-ni-ni

LÚ.A.SI.MEŠ-ni[56]

(LÚ.)UKÙ.MEŠ-ra-ni

These forms end in -*ni* or -*ni-i/e*, clearly indicating analysis as /-*ne*/. The exception is ^{KUR}*ebanie* = KUR-*nie*. This word, meaning 'land,' apparently functioning as object, occurs in the following spellings:

e-ba(-a)-ni *and* KUR-ni	53 occ., sometimes after proper name
e-ba(-a)-ni-i *and* KUR-ni-i	4 occ., sometimes after proper name
e-ba(-a)-ni-i-e *and* KUR-ni-i-e	11 occ., all after proper names
e-ba-ni-e *and* KUR-ni-e	43 occ., all after proper names

It seems apparent that the form used after a proper name is to be analyzed as /*ebanexe*/. That is, it is identical with the form of the dative case, but it is difficult to see how a dative suits the context. In analogous situations where a proper name is not involved, the form used is /*ebane*/. Of course, there are some cases of defective writing of the longer form. Apparently the base cannot be interpreted as */*ebanex*-/ rather than /*eban*-/ because of the occurrence of the form

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[55] K transliterates as two words: LÚ-*ú-di* *gu-ni* (124 rev. 3)

[56] K divides the passage (103 V 15) rather differently: LÚ.A.SI. MEŠ *ni-ku-ú-li*

ebana (103 VI 26, apparently locative plural), which can only come from the latter stem.[57]

masinie does not appear in the above list, since it is interpreted as dative in accordance with the discussion of the phrase *masinie* ^{GIŠ}*šurie* in 7.4.1.1 above.

7.4.1.1.3. *a*-stems.

^{m}me-nu-a

na-a-ra(-a), na-ra(-a)

^{LÚ}pu-ra[58]

qi-ú-ra-a

É.[GAL].MEŠ-ri-a[59]

LÚ-ta[60]

These forms obviously end in the stem vowel.

7.4.1.1.4. *u*-stems.

bi-pu[61]

hu-ṭu (?)[62]

e-gu-ru-hu (: e-gu-ru-hí)

^{GEME}lu-tú(MEŠ)

LÚ-ta-ú[63]

7.4.1.2. Instrumental-ablative use of the general case.--The following forms seem to refer to the instrument with which an action is carried out, or the incentive leading to its accomplishment, or else to the place from which motion is proceeding, as the following examples show.

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[57] The evidence of the monuments would seem to indicate that the -*n*- is part of the root. However the form ^{KUR}*e-ba* in a tablet from Karmir-blur (*VDI* 1957,3, 145 line 2) suggests that *ebani* may be a derived stem in -*ni* from the root *eb*-.

[58] See 6.1.1.1 and n. 12 thereto.

[59] In its context (80 V 75) this word can hardly be anything but an object. It may be incomplete, however. K shows É.[GAL].MEŠ-(·)-*ri*-(·)-*a* (·).

[60] This form is troublesome. It seems to have variant spelling LÚ-*ta-ú*. See Appendix I.

[61] This form, occurring in 104:25, is considered a logogram by K, by M (No. 158), and by Beran, on very inadequate grounds (cf. K, p. 47).

[62] Cf. Appendix I.

[63] See n. 60 and Appendix I.

aluše ini pulusi *esini* suidulie (75 rev. 2-5)

'whoever removes this stele *from (its) place*'

^{d}haldinini *alsuišini* ^{m}argištiše ^{m}menuahiniše ini pile aguni (90:1-3) '*Through the greatness* of Haldi, AM brought this canal.'

al-su-i-ši(-i)-ni
  al-su-ši-ni
  al-su-u-ši-i-ni
  al-su-ú-i-ši(-i)-ni
  al-su-ú-ši-ni

ba-ú-ši(-i)-ni, ba-u-ši-ni[64]

bi-di(-i)-ni
  bi-e-di-ni
  bi-[i]-e-di-i-ni
  be-di-ni

e-si-ni, e-si-i-ni(-e)[65]

e-si-ni-ni

gu-nu-ši-ni-ni[66]

^{d}hal-di-na-ni[67]

i-nu-ka(-a)-ni

ku-ru(-ú)-ni

ku-ru-ni-ni

uš-gi-ni

uš-ma(-a)-ši-i-ni
  uš-ma(-a)-ši-ni

---

[64] This word occurs in the phrase *^{d}haldini baušini* 'at the command of Haldi.' Cf. 76A:5: *[^{d}h]al-di-ni-e* *ba-ú-ši-i-e* *^{d}hal-di-ni* [. . .]; because of the broken context it is unknown if an equivalent phrase is involved here. *baušie* appears to be dative.

[65] An anomolous form occurs in 6 rev. 44: *[a-lu-še]* *e-si-ni-e-i* *i-ri-du-l[i-e]*. It is tempting to consider this phrase equivalent to the more common *aluše* *esini* *suidulie* 'whoever removes (it) from (its) place.' The spelling *e-si-ni-e-i* is not attested with ablative sense, and the verb *iridulie* is otherwise unknown, so probably this phrase means something quite different.

[66] Possibly object in 102 rev. 21, 104:18, uncertain use in 102 left 9, 122:16.

[67] *^{d}hal-di-na-ni* is difficult to analyze. Most occurrences of it may be interpreted either as use as a genitive substantive or as an adjective (syntactically). In most occurrences the substantive qualified seems to be locative plural. The occurrence in 9:29 could be interpreted as a genitive substantive or an ablative adjective:

It will be noted that even simple reinforcement of the final vowel is very rare, clearly indicating analysis of the ending as /-*ne*/ and suggesting that the final /-*e*/ may often have been unpronounced. That is, these forms represent the stem form of stems ending in /-*ne*/.[68]

The following in their contexts could be either ablative or genitive. In some cases even a locative sense is not impossible. An example is:

aluše giei *inani arniušinani* lakudulie (117:17-18)

'whoever carries off(?) anything *of/from this structure*'

It has been customary in the literature to treat them as ablatives, probably to some extent because of the opinion that the genitive should not end in -*ni*.

ar-ni-ú-ši-na-ni (117:6, 18)[69]

ba-ú-ši-na-ni (128:7)

i-na(-a)-ni (117:6, 7; 128:7)

iš-ti(-i)-ni (9 occurrences: 103 I 16, III 40, etc.)

iš-ti-ni-ni (20 occurrences: 80 V 26, 103 II 21, etc.)

[aluše niri]be ^{d}haldinani KÁ haulie

'whoever removes(?) the n. from the Haldi gate'

The Ass. parallel is *ištu*(TA) *lìb-bi* [*bābāni*(KÁ.MEŠ) *šá*] ^{d}*hal-di/e-e* 'from [the gates of] Haldi' (9:27-28). In 9:34, apparently corresponding to the same Ass. phrase occurs ⌜^{d}*hal*⌝*-di-ni* KÁ, possibly a scribal or engraving error for ^{d}*hal-di-⟨na⟩-ni*, or perhaps a genitive noun. Most stems in -*na* are adjectivally used (see Appendix II).

[68] There are no clear cases of stem forms not ending in -*ni* with instrumental or ablative force. There are some occurrences of apparently locative forms with instrumental force: *gunuša*, $^{(LÚ)}$*huradina* (cf. Ts., *NHI*, 33; Fr., *Einf*. 66; *ZA* VI, 280).

[69] Probably a plural adjective.

$^{\mathrm{KUR}}$lu-lu-i-na-ni (128:3)[70]

si-ir-ši-ni-ni (60:4, 61:8)

[ṣ]u-i-ni-i, ṣu-ú-ni-e (86:5, 121:14)

ṣu-i-ni-a-ni (118:5, 12)

ṣu-i-ni-ni (121:26, 124 rev. 13)

šú(-ú)-i-ni, šú-i-ni-i (31 rev. 6, 8; 121:16; 124 obv. 19[71]; 128:3)

KUR-ni-i-ni

7.4.1.3. Circumstantial use of the general case.--There are a number of forms ending in the stem vowel which apparently indicate the circumstances of time or place in which an action took place, e.g.

inanele arniušinili *šusini šale* zadubi (80 IV 11-13)

'I did these deeds *in one year*.'

erṣidubi *esi* ʾaldubi mešini pi (103 I 45)

'I left (him) *in place*; I put (him) under tribute.'

---

[70] A plural adjective in most contexts. Note especially 128:3: $^{\mathrm{KUR}}$*lu-lu-i-na-ni* KUR-*ni-i-ni* (so M 278; Fr., *ZDMG* XXX, 66). Fr. does not comment on this construction. He generally analyzes forms in -*nani* as plural ablatives (*Einf.*, 13, 15; *ZA* VI, 275-76). He considers a proper name preceding the word "land" to be an adjective in most cases (see n. 5 to 7.2.2.2); however, *lulu* is presumably a descriptive term and not a specific name (Fr., *ZDMG* XXX, 67, and references there cited). KUR-*ni-i-ni* is singular in form; therefore, either (1) $^{\mathrm{KUR}}$*luluinani* is a singular syntactic adjective, or (2) it is a singular noun in the genitive, or (3) a singular noun can be qualified by a plural adjective. The last seems most likely, and this construction tends to support the position implicit in the lists given in this chapter: that plurality is often a characteristic of the stem, which can still be inflected according to the usual pattern of the singular. That is, *luluina*- is an adjective, meaning roughly 'of the enemies,' which can be used to modify a singular noun. It is not itself plural in the inflections it takes, but only in the nature of the stem. K avoids the whole problem by reading here $^{\mathrm{KUR}}$*lu-lu-i-na-ni* KUR-*ni-i-na-ni*. M, the original publisher of the text, saw no -*na*- and the photograph he supplies (*VDI* 1953,4, Fig. 7), though not too clear, seems to show what he read. There seems, therefore, to be no authority for the reading which K offers without comment as clear.

[71] The occurrence in 124 obv. 34 is probably dative.

That forms ending in /-*e*/ can have locative force is clearly shown by $^{\text{URU}}$*ar-di-ni(-e*) (9:23, 33; 122:21, 22) to which the corresponding Assyrian is *ina* (*libbi*) $^{\text{URU}}$*muşaşir* 'in Muşaşir (= Ardini).'

In many contexts the forms could be interpreted as genitives or as indirect objects as well as "locative,"[72] e.g.

19 LUGAL.MEŠ *išani aptini* şuiniani (118:12)

'19 kings *on/of the other(?) side* of the lake'

nahadi LÚ.AD-sini *esi* (103A:2)

'I sat(?) *in the place* of (my) father.'[73]

However, in 128:5-6 occurs the sequence *i-nu-ki-e* É.GAL-*a*. The context is broken, but apparently *inuke* modifies É.GAL-*a* adjectivally, and the sense is probably locative. The form *inuke* can be general case, genitive, or dative, while É.GAL-*a* cannot be genitive. A similar phrase occurs in 118:12-13: $^{\text{KUR}}$*ba-ba-ni-a* *ku-ru-ni-e*, apparently locative in sense, 'in high mountains.'[74]

---

[72] In a few contexts an ablative sense is also possible.

[73] The exact meaning of the verb here is uncertain. The corresponding Class I stem apparently means 'take away,' which suggests that the basic meaning of the Class II stem may be 'go' rather than 'sit,' but in that case an allative noun would be expected after it.

[74] Such phrases would suggest the possibility of recognizing /*e*/ as an allomorph of the locative ending /*a*/. There is not enough data to prove that these would not be in complementary distribution, though obviously the distribution would not be phonologically defined. The only stems perhaps occurring with both endings are *esi*, *esia*; *šusini*, *šusina*, but both are somewhat uncertain. Nevertheless, it seems extremely unlikely that /*e*/ and /*a*/ should be considered allomorphs of the locative case ending. These constructions are better explained by admitting as a syntactic principle that a locative substantive can be qualified by a general case adjective. *inuki* can quite clearly have locative force, e.g.:

šidištuli inili É.GAL.MEŠ inuki $^{\text{KUR}}$ebani (118:15-16)

'I built these fortresses in this land.'

Perhaps the use of some cases, like the use of plural forms, is optional.

There is no formal distinctiveness to warrant setting up a special case for these words. Friedrich (*ZA* VI, 287-88) recognized these as being stem case forms, "originally accusative or ablative." Tseretheli (*RA* XXXII, 48) considered some of them to be dative, but the forms are not those usual for the dative case. Future developments may require the attribution of some or all of these to the genitive case. For the time being, in view of the scarcity of data, no definitive interpretation is possible.

The following forms can probably be attributed to the group here under consideration, though some could be interpreted as genitive:

ap-ti(-i)-ni
^{URU}ar-di-ni(-e)
áš-ta-a-ni
^{KUR}ba-ba-na-a-hi
bar-zu-di-bi-du
e-si(-i)
e-si(-i)-ni
e-si-ni-ni
i-ku-ka-hi-ni-e
i-ku-ka(-a)-ni

i-na-ni
i-ni(-i)
i-nu-ka(-a)-ni
i-nu-ki(-e)
i-šá(-a)-ni[75]
ka-ma-a-ni
šá-a-li(-e)
ši-ši-ni
šú-si-ni(-i), šú-si-ni-e
uš-ti-ip-ti-ni

Logograms

ITI-ni
KÁ-i
U$_4$-*ME*-ni(-e)

---

[75] It is a little uncertain whether the initial *i*- belongs with this form or not--it is possibly part of the preceding word (16 up. 12, 103 V 13, 118:12; *šani* in 9:10, 10:25 is obviously a different word). The same is true of *i-šá-na*, which occurs in very similar contexts (77a:3, 77b:3) and is apparently related. However a word definitely *šana* occurs in a similar context in 86:5. K reads *išani*; his transliterations show *šana*, but there seems to be no entry for it in his glossary. Cf. K, p. 220.

7.4.1.4. Postpositional use of the general case.--The considerations which lead to treatment of the forms preceding kai, kaini, pi(ei), pieini, and edini as independent words, rather than stems to which the postpositions are attached as suffixes, are given in Appendix III, with examples of their use.[76] Some of these forms are presumably plural, but they are still stem forms, even though stems used only in the plural.

	used before
e-stems	
^{d}al-di, ^{d}hal-di	kai
^{m}ar-gi-iš-ti(-i), ^{m}ar-giš-ti(-i)	kai
^{m}sar$_5$-du-ri	kai
ne-stems	
^{KUR}bi-a-i-na-ni	edini
^{LÚ}ip-ri-ú-na-ni	edini
me-e-ši(-i)-ni, me-ši-ni	pi(e)i
pu(-ú)-lu-si-ni	kai
^{KUR}šú-ra-a-ni	edini
^{GIŠ}šur-gi-ni	kaini
ul-gu-ši-ya-ni, ul-gu-ši-i-a-ni, ul-gu-si-ya-ni	edini
^{LÚ}ur-bi-ka-ni	kai
a-stems	
a[r-da]-a	kai

---

[76] There seems to be another word edin(i), not a postposition. It occurs preceded by inukani (103 ⌜I 60⌝, II 62, III 65, IV 59) and by ikukani (62a:10, 110:4, 117:2). These do not appear in the list which follows. Cf. K, p. 223. See n. 2 to Chapter IX.

	used before
^{m}me-mu-a	kai, pi
[m]$_{}$ru-sa-hi-na	kai
Logograms[77]	
GIŠ.TIR-ni	kai
KÁ	kai
LÚ.A.SI.MEŠ-na-ni	edini
LÚ.UKÙ.MEŠ-ra-[ni]	edini
^{d}UTU	kaini, pi(ei)ni
^{d}UTU-ni	kai, pieini
Proper names	
^{URU}ṭu-me-iš-ki-ni	kai
^{LÚ}ú-ru-ur-da-a-ni	kai

7.4.2 General case, plural.--This case is represented by two or three forms used as subjects of nominal sentences or of *man*-, one used as complement of a Class II verb (126:7), and a number of examples of objects of Class I verbs. The following will serve as examples of the use of this case:

^{LÚ}*huradinili* uelidubi (80 I 5) 'I assembled *the soldiers*.'

^{GEME}*tariahinili* tini (40:3) '*Tariahinili* (is its) name.'

3 É.GA[L.M]EŠ *agumunili* manuli gunuša haubi (103 VI 7)

'3 fortresses (which) were *fortified* I took by storm.'

The following words are apparently in this case:

a-gu-ú-nu-ni-e-li
a-gu-nu-ni-li
^{LÚ}a-ú-[e]-ra-ši-li

^{m}ar-gi-iš-ti(-e)-hi-ni-li
^{m}ar-[giš-ti-hi-ni-li]
^{m}ar-giš-te-e-hi-ni-⌈li⌉

---

[77] Perhaps to be restored before *kai* in 9:7 is [BARA] = Ass. *par-⌈rak⌉-[ki]* (9:6).

ar-ni-ú-ši-ni(-e)-li
  ar-ni(-u)-ši-ni-li

ar-nu-i-a-li, ar-nu-ya-li

at-hu(-ú)-a-li

^{KUR}ba-ba-ni-li

ba-ú-ši-ni-[li]

^{KUR}bi-a-i-ni-li

bur-ga-la-li

^{KUR}e-ba-ni(-e)-li

^{d}hal-di(-i)-ni-li

^{LÚ}hu-ra-di-ni-e-li
  ^{LÚ}hu-ra-di-ni-li^{MEŠ}
  ^{LÚ}hu-ra-a-di-ni-li

hu-ru-ni-li

i-a-ni-li

i-na-a-ni-e-li(-e)
  i-na-ni(-e)-li

i-ni(-e)-li

ku-ri(-e)-li

^{KUR}lu-lu-i-ni-l[i]

ma-si-ni-li

^{m}me-nu-a-hi-n[i-li]

pi-ṣu-ši-ni-ni-li

^{m}ru-sa-hi-i-ni-l[i]

^{m}sar$_{5}$-du-ri-ni-li

še-iš-ti-li

^{KUR}šú-ri(-e)-li

ta-ar-ma-a-ni-e-li
  ta-ar-ma-ni-li

^{GEME}ta-ri-ri-a-hi-ni-li

The following also probably belong to this case:

ha-lu-li(-e)

hu-ra-la(-a)-i-ši-li

mu-ri-li

ni-qa-li

ṣi-šú-li[78]

ši-i-du-li

šú-li-e

ú-ru-li-li[79]

The following logograms with phonetic complements also evidently represent words in this case:

BUZÚR.MEŠ-li-li

DINGIR.MEŠ-l[i]

[DINGIR.MEŠ]-ri-li

É.GAL.MEŠ(-a)-ši-li

---

[78] K divides differently: a-du-li e-ṣi šú-li (117:10). See K, p. 138 n. 3.

[79] So M 27:9, 45; Ts., RA XLVIII, 69, 92. K (10:9, 45) divides ú-ru-li-li-ú-e ši(-ú)-a-li, which seems less likely in the context.

KÁ-li

KUR-ni-li

LÚ.A.SI.MEŠ-l[i]

LUGAL(-li)-li

Of the same type is the proper name ^{KUR}*e-ti-ú-hi-ni(-e)-li*.

The ending of this case is obviously /-*le*/ added after the stem vowel.

7.4.3. Ergative case.--Only one number category is attested for this case. This is the case in which the subject of a Class I verb stands.[80] The function of the forms in -*še* used in the curse formula remains somewhat uncertain, but they are probably also transitive subjects.[81] A typical use of this case is:

^{m}išpuiniše ^{m}sardurehineše ini É-e zaduni (4a:1)

'*IS* built this temple.'

The following are clearly recognizable as nouns in this case:

[^{URU}ar-di]-⸢ni⸣-ni-na-še[82]

^{m}ar-gi-iš-ti(-e)-hi-ni-še
  ^{m}ar-giš-ti(-e)-hi-ni-še
  $^{m(?)}$ar-giš-te-hi-ni-še

^{m}ar-gi-i-iš-ti-i-še
  ^{m}ar-gi-iš-ti(-i)-še
  ^{m}ar-giš-ti(-i)-še

[K]^{UR}bi-a-i-ni-še[83]

^{m}e-ri-me-na(-a)-hi-ni-še

^{d}hal-di-ni-še

^{d}hal-di-i-še(-e)
  ^{d}hal-di-še, ^{d}hal-di-iš

^{m}iš-pu-ú(-i)-ni-hi-ni-še
  ^{m}iš-pu-ú-i-ni-e-hi-ni(-e)-še
  ^{m}iš-pu-u(-i)-ni-hi-ni-še
  ^{m}iš-pu-ú-i-ni-e-hi-i-ni(-e)-še

---

[80] In addition to the nouns listed below, of the same type are the pronominal subject forms *aluše* 'whoever' and *ieše* 'I.'

[81] Extended discussions of all or part of the curse formula include: Müller, *DWAW* XXXVI, 23-26; L-H, *Ber*., 14 n. 1; *ZDMG* LVI, 109-15; LVIII, 825-31; *Klio* XXIV, 153-55; Belck, *ZDMG* LVIII, 175-82; Ts., *NHI*, 69-70; *RA* XXX, 45-47; XLV, 203-204, 208; XLVII, 140; G, *RHA* 22, 190-95; *ZA* V, 117-24; Fr., *Einf*., 41-45; Kapant͡sîan, *ArO* XVII, 1, 361-65.

[82] See n. 26 above.

[83] In 126:41 possibly we should divide ^{KUR}*bi-a-i-ni-še-e a-i*, but division before the *e* seems more likely.

^{m}iš-pu-ú-i-ni-še, ^{m}iš-pu-ú-i-ni-iš[84]

[KU]^{R}lu-lu-i-ni-še

^{m}me-i-nu-ú-a-hi-ni-e-še
  ^{m}me-nu-ú-a-hi-ni(-e)-še
  ^{m}me-nu-a-hi-ni(-e)-še

^{m}ru-sa-a-hi-ni-[e?-še]
  ^{m}ru-sa-hi-ni-še

^{m}sar$_5$-duri-hi-ni-še
  ^{m}sar$_5$-du-ri(-e)-hi-ni-še
  ^{m}sar$_5$-du-ú-ri-e-hi-ni-e-še

^{m}sar-du-ri-še
  ^{m}sar$_5$-du-ri(-i)-še
  ^{m}sar$_5$-du-ú-ri-i-še

a-class

^{m}i-ni-uš-pu-a-še

^{m}me-i-nu(-ú)-a-še
  ^{m}me-nu(-ú)-a-še

qi-ú-ra-a-še

^{m}ru-sa(-a)-še

^{d}te-e-i-še-ba-a-⸢še⸣

Logograms[85]

BUZÚR.MEŠ-še

DINGIR.MEŠ-še

EN(-ú)-še[86]

^{d}ISKUR(-a)-še

LÚ.A.SI.MEŠ-še

LÚ.AD-še

LÚ.AD.AD-še

LÚ.ÈR-še

^{d}UTU(-ni)-še

Proper names

^{KUR}ma-na-še (a little uncertain)

^{m}di-a-ú-hi-ni-še

⸢^{m}ur⸣-za-na-še

---

[84] K, p. 189 s.v., lists ^{m}išpuini-eše as occurring in 9:7. This form is restored, probably erroneously. Exigencies of space favor the restoration [^{m}iš-pu]-⸢ú⸣-i-n[i-še].

[85] URU-še (76C:4, 76E:4), URU-ri-še (Inc. 34:10) may belong to this class, but the contexts are uncertain. From the point of view of meaning it does not seem very likely.

[86] EN-[še] is a probable restoration in 124:31, and perhaps 122:28 should be restored [EN]-⸢še-e⸣. EN-ú-še occurs in 125 obv. 24.

The ending of this case is obviously regularly -še, added after the stem vowel. The occurrence, though rarely, of -iš as a variant spelling for the ending would give rise to the suspicion that the final vowel of -še was graphic only, not pronounced. However, another variant spelling, also rare, -še-e, indicates that at least under some conditions the final vowel was pronounced. The available data are inadequate for any conclusions as to the circumstances governing loss or retention of the vowel.

7.4.4. Genitive and dative.--Examination of the evidence as a whole indicates that the genitive singular has case ending /-e/; the dative singular has /-xe/ for e-stems, Ø for a-stems. The evidence for u-stems is too scanty for certain conclusions; it would seem that the genitive and dative singular both have the ending /-xe/. The data on which these conclusions are based are given in the following sections. In the texts, however, the two cases are not clearly distinguished. The genitive ending of e-stem nouns coalesces with the stem ending, so that the resulting form is identical with the general case form. Furthermore, the dative may be defectively written and thus be indistinguishable from the genitive or general case. In the plural the genitive and dative have already fallen together into a single case, and there is some ground for suspecting a tendency toward such fusion in the singular, with the more distinctive dative spreading at the expense of the genitive. There are a number of examples of apparent dative forms used in contexts which would seem to us to call for the genitive, fluctuating with forms which can be interpreted as genitive:[87]

---

[87] Such occurrences have led to interpretation of forms in -ie(i) as genitives. That they are basically datives is shown by the fact

terubi tini ^{d}hal-di-e-i URU (119:6)

'I established (its) name: "city of Haldi."'

teruni ^{d}hal-di-i patari tini (41:10)

'He established (its) name: "city of Haldi."'

audi ^{d}hal-di-ni-e-i URU-e-⌈i⌉ (79:3)

' . . . city of Haldi.'

^{d}hal-di-ni-i URU-i-e pulusi alziniei . . . (79:1)

'A stele for(?) the city of Haldi . . .'

GU$_{4}$ 2 UDU DINGIR.MEŠ ^{d}hal-di-ni URU (10:56)

'An ox, 2 sheep for the gods of the city of Haldi'

^{m}me-nu-a-i-ni(-e)-i ú-ri-iš-hu-si-ni(-i)/-ni-e-i[88]

'storehouse(?) of Menua'

^{m}sar$_{5}$-du-ri-e NÍG (112D)

^{m}sar$_{5}$-du-ri(-i) NÍG (112D)

NÍG.GA ^{m}sar$_{5}$-du-ri-e-i (112E)[89]

'property of Sarduri'

Note also:

^{m}me-nu-a-i-ni-e-i ^{GEME}si-la-a-i-e ^{GEME}ta-ri-ri-a-i i-ni ^{GIŠ}ul-di

(40A:1-2) 'This (is the) vineyard of T., wife(?) of Menua.'

---

that such forms are always used in those passages where the context demands a dative rather than a genitive, only infrequently in contexts where a genitive sense seems indicated.

[88] The publications of this inscription (Piotrovskiĭ, KB II, 55; M, Nos. 112-117) unfortunately do not specify which spellings of ^{m}menuaini(ei) occur with each of the variant spellings of urišhusini(ei).

[89] Cf. 40C: NÍG ^{m}me-nu-a 'property of Menua;' 112D: NÍG ^{m}sar$_{5}$-du-ri(-i/e), translated by Fr., ZDMG XXX, 160, "Gegenstand des (oder von) Sarduri," but ^{m}menua is not a genitive form, but is rather a dative, which would lead us to interpret all the names in these phrases as datives.

silaie is apparently genitive, but the modifying adjective (presumably) ^{m}*menuainiei* is dative in form; *tariria*, in apposition to it, is clearly genitive. Another probably example of the use of dative for genitive, ^{m}*menua kuruni*, was discussed above (7.2.2.4).

In any case, it is frequently difficult to sharply separate the uses of the two cases, and languages differ in the range of usage of comparable cases or constructions.[90] Where discrimination between the two functions cannot clearly be made, words not clearly dative in form are listed below as genitive. In general, the words clearly dative in sense are also dative in form, but some words dative in form seem to have genitive force. The close relationship of the two cases is also shown by the fact that the genitive of *a*-stems has the same case ending as the dative of *e*-stems and vice versa.

7.4.5. Genitive case, singular.—The variety of nuances of the case meaning can hardly be catalogued here. In practice, it calls for translation with the preposition "of." The following are examples of the use of this case:

te-ru-bi ti-ni ^{m}*ru-sa-a-i* ṣu-e (121:4)

'I established (its) name: "Lake *of Rusa*."'

alusinini alsuišini . . . hašialme DINGIR.MEŠ (103 V 3-4)

'Through the greatness *of the lord* . . . the gods listened to me.'

---

[90] e.g. medieval and dialectical French use of *à* (< *ad*) instead of standard *de* in expressing possession: *fille ad un conpta* ('fille d'un comte'), *e(n) la compaigne as angeles* ('en la compagnie des anges'): J. M. Meunier, *La vie de Saint Alexis* (Paris, 1933) pp. 22-23 l. 42, 66-67 l. 607; cf. K. S. de Vogel, *Syntaxe historique du Français* (La Haye, 1927), 354; Elizabethan English "Juliet, daughter to Capulet," etc.

The genitive function is very difficult to recognize with certainty, and there is wide difference of opinion as to what forms should be so interpreted, since formally the genitive of stems ending in /-*e*/ is indistinguishable from the general case. Many of the forms in /-*ne*/ listed below have been considered ablative by others.[91]

7.4.5.1. *e*-stems.--The following forms from stems ending in /-*e*/ can probably be attributed to this case:[92]

^{m}ar-gi-iš-ti(-i/e)
^{d}hal-di(-i)
hu-bi-i[93]
^{m}sar$_5$-du-ri(-i/e)[94]
šá-a-li(-e)
^{GIŠ}šú-ri-i, $^{(GIŠ)}$šú-ri
$^{(É)}$ú-ri-iš-hi (?)[95]
^{É}ú-ri-iš-hu-si(-e) (?)[96]

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[91] Also, some previous scholars have considered some of these to be "adjectives" in various cases. See n. 6, 7 above.

[92] Some of the forms listed above as circumstantial use of the general case (7.4.1.3) and as probably ablative (7.4.1.2) could be interpreted as genitive.

[93] This word is possibly intransitive subject (126:6).

[94] In K 112E (M 191, 192; Fr., *ZDMG* XXX, 60) NÍG.GA ^{m}*sar$_5$-du-ri-e-i* has been translated "property of S." As genitive, the only attested spellings are: ^{m}*sar$_5$-du-ri* once, ^{m}*sar$_5$-du-ri-e* twice, ^{m}*sar$_5$-du-ri-i* three times. Therefore the form in -*ri-e-i* would be an atypical spelling for the genitive. A dative translation "object for Sarduri" is not impossible, or possibly NÍG.GA was intended as a form of the verb "to give," perhaps meaning "given for (to?) S.," or ^{m}*sar$_5$-du-ri-e-i* may be an example of the substitution of a dative form for a genitive. Cf. also n. 89 above.

[95] : ^{É}*ú-ri-iš-hu*. It is not certain that these forms are genitives, as they are labels on pieces of equipment (see 7.2.2.4).

[96] The spellings with -*si* and -*si-e* occur once each. The occurrences are in labels on pieces of equipment. Fr., *ZDMG* XXX, 60, identifies the form as "nominative" (here called general case), but his translation sometimes is as dative: "dem Rusa gehöriges Inventar(?)." M (e.g. 270-274) translates it as genitive: "Oruzheĭnogo doma (t͡sari͡a) Rusa." These forms are probably to be interpreted as being in the same case as *urišhusini(ei)* (cf. 7.2.2.4), since the contexts are analogous. Since the latter seems to be dative, it seems better to consider $^{(É)}$*urišhuse* also as dative and not genitive or general case.

The following logograms with phonetic complements also evidently represent genitive forms of *e*-stem nouns:

BUZÚR-i

TUR-gi

URU-e

It is evident that these forms end in /-*e*/, i.e. the stem vowel. From the evidence of the *a*-stems (7.4.5.3) it is probable that the basic ending of the genitive is /-*e*/, but in the case of stems ending in /-*e*/ the stem vowel and the case ending have coalesced, and the resulting form is indistinguishable from the general case form.

7.4.5.2. *ne*-stems.--The following forms seem to be genitives of stems ending in /-*ne*/:

a-la-ú-i-ni-ni

a-lu-si(-i)-ni-ni
  a-lu-ú-si-ni-ni

[^{d}al]-di-ni-ni

^{m}ar-giš-te-hi-ni-i

^{m}ar-gi-iš-ti-ni-i, ^{m}ar-giš-ti-ni

$^{\text{KUR}}$ba-ba(-a)-ni[97]

ba-du-si-ni

$^{\text{KUR}}$e-ba-ni(-i)

gu-nu-ú-ni

^{d}hal-di(-i)-ni, ^{d}hal-di-ni-i/e[98]

^{d}hal-di-i-ni(-i)-ni, ^{d}hal-di-ni-ni[98]

^{d}hu-ṭu-i-ni-ni

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[97] A locative sense is possible, but there is a distinct locative form, $^{\text{KUR}}$*babania*.

[98] Genitive force seems more likely than ablative (see n. 7 above). K in his glossary under ^{d}*haldini* "Abl. Sg." says "s. unter . . . *kuruni(ni)*." Under ^{d}*haldi* "Lok." he says "s. unter . . . *kuruni(e)*." Under *kuruni* he shows the constructions with ^{d}*haldini* and ^{d}*haldi*. The latter he translates "durch die Sch(reckensmacht) bei H."; for the former he gives no translation here. In text translations he translates ^{d}*haldini kuruni* "mit dem Schreckensglanz des Haldi," (e.g. p. 38), and he offers exactly the same translation for ^{d}*haldi kuruni* (e.g. p. 61) and for ^{d}*haldi kurunini* (p. 126). It is quite unclear how he arrived at his identification of the cases of these words, how the case attributions suit the translations he offers, or why these words are in different cases at all. Cf. also 7.2.2.4 and n. 7, 8, and 11 above.

^{m}iš-pu-ú-i-ni[99]

^{m}me-nu-a-hi-ni-i

^{m}me-nu-a-i-ni(-i/e)[100]

pi-ṣu-ši-ni

qu-du-ia(-a)-ni

^{m}ru-sa(-a)-i-ni-e[101]

⌈^{d}ši⌉-i-ú-i-ni

$^{\text{GIŠ}}$šú-ri-ni

$^{[\text{URU d}]}$te-i-še-ba-i-ni[102]

tú-hi-ni(-⌈e⌉)[103]

ú-ri-iš-hu-si-ni(-i)[104]

The following probably also belong to this group:[105]

i-na-ni[106]

man-ka-li-ni$^{\text{MEŠ}}$[107]

me-li-a-i-ni

sal-mat-hi-ni

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[99] It is not certain that this spelling occurs as genitive, but that seems the most likely interpretation of 6 obv. 13, rev. 6; 6a:12; 7 obv. 13, 43, rev. 14. A dative sense is possible, but the spelling is not that usual for the dative.

[100] The various spellings of ^{m}*menuaini* are distributed as follows: -*ni-e* once in an uncertain context (34:5); -*ni*, -*ni-i*, and -*ni-e-i* once each in naming various structures; and -*ni-e-i* also occurs in 40:1, 4, in a construction which would call for a genitive in many languages but could also be dative (see 7.4.4 where this passage is cited).

[101] Seems to function as a genitive in 126:16, 130B.

[102] Seems to be a genitive (130A)

[103] See Appendix I.

[104] Cf. 7.2.2.4.

[105] In 121:11 K and M both restore $^{\text{URU}}$ṭu-uš-pa-i-ni-[še]. There is no other occurrence of this form. If it is an adjective, it should be an object, which could hardly end in -*še*. All the attested forms of the name of this city are followed by URU. The more likely restoration would seem to be $^{\text{URU}}$*ṭu-uš-pa-i-ni* [URU], a genitive substantive; cf. 130A, $^{[\text{URU d}]}$*te-i-še-ba-i-ni* URU.

[106] It is not certain that *inani* is ever genitive, but it seems likely to be so in 103A:5.

[107] This reading is much more likely than K's MAN-*kali* ÌÀ.MEŠ (103A:10).

^{m}sar$_{5}$-du-ri-ni(-i)[108]

ú-hi-ni

uš-ti-ip-ti-ni

The proper name ^{KUR}bi-a-ni, ^{KUR}bi-⸢i-a⸣-[ni-e] evidently belongs to this group.[109] The following logograms with phonetic complements also seem to represent genitive forms of ne-stem nouns:

DUB-ni-ni[110]

É.GAL-ni[111]

EN-si-ni-ni

GU$_{4}$-ni-ni

INIM.MEŠ-ni[112]

[LÚ.A]D-ni

LÚ.AD-si-ni

URU-ni(-e)[113]

^{d}UTU-ni-ni

Obviously these forms end in /-ne/, that is, they are identical with the stem form of stems ending in /-ne/.

7.4.5.3. a-stems. The following forms of a-stem nouns seem to be genitive:[114]

^{m}me-i-nu-ú-a-i, ^{m}me-nu-a-i

^{m}ru-sa-a-i

^{GEME}si-la-a(-i)-e

^{GEME}ta-ri-ri-a-i

---

[108] ^{m}sardurini is usually intransitive subject, but it is possibly genitive in 117:8, 110:6.

[109] Evidently not the same land as ^{KUR}biaina.

[110] 98B:4. The division is uncertain. M (142B) reads DUB-ni-ni-ni e-si-ni; K reads DUB-ni IÀ-ni e-si-ni.

[111] Probably genitive in 77a,b.

[112] Occurs in 117:19; it seems unlikely that it is ablative.

[113] URU-ni-e occurs in M 296a = Sayce, JRAS 1882, 656-57. This inscription is omitted from K for completely unclear reasons (see K, pp. 25-26 under Nos. 130, 133e).

[114] Cf. n. 134 below.

tú(-ú)-a-i-e, tú-a-g[i]

$^{\mathrm{URU}}$ţu-uš-pa(-a), $^{\mathrm{URU}}$ţu-uš-pa(-a)-i, $^{\mathrm{(URU)}}$ţu-uš-pa(-a)-e,[115]
$^{\mathrm{URU}}$du-uš-pa-[e]

Probably also to this class belongs $^{\mathrm{d}}$ISKUR-*i* (= *teišebai*) and the following proper names:

$^{\mathrm{KUR}}$bar-šú-a-i
$^{\mathrm{m}}$e-šú-mu-a-i
$^{\mathrm{m}}$hi-la-ru-a-da-a-i
$^{\mathrm{m}}$[k]a-⸢tar⸣-za-a-e
$^{\mathrm{m}}$⸢me⸣-šá-i
$^{\mathrm{KUR}}$qul-ha-i

These all show the addition of -*i*/*e* after the stem vowel *a*, so the ending must be analyzed as /-*xe*/. That is, the ending of the genitive of *a*-stem nouns is identical with the ending of the dative of *e*-stem nouns, as will be shown below (7.4.6).

7.4.5.4. *u*-stems.—There are very few occurrences of possible genitives of *u*-stem nouns. $^{\mathrm{É}}$*ú-ri-iš-hu* occurs as a variant spelling for the more common $^{\mathrm{(É)}}$*ú-ri-iš-hi*.[116] It occurs as a label on a piece of equipment, so its case is quite uncertain. There are also the proper names $^{\mathrm{KUR}}$*pu-uš-tú(-ú)-e*, $^{\mathrm{m}}$*ka-am-ni-ú-i*, and $^{\mathrm{URU}}$*šá-a-ši-lu-ú-i*. If these represent usual Urartian formations, then *u*-stems apparently take the ending /-*xe*/, like *a*-stems. In that case, the genitive of *u*-stems would be identical with the dative of the same stems, differing from the genitive-dative plural only in the stem vowel, if at all.

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[115] The defective spelling and the full spelling are almost equally common: $^{\mathrm{URU}}$*ţu-uš-pa(-a)* 29 times; $^{\mathrm{URU}}$*ţu-uš-pa(-a)-i*, $^{\mathrm{(URU)}}$*ţu-uš-pa(-a)-e* together 31 times.

[116] The form occurs in 112C. The publications of this inscription (Piotrovskiĭ, *EV* V, 111; *KB* II, 55-56; *M* 177-190) do not indicate whether the variant *urišhu* occurs with É or not. Fr. (*ZDMG* XXX, 60) indicates only the form without É for both spellings. M's note implies that É is present with the variant -*hu*.

7.4.6. Dative case, singular.--The following forms seem to function as indirect objects (translated with "to" or "for"), occasionally they seem to have comitative force (translated with "with"), or they function as complements of Class II verbs.[117] For example,

$^{\text{d}}$haldie eurie ini aše $^{\text{m}}$argištiše $^{\text{m}}$menuahiniše $^{\text{URU}}$irpuniedi uštuni

(99B:1) 'AM brought this shield to Irpuni for dedication to Haldi, the lord.'[118]

uštadi $^{\text{LÚ}}$ueli šusinie $^{\text{KUR}}$uelikunigidi (103 V 16-17)

'I went with the whole(?) army to Uelikuni.'

uluštaibi $^{\text{d}}$haldini $^{\text{m}}$išpuinie $^{\text{m}}$sardurehinie $^{\text{m}}$menua $^{\text{m}}$išpuinehinie

(6:18-21) 'Haldi went ahead of IS, MI.'

7.4.6.1 e-stem nouns:

a-me-e-i

$^{\text{d}}$a-ni-qu-gi-e

a-ú(-i)-e, a-ú-i, a-ú-i-e-i

$^{\text{d}}$a-ú-i-e

al-su-i-še(-e)
  al-su-i-ši-e
  al-su-ú-ši-e

$^{\text{d}}$ar-di-i-e

$^{\text{m}}$ar-gi-iš-ti(-i)-e
  $^{\text{m}}$ar-giš-ti-e(-i)

ba(-a)-du-ú-si-i-e
  ba-du-si(-e)
  ba-du-si-i-e

da-ši-i-e

---

[117] $^{\text{LÚ}}$ueli, $^{\text{GIŠ}}$šurie, and šusinie seem to be comitative in sense, to be translated "with . . .," rather than indirect objects. Perhaps the first should not be attributed to this form category; the spelling is not that usual for this case, but there is only one occurrence (103 V 16) where K joins it to the following word: $^{\text{LÚ}}$ú-e-li-šú-si-ni-e. On the meaning and interpretation of $^{\text{GIŠ}}$šurie see n. 9 and 7.4.1.1.

[118] This context shows that uštu- means 'to bring (for dedication)' rather than simply 'to dedicate' as it is usually translated. This meaning is also indicated by the fact that this root in its Class II form means 'to go.' Cf. Sayce, JRAS 1882, 656.

di-ru-ši-i-e

^{d}e-li-ip-ri(-i)-e, ^{d}e-li-ip-ú-ri-e

e-ú-ri(-i)-e

^{d}hal-di-e-i[119]

^{d}ip-ha-ri-⌈e⌉

na-a-pa(-a)-hi-i-a-i-di[120]
na(-a)-pa-hi-a-i-di

ni-ri-bi(-i)-e

pa-a-ri(-e), pa-ri(-e)

^{d}sar-di-i-e

^{m}sar$_5$-du-ri-e(-i)

^{d}ṣi-nu-ya-ar-di-e
[^{d}ṣi-nu]-⌈ú-ya⌉-ar-di-i-e

^{d}[ši]-e-la-ar-[di]-i

^{d}ši-ni-ri(-i)-e

$^{(GIŠ)}$šú-ri(-e), ^{GIŠ}šú-ri-i(-e)

^{LÚ}ú-e-li

^{É}ú-ri-iš-hu-si(-e)

uš-ma-a-še(-e)
uš-ma-še
uš-ma-ši-i-e

Probably, but not certainly, the following also belong to this group:

ba-ú-ši-i-e

bi-di-i-e

^{d}hal-di-e

^{LÚ}hu-ra(-a)-di-e
^{LÚ}hu-ra-di-⌈i⌉-e[121]

i-ni-ri-a-ši-e

ku-ul-me-i-e[121]

ta-áš-mu-še

^{GIŠ}ú-du-li-e-i

The following forms are evidently datives of expanded stems in /-ne/:[122]

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[119] As noted above (7.4.4), this form is often to be translated with "of" (e.g. 110:1, 119:6, 122:24, 124:31, 128:2).

[120] See n. 137 below.

[121] These forms may possibly be objects, but in form they seem to be dative. They occur in 80 III 25 and 80 V 18 respectively. Apparently M (127 III 25) considers ^{LÚ}huradie to be dative.

[122] The dative ending may be added after the -ni, but -ni can never be added after the dative ending. This confirms the observation that -ni is a stem formative. Possibly atqanani in 9:16 is a defectively written dative, or it may be a second object. Fr. (ArO III, 260) also denied that datives could end in -ni. Therefore there seems no alternative to taking ^{d}haldini as a genitive substantive in ^{d}hal-di-ni

$^{d?}$a(-a)-ru-ba-i-ni-e
  $^{d?}$a-ru-ba-ni
  [$^{d?}$a-a]-⸢ru-ba⸣-a-ni-e

^{d}a-i-ra-i-ni(-e)

^{d}al-ap-tú-ši-ni-e

^{m}ar-giš-ti-hi-ni-e

$^{(d)}$ar-ni-i-e

^{d}ar-ṣi-be-di-ni-e (2 words?)

^{d}at-bi-ni-i-e

gu-nu-ši-ni-i(-e)[123]

^{d}hu-ṭu-i-ni-e

^{d}ir-mu-ši-ni-e

^{m}iš-pu-ú-i-ni(-i)-e

^{m}iš-pu-ú-i-ni-hi-ni(-e)
  ^{m}iš-pu-ú-i-ni-e-hi-ni

ma(-a)-si-ni-e, ma-si-ni(-i-e)

^{m}me-nu-ú-a-hi-ni-e
  ^{m}me-nu-a-hi-ni(-i)-e
  ^{m}me-nu-a-hi-ni-i

^{d}na-la-i-ni-e

^{d}qi-li-ba-ni(-e)

^{m}ru-sa-a-hi-ni-[i-e]

^{m}sar$_{5}$-du-ri-e-hi-ni-e
  ^{m}sar$_{5}$-du-ri-hi-ni
  ^{m}[sar$_{5}$]-du-ri-e-[hi]-i-ni-i-e

^{d}ši-i-ú-i-ni(-e)
  ^{d}ši-⸢ú⸣-i-⸢ni-i-e⸣

šú-si-ni-e

^{d}tar-ra-i-ni-e

^{d}ṭu-ra-ni-i-e

ú-ri-iš-hu-si-ni(-i)
  ú-ri-iš-hu-si-ni-e-i[124]

^{d}ú-a-ru-ba-ni-e

^{d}zi-qu-ú-ni-i-e, ^{d}zi-ú-qu-ni-e

Probably the following also are of this type:

a-i-ni(-e), a-i-ni(-e)-i

al-zi-ni-e-i

at-qa-na-ni

ba-u-ši-ni, ba-ú-ši(-i)-ni[125]

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da-ši-i-e GU$_{4}$ 2 UDU.MEŠ (10:15) 'an ox, 2 sheep for the d. of Haldi.' It can hardly be an adjective, since it would have to be dative case.

[123] Occurs as a modifier in such phrases as LÚ.MEŠ *g.*, probably literally 'men for fighting.'

[124] The spellings *-ni*, *-ni-i*, and *-ni-e-i* occur twice each in equivalent contexts as labels on pieces of equipment. The usual translation is 'of the storehouse of N.' (e.g. M 112-117; Fr., *ZDMG* XXX, 54-55). The spelling *-ni-e-i* is not typical of the genitive, but is rather dative. Cf. 7.2.2.4.

[125] 106:1, 122:17, 81 obv. 17, 81 rev. 13, 90:6, 103 I 36, ⸢124 rev. 33⸣. A genitive meaning seems more likely than an ablative one (cf. K; Fr., *Cauc.* VIII, 129-30; and n. 17 above).

e-si-ni

^{d}hal-di-ni(-e)-i

[h]u-bi-ni-⌈e⌉

^{m}me-nu-a-i-ni-e-i

^{m}ru-sa(-a)-i-ni-e

si-e-ir-ši-ni-i-e, si-ir-ši-ni-e[126]

šú(-ú)-i-ni[127]

^{LÚ}ú-e-⌈di-i⌉-[a]-ni-e-i

The following logograms with phonetic complements seem to be dative forms of e-stem (including ne-stem) nouns:

BUZÚR-e

DINGIR-i-e

EN-ri

KUR-ni-e

URU-e-⌈i⌉, URU-i-e[128]

^{d}UTU-ni-e

It will be noted that almost all of these forms have a final vowel sign which contrasts with the inherent vowel of the preceding sign: they end in CV_1-V_2. Furthermore, the spellings -Ci-i-e and -Ci-e-i are quite frequent. Obviously then, the ending of this case is to be analyzed as /-exe/, that is, stem vowel (/e/) + case ending /-xe/.

7.4.6.2. a-stems.--Nouns whose stems end in -a have no case ending in the dative singular. This group is apparently not productive in the language as a whole, as the overwhelming majority of the words of this class are proper names, many are probably borrowed words.

$^{d?}$a(-a)-na-ap-šá-a

^{d}a-da-ru-ta-a

^{d}a-di(-i)-a

^{d}a-ya

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[126] 60:2 and 61:4. It could be construed as a direct object, but the meaning is uncertain and the context would seem to allow interpretation as dative, which seems indicated by the form.

[127] Probably dative in 31 rev. 6, 8. It also occurs in 121:16; 124 obv. 19, 34; but the contexts are uncertain. K considers some of these to be ablative, others genitive.

[128] The contexts and word division are uncertain (79:1, 3).

^{d}a-ra-za-a

^{d}ar-ʾa-a

^{d}ar-si-me-la(-a)

^{d}ba-ba-a

^{d}bar-ṣi-i-a

^{d}e-li-a-ʾa-a[129]

^{d}e-ri-na-a

^{d}ha-a-ra-a

^{m}i-nu-uš-pu-ú-a

^{m}me-i-nu-ú-a
  ^{m}me-nu(-ú)-a
  ^{m}me-nu-u-a

mu-na-a[130]

^{d}qu-e-ra, ^{d}qu-ú-e-ra-a

^{d}qu-e-ra-a-i-n[a][131]

^{d}si-li-i-a

^{d}šú(-ú)-ba-a

^{d}ta-la-ap-ú-ra-a

^{d}te-i-š[e]-e-ba-a

^{d}ṭu-uš-pu-⌈e⌉(-⌈i⌉)-a

^{d}ú(-i)-a

^{d}ú-ni-na-a

^{d}ú-ra-a

[DING]IR.MEŠ-na (?)

^{d}ISKUR-a

7.4.6.3. *u*-stems.--The following forms seem to be dative:

^{d}še-bi-tú-ú-e

ši-e-di-ú-e[132]

ur-pu-ú-e[133]

^{d}zu-zu-ma(-a)-ru-e

Some of these forms may be plural, but they do not conform to the usual pattern of formation of the genitive-dative plural in that the ending *-ú-e* is not preceded by *a*. It therefore seems most likely that they are singular forms from *u*-stem nouns. The ending would be /-*xe*/

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[129] In Inc. 34:9 *e-li-a-ʾa* (without determinative) appears in an uncertain context.

[130] Possibly locative (⌈3A:1⌉, 31 rev. 4).

[131] Possibly locative plural (⌈3A:4, 3B:2⌉, 33 obv. 23).

[132] The context (⌈121:26⌉, 124 rev. 14) is uncertain; the form could be genitive.

[133] Occurs in 10:4. It is possibly a verb (so Ts., *RA* XLVIII, 75), but in the context it seems rather to be a dative noun.

added after the stem vowel, that is, the same type of formation as is used for the genitive of both a- and u-stems and for the dative of e-stems.

7.4.6.4. Forms before edia.--The forms used before the postposition edia 'to' pose a problem. Some of them are formed like the words listed in 7.4.6.3; others follow the type of formation of the genitive-dative plural. There seems no reason why these forms should be plural. Two of the names which so occur also appear in other forms which indicate that the bases end in /-x-/: $^{\mathrm{KUR}}$ur-me-i-e (object, base /urmex-/) and $^{\mathrm{KUR}}$za-ba-a-ha-a-e-ši-li (object, root /zabahax-/). Possibly edia is used, instead of putting the word into the allative case, only after such bases. Since all the words which so occur are proper names, we cannot be sure if their structure conforms to a pattern usual for Urartian or not. The present evidence is not adequate to show whether these should be set up as a special case or whether the ending (/-uxe/?) is an allomorph of the dative or genitive. Perhaps some of these words should be considered genitive-dative plural. The following words occur before edia:

$^{\mathrm{KUR}}$ar-ha-ú-e
[KUR]ha-hi-a-ú-e
$^{\mathrm{KUR}}$li-qi-ú-e
$^{\mathrm{KUR}}$ú-⸢bur⸣-da-ú-e
$^{\mathrm{KUR}}$ur-me-ú-e
$^{\mathrm{KUR}}$za-ba-a-ha-a-e-ú-e

7.4.7. Genitive-dative case, plural.--The genitive and dative have fallen together into a single form category in the plural. As examples of the use of this case the following may be cited:

BUZÚR $^{\mathrm{KUR}}$biainaue (104:33) 'king of Biaina'
?aše $^{\mathrm{GEME}}$lutu LÚ.A.SI.MEŠ-ue arubi (103 V 28)
'Men, women I gave to the soldiers.'

The following words are evidently in this case:

^{d}a-a-i-na-ú-e

⌈a⌉-la-ú-e (?)

a-lu-ka-ú-e (? division uncertain)

$^{\mathrm{URU}}$ar-di-ni-na-ú-e

^{m}ar-giš-te-e-hi-na-a-ú-e

^{d}ar-ṭu-ˀa-ar/ra-sa-ú-e

at-qa-na-na-ú-e

$^{\mathrm{KUR}}$ba-ba-na-ú-e

$^{\mathrm{KUR}}$bi-a-i-na-a-ụ(´)-e
$^{\mathrm{KUR}}$bi-a-i-na-ụ(´)-e
$^{\mathrm{KUR}}$bi-i-a-i-na(-a)-ú-e
$^{\mathrm{KUR}}$bi-i-na-a-ú-e
$^{\mathrm{KUR}}$bi-a-na-ú-e
$^{\mathrm{KUR}}$bi-i-a-i-na-e[134]
$^{\mathrm{KUR}}$bi-i-na-e
$^{\mathrm{KUR}}$bi-a-i-na-e
$^{\mathrm{KUR}}$bi-ya-na-ú-e

di-ra-ú-e

$^{\mathrm{KUR}}$e-ba-ni-na-ú-e

e-ri-e-la-a-ú-e, e-ri-la-ú-e

^{d}hal-di-na-ú-e
^{d}[hal-di]-i-na(-a)-ú-e

$^{\mathrm{LÚ}}$hu-ra-di-na-ú-e$^{(\mathrm{MEŠ})}$

i-na-hi-na-ú-e

^{d}i-nu(-ú)-a-na-ú-e

i-ṣi-na-a-ú-⌈e⌉

$^{\mathrm{KUR}}$lu-lu-i-na(-a)-ú-i

[p]i-la-ú-e

^{m}ru-sa-hi-na-ú-e

^{d}ṣu-i-ni-na-ú-e

$^{\mathrm{KUR}}$šú-ra-ụ(´)-e
$^{\mathrm{(KUR)}}$šú-ra-a-ú-e
$^{\mathrm{KUR}}$šú-ú-ra-a-ú-e

$^{\mathrm{URU}}$ṭu-uš-pa(-ni)-na-ú-e

^{d}ú-a-i-na-ú-e

The following logograms with phonetic complements also evidently represent nouns in this case:

BUZÚR(.MEŠ)-ú-e

DINGIR.MEŠ-ú-e

[KUR.KUR]-⌈ú⌉-e[135]

KUR.KUR.MEŠ-a-u-e
KUR.KUR.MEŠ-ú-e

GIŠ.MEŠ-ú-i

LÚ.A.SI.MEŠ-ú-e

LÚ.UKÙ.MEŠ-ú-e

URU.[M]EŠ-ú-⌈e⌉

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[134] $^{\mathrm{KUR}}$bi(-i)-a-i-na-e is probably defective writing of the genitive plural, but possibly singular used for plural.

[135] Very uncertain reading; so M (No. 164); K (111c:10) has [BUZÚR BUZÚR.MEŠ]-ú-e.

The following proper names are also of this type:

$^{\text{KUR}}$al-ga-ni-na-ú-e
$^{\text{URU}}$qu-me-nu-na-ú-e

The ending is evidently to be analyzed as /-xe/, preceded by the change of stem vowel i/e or u(?) to a. The consistent spelling with -ú-e suggests that /x/ in this ending had a phonetic form something like a bilabial, roughly [w], or else we are dealing here with a rigidly formalized spelling convention.

7.4.8. Allative case, singular.--This case indicates the goal of motion, for example,

ušṭadi $^{\text{KUR}}$qumahahaline $^{\text{KUR}}$ebaniedi (103 II 54-55)
'I went to the land of Q.'

This form is also used after the verb which evidently means 'to pray.' The following words apparently are in this case:

e-stems

$^{\text{URU}}$ar-di-ni-di
$^{\text{KUR}}$ba-ba-a-ni-i-e-di
$^{\text{KUR}}$e-ba-ni(-i)-e-di
  $^{\text{KUR}}$e-ba-ni-gi-di
  [KUR]e-ba-a-ni-i-e-di

[ha?]-⸢ri-e⸣-di[136]
$^{\text{d}}$hal-di(-i)-e-di

a-stems[137]

$^{\text{KUR}}$ba-ba-na-di

$^{\text{KUR}}$bi-a-i-na(-i)-di
  $^{\text{KUR}}$bi-a-na-i-di
  $^{\text{KUR}}$bi-i-a-i-na-a-[i-di]

---

[136] = Ass. ina muḫḫi(UGU) ḫarrāni(GIR-[ni]).

[137] napahiaidi in 103 II 21-23 is considered by Fr. (ArO III, 267-68) to be allative. In form it could be so, but it is in parallel construction with a form apparently dative: É.GAL.MEŠ ištini šidištubi $^{\text{KUR}}$biainaue ušmaše $^{\text{KUR}}$luluinaui napahiaidi 'I built fortresses there for the strengthening(?) of Biaina, for the controlling(?) of Luluina.' Therefore, it seems necessary to consider it to be dative of a stem ending in -di. Fr. considered this possibility, but preferred interpretation as allative. K calls it a passive infinitive.

^{m}me-nu-a-hi-na-a-di

qi-ú-ra-a-e-di[138]
qi-ú-ra-i-di, qi-ra-e-di

^{m}ru-sa-hi-na(-i)-di[139]

šú-ya-i-di

u-stems

⸢tar⸣-ṷa-i-[nu]-⸢ú⸣-a-di

tar-a-i-ú-e-di

Proper names

^{KUR}a-pu-ni-i-e-di

⸢$^{KUR?}$⸣ar-hi-i-e-d⸢i⸣ (?)

⸢^{KUR}⸣áš-⸢qa⸣-la-⸢a-ši-i-e⸣-di

KUR.AŠŠUR-ni-e-di

[^{KUR}ba-ru]-ú-a-ta-⸢i⸣-di

^{KUR}bar-šú-a-i-di

^{KUR}e-ri-a-hi-ni(-e)-di

^{KUR}e-ti-i-ú-ni-i-e-di
^{KUR}e-ti-ú-ni-e-di

^{KUR}e-ti-ú-hi-na-e-di

^{KUR}ha-ti-na-i-di

^{KUR}i-ga-ni-e-di

^{KUR}iš-te-lu-a-ni-gi-di

^{KUR}ma(-a)-na-a-i-di
^{KUR}ma-na-i-di

^{KUR}pu-lu-a-di-e-di

^{KUR}pu-uš-tú(-ú)-e-di

^{KUR}qa-di-a-i-ni-e-di

^{KUR}qu-ul-ha-i-di

^{KUR}u-i-ṭí-ru-hi-e-di

^{KUR}ú-e-li-ku-ni-gi-di

^{KUR}ur-me(-i)-e-di

^{URU}al-qa-ni-a-i-di

^{URU}ir(-e)-pu-ni-e-di

^{URU}li-ip-li-ú-ni-e-d[i]

^{URU}me-e-iš-ta-a-e-di

^{URU}zu-ú-a-ni-di

^{m}di-a-ú-e-hi-ni-e-di
[^{m}d]i-a-ú-hi-ni-di
[^{m}]di-i-[a]-⸢ú-hi-ni-e-di⸣

^{m}lu-šá-i-ni-e-di

^{m}ú-i-ṭè-ru-hi-ni-e-di

Logograms

BUZÚR-nu-a-di[140]

BUZÚR.MEŠ-di

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[138] = Ass. *ina muhhi*(UGU) *qaqqāri*(KI-⸢ri⸣)

[139] Probably plural

[140] Context is uncertain; K (80 VI 13) translates "I became king."

EN-di

GIŠ.LÀ.ŠAR-ni-di (?)

^{d}ISKUR-di

KUR-ni(-e)-di

KUR.KUR.MEŠ-di

LUGAL.MEŠ-di

U$_4$-ME.MEŠ-di

^{d}UTU(-ni)-di

Analysis of these forms poses problems, since the same base may appear in more than one form. This is especially apparent in 125 obv. 34-35 where close to one another, in a context which is unclear, occur the forms ^{KUR}ba-ba-a-ni-i-e-di (/babanexede/) and ^{KUR}ba-ba-na-di (/babanade/). It does not seem that the contrast of the two forms is one of singular and plural, though that is possible. It may be that the forms are equivalent in meaning. This seems possible in view of the apparent equivalence of ^{KUR}bi-a-i-na-di (/bexaxenade/) and ^{KUR}bi-a-i-na-i-di (/bexaxenaxede/); ^{m}ru-sa-hi-na-di (/rusahenade/) and ^{m}ru-sa-hi-na-i-di (/rusahenaxede/). Perhaps the apparent equivalence is another example of the use of singular for plural. Or perhaps the forms appearing as ^{KUR}ba-ba-na-di, ^{KUR}bi-a-i-na-di, and ^{m}ru-sa-hi-na-di should be analyzed as ending in /-xde/ and the writing system has no way of representing the cluster. The occurrence of the form tar-a-i-nu-ú-a-di (instead of *-e-di) tends to confirm the guess that all these writings are attempts to suggest a cluster of /xd/. In that case, the appearance of the vowel in some occurrences might be compared to the intrusive vowel noted adjacent to l, r, and š (4.7 (1)). The tentative analysis suggested is /-xde/ ~ /-xede/ (?).

7.4.9. Allative case, plural.--In one set formula of frequent occurrence there occur two forms in -ašte (e.g. 82 obv. 22-23):

hutiadi ^{d}haldiedi EN-di . . . DINGIR.MEŠ-ašte ^{KUR}biainašte

'I prayed to Haldi the lord . . . to the Biainian gods.'

The forms in -di in parallel construction indicate clearly that the forms are allative.[141] The ending is probably to be analyzed as /-šte/, before which the stem vowel is always a. One other form of the same type occurs in an untranslatable passage (23:20-22):

ˀa-a-ha-a-ú LÚ.A.SI.MEŠ-áš-te ú-i ú-ni a-šá-a-zi-e hi-i-ni-e
ši-ú-bi

7.4.10. Locative case, singular. According to D'îakonov (Comparative Survey, 4), Urartian has a distinction, which seems to have existed in Hurrian (IH, 112-13) between a locative in -a which preserves the stem vowel (i.e. ends in /-xa/ by the analysis used in this paper) and a stative in -a in which the stem vowel disappears before the case ending. He cites as an example of the former "ebani-a," but this form does not seem to be attested in the texts. Many of the forms ending in -Ca are plural and so, presumably, would not be subject to the distinction he proposes, e.g.

ali LÚ tuhi 3 $^{\text{KUR}}$ebana 1 MU zadubi (103 VI 25-26)

'what prisoners(?) in 3 lands in one year I made'

which seems quite clearly locative. gunuša and $^{\text{LÚ}}$huradina may be examples of the stative (though the last is almost certainly plural), but there are no examples certain enough to prove that the distinction exists in Urartian; further data will be needed before the "stative" as a distinct case can be considered proven. Many examples of this type seem not to be significantly different in sense from the "locative." As examples of the use of forms of these types may be cited:

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[141] The interpretation is strengthened by the striking similarity to the form of the ending of the corresponding case in Hurrian:-(a)š-ta. The spellings of $^{\text{KUR}}$biainašte which occur are: $^{\text{KUR}}$bi-a-na-áš-te, $^{\text{KUR}}$bi-a-i-na(-a)-áš-te, and $^{\text{KUR}}$bi-i-a-i-na(-a)-áš-te. Perhaps this expression is an archaic survival, especially in view of its religious associations.

[LÚ.EN].NAM.MEŠ esia terubi (82 rev. 17)

'I set prefects in place.'

^{URU}šebeteria ^{d}haldi iarani šidištuni (25:13-14)

'In Š. he built a Haldi chapel(?).'

^{d}haldia and ^{KUR}etiunia occur before the postposition ištinie, which seems to mean "for, on behalf of." The use of the locative in this construction may have arisen from some such idea as "acting in place of, as representative of."

^{d}haldia ištinie inanele arniušinili šusini šali zadubi

(80 IV 10-13) 'For Haldi I did these deeds in one year.'

7.4.10.1. Forms ending in /-xa/.--The following forms add the vowel sign -a after the stem vowel:

^{KUR}ba-ba-ni-a

e-di-a

e-si(-i)-a

e-si-⸢ri⸣-i-[a?] (uncertain)

e-ši-a (uncertain)[142]

^{d}hal-di-a[143]

⸢ṣu-i⸣-ni-a

ṣu-ni-a

^{KUR}e-ti-ú-ni-a[144]

^{URU}še-he-te-ri-a[145]

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[142] The division (125 rev. 25, 126:22) is uncertain. K divides: A.MEŠ-e ši-a-ṣi-ú-li (cf. K, p. 157 n. 1).

[143] This is perhaps the source of the Assyrian form of this name used in the Topzawa inscription (K 122): ^{d}ḫal-di-a. The Assyrian version of the Kelishin inscription (K 9) uses ^{d}ḫal-di/e-e. ^{d}hal-di-a is attested in Urartian only before ištinie.

[144] Occurs only once, before ištinie.

[145] This is probably also the stem form, cf. ^{URU}še-be-te-ri-a-ni (genitive).

7.4.10.2. Forms ending in /-*a*/.—The following forms lose the stem vowel before *a*:

^{d}al-di-na (plural)
^{KUR}e-ba-na (plural)
e-sa-a (?)
gu-nu(-ú)-šá-a[146]
^{d}hal-di-na(-a)
  ^{d}hal-di-i-na-a (plural)
^{LÚ}hu(-ú)-ra-di-na-a[147] (plural)

mu-na-a (?)
^{d}qu-e-ra-a-i-n[a] (plural?)
^{m}ru-sa-a-hi-na (plural)
šá-na (?)
šú-si-na[148]
tú-hi-ni-na-a[149]

Probably also of this type is the proper name ^{URU}*me-iš-ta* and the logograms with phonetic complements É.GAL-*a*, GIŠ.GU.ZA-*a*, and KUR.KUR.MEŠ-*a*, but all these are somewhat uncertain.

7.4.11. Locative case(?), plural(?).—There are a number of forms ending in -*(a)ṣi* which seem to have locative force, perhaps also sometimes the force of an allative. Many of these are clearly plural; several are of uncertain number.[150] If these forms do belong to the plural category, the appearance of the vowel *a* in all the attested examples would perhaps be related to the regular use of the same vowel in the formation of the genitive-dative and allative plural. There are not enough of these forms to certainly analyze the ending and stem form. On the basis of the occurring forms, probably the ending is /-*xaṣe*/ after stem vowel *e* or *u*, /-*ṣe*/ after stem vowel *a*.[151] As an example of the usage of this case may be cited:

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[146] This form occurs in the phrase *gunuša haubi* (e.g. 103 II 56) 'I took by force,' literally probably 'I captured in battle.' Cf. Ts., *NHI*, 33; Fr., *ZA* VI, 280; *Einf*., 14, 66.

[147] The interpretation of ^{LÚ}*huradina* (e.g. 6:15) remains obscure. Cf. Fr., *ZA* VI, 283-84; *Einf*., 14, 54.

[148] The interpretation of *šusina* (122:28) remains uncertain. Possibly it is a locative form, apparently plural in sense:

šusina MU.M[EŠ ^{KUR}b]iainili nulduli (122:28-29) = *Ass*. ina libbi šanātēya ana ^{KUR}urarṭi(URI) erti[?i]

'I watched over Biaina in (my) years.'

[149] See Appendix I.

[150] *ebaniaṣi* in 103 III 61 is perhaps least readily interpreted as plural:

karuali 4 BUZÚR.MEŠ ^{KUR}ueduretiuni ^{KUR}ebaniaṣe

'He fought four kings in the land of Uedur-etiuni.'

inanili 4 É.GAL.MEŠ $^{\mathrm{KUR}}$*ebaniaṣe* haubi (103 VI 18-19)

'These four fortresses *in the land(s?)* I conquered.'

The following forms seem to be of this type:[152]

a-la-ṣi

$^{\mathrm{KUR}}$e-ba-a-ni-a-ṣi-e
$^{\mathrm{KUR}}$e-ba-ni-a-ṣi(-e)

$^{\mathrm{KUR}}$lu-lu-i-na-ṣi

šú-hi-na-a-ṣi-e

šú-ya-ṣi(-e)

ya-ši-na-ṣi-e[153]

Etiuni is well attested elsewhere as a land name, so perhaps Uedur-etiuni is a compound, with which a plural would be appropriate, or else perhaps the territory of each of the four kings is considered to be a 'land.' In 23:28 the locative force of $^{\mathrm{KUR}}$*ebaniaṣi* is not clear. In 80 II 15 $^{\mathrm{KUR}}$*hatinaṣe* occurs after *[uš]tadi*, which position is usually occupied by an allative. On these forms cf. Ts., *NHI*, 38; Fr., *ZA* VI, 276-77.

[151] The form after *u* is a guess, analyzing *šú-ya-ṣi(-e)* as stem *šu-* + /-*xaṣe*/. It would equally be possible to analyze the stem as /*šuxa*-/. The apparent fusion of the ending with the stem seems to rule out any possibility of treating this element as a postposition, as is done by Ts. (*RA* XXXII, 58, though he writes as one word with what precedes).

[152] It is quite uncertain whether any of the occurrences of LÚ.A.SI.MEŠ-*ṣi(-e)* belong to this category (80 II 57, IV 79; 104:11). The *ṣi* may be part of the stem. The same is true of *ur-pu-a-ṣi* (76B:6, 7; 76D:1), TAK-*ṣi* (97:8, 122:14). In 122:14 TAK-*ṣi* seems to be an object.

[153] This may be only the end of a word; the preceding area is illegible (102 obv. 11).

Also the following logograms with phonetic complements:

⌈KÁ-ṣi-e⌉

KUR.KUR.MEŠ-ṣi

and the proper name

$^{\text{KUR}}$ha-ti-i-na-a-ṣi-e

7.5. Summary of case endings.--The endings discussed in the preceding sections can be summarized as follows:[154]

	e-stems[155]	a-stems	u-stems
Singular			
General case	/e	a/	
Ergative	/e-še	a-še/	
Genitive	/e-∅	a-xe	u-xe(?)/
Dative	/e-xe	a-∅	u-xe/
Allative	/e-x(e)de	a-xde	u-xde/
Locative	/e-xa/, /∅-a(?)/		
Plural			
General case	/e-le	a-le	u-le/
Genitive-dative	/a-xe	a-xe/	
Allative	/a-šte/		
Locative(?)	/e-xaṣe	a-ṣe	u-xaṣe/

7.6. Nouns with pronominal suffixes.--There are a few examples of nouns with pronominal suffixes, but not enough to draw many firm conclusions.

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[154] Gaps in the table indicate forms not attested in the extant texts.

[155] Including stems ending in /-ne/. The ablative-instrumental function of the general case occurs only with /-ne/-stems.

7.6.1. First person singular genitive suffix.--/-*xuke*/ added after the stem vowel.

$^{\text{KUR}}$e-ba-ni-ú-ki(-e), $^{\text{KUR}}$e-[ba-a]-ni-ú-ki 'my land'

e-ú-ri-u-ki 'my lord'

The first noun has locative force, the second dative. In one form the case suffix of the allative singular seems to be added after the pronominal suffix:

$^{\text{KUR}}$e-ba-ni-ú-ki(-e)-di, $^{\text{KUR}}$e-ba-ni-ki-di 'to my land'

Probably also of this type is $^{\text{KUR}}$*e-ba-ni-ú-ka-ni* (80 III 7, 31), which apparently has the suffix -*ni* added to the form meaning 'my land.' It is not clear from the contexts whether the form is ablative or locative in sense.

7.6.2. First person singular dative suffix.--/-*me*/, often attached to verbal forms (6.9.3), may also be suffixed to the subject of the verb, in which case the final vowel of the ergative ending -*še* is lost:[156]

$^{\text{d}}$hal-di-iš-me(-e) 'Haldi (gave) to me'

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[156] The same type of form occurs with a pronominal subject: *a-lu-uš-me*.

CHAPTER VIII

PRONOUNS

8.0. General.--Most of the material relative to pronouns has already been presented, but it is recapitulated here for convenience.

8.1. Relative and indefinite pronouns.

8.1.1. *a-lu-še*, *[a-lu]-še-e*, *a-lu-ú-še* 'who, whoever.'--This is used as an indefinite or relative pronoun in the ergative case (subject of a Class I verb), for example:[1]

aluše ini DUB-te pitulie (25:22-23)

'whoever destroys this inscription' (in curse formula)

BUZÚR *DAN*-*NU* aluše ^{KUR}biainili nulduali (119:8)

'mighty king, who rules(?) Biaina' (in titulary)

It also occurs with an object suffixed:

a-lu-uš-me	'who . . . to me'
a-lu-uš-ni	'who . . . him(?)'[2]

8.1.2. *a-li* 'what, which.'--This is apparently a general case pronoun. Unfortunately most of the contexts in which it appears are of quite uncertain meaning. It seems to be used as (1) object of a

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[1] The Ass. parallel is *a-⌈lu⌉-še* (9:38) : Ass. ⌈*šá*⌉ (9:39). *aluše* is probably also to be restored in 9:28 corresponding to Ass. *ša* in 9:27. However, in 9:30 *[a]-lu-še* : Ass. *šúm-mu* 'if' (9:29).

[2] *alušni* is found in 74 rev. 7: *[a-l]u-uš-ni* *tú-li-e*. There is a possibility that the division should be *aluš* *nitulie*, though a verb *nitulie* is not attested. Cf. Fr., *Cauc*. VIII, 137-38.

Class I verb, (2) subject of a Class II verb, and perhaps also as (3) complement of a Class II verb.

É murili ali LÚ.AD-še LÚ.AD.AD-še zaduali (103 I 33-34)
'the m. houses which (his) father (and his) grandfather had built'

^{LÚ}irdi ali ^{KUR}qulhai ištini manu zašgubi (103 III 21-22)
'the governor(?) who was there at(?) Q. I put to death.'

uladi ^{KUR}etiuniedi ali aštadi (103 V 4-5)
'I went to E. where(?) I . . ? . . .'

Apparently *ali* can be used as an adjective:

ali LÚ-ta-ú tuhi ištini zadubi 3 LIM 2 ME 25 upše ištinini nahubi (103 IV 40-43) 'what prisoners, booty(?) there I made were: 3,225 men from there I carried off . . .'

8.1.3. *a-li(-e)-li*.—This is probably the plural of *ali*. It is used as pronoun and adjective (82 rev. 33, 125 obv. 35, 128:5), e.g.

aleli BUZÚR.MEŠ arnuiali ^{m}diauhine šišini MU [ha]ubi (82 rev. 33-35) 'What kings had aided(?) D. in one year I conquered.'

8.1.4. Other indefinite pronouns.—The meanings of most of the following are somewhat uncertain:[3]

a-li-ki, a-li-ki$_4$, a-li-e-ki-e	'some'[4]
a-i-ni(-e/i), a-i-ni-e-i, ⌈a⌉-ni-e-i	'(to) anyone'[5]

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[3] These forms are discussed by G, *RHA* 22, 179-85; *ZA* V, 125-28.

[4] Occurs only in correlative pairs, 'some . . . some/others.'

[5] The Ass. parallels are: ⌈*a-i-ni-e-i*⌉ (9:30) : Ass. ⌈*me*⌉*-ni-*⌈*me-ni*⌉ (9:29); *a-[i-ni-i]* (9:38) : Ass. ⌈*a*⌉*-na* *me-ni-me-ni* (9:39). It seems to be dative in sense in all occurrences.

a-i-še(-i), a-i-še-e-i	'someone' (?)[6]
gi-e-i, gi-i, gi-⌈e⌉	'anything' (?)[7]
ú-li(-e), ú-li-i	'by(?) another'[8]
ú-li(-e)-še	'to another'[8]

8.2. Personal pronouns.

8.2.1. *i-e-še* 'I.'—This is the first person singular pronoun in the ergative case (subject of a Class I verb), for example:

ieše $^{\mathrm{URU}}$bihurani haubi (80 VI 20) 'I captured B.'

8.2.2. Third person singular possessive pronouns.[9]—The following is apparently an independent pronoun:

ma(-a)-si-ni-e, ma-si-ni, ma-si-e	'his (own)'

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[6] K translates "to anywhere." *aišei* is possibly used adjectivally in 103 I 35, but the meaning of the passage is uncertain.

[7] See Appendix IV on the meaning of *gi(e)i*.

[8] *ule* occurs only in the curse formula: *aluše ule inili dule* 'whoever sees these things (done) by another(?).' *uleše* occurs only in the curse formula also, in the phrase *aluše uleše tiule* 'whoever says to another.' The case formations (if that is what they are) do not appear to be the usual nominal ones.

[9] It is probable that *mani* is, in some occurrences at least, object pronoun third person singular 'him, it' (cf. Fr., *Einf.*, 17; *Cauc.* VIII, 131; M., *VDI* 1953,1, 271; K, glossary, s.v.). However, many of its occurrences can also be interpreted as meaning "is." The copulative verb is often closely associated with a personal or demonstrative pronoun (cf. e.g., Blake, *RHA* 35, 109-10; Erwin Reifler, *Lingua* III (1953) 387-90). *manini* would be another form from the same stem.

Šusina in 122:28 has as Ass. equivalent *ina ⌈lìb⌉-bi . . . -ya* 'in my . . . .' It would seem to be a plural form of *šusini*. The latter occurs frequently before MU; the phrase is usually translated "in one year," since *šusini* in this phrase is often replaced by the figure 1. These usages could be reconciled by considering *šusin-* to be a weak demonstrative; then the above phrases would be translated "in a/the year" and "in the(se) . . .," or something of the sort. K's suggestion (sg. 'every,' pl. 'all'; p. 203 s.v.) does not seem to fit the contexts very well and does not account adequately for the variant writing of the singular.

An example of its use is:[10]

aluše tinini tulie mase tini teli (126:38-40)

'whoever effaces (my) name (and) places his (own) name'

ma-si-ni-li (81 left 10) may be the corresponding plural form.

8.2.3. Possessive pronoun suffix (on noun).[11]--The only form attested is the first person singular /-*xuke*/ 'my':

BUZÚR $^{\mathrm{KUR}}$hušalhi . . . parubi erṣidu[bi] $^{\mathrm{KUR}}$*ebaniuke* (103 I 9-11)

'The king of H. . . . I carried off, I caused to dwell *in my land*.'

$^{\mathrm{KUR}}$ebani $^{\mathrm{KUR}}$*ebaniukedi* abilidubi (103 II 30)

'I added the land *to my land*.'

8.2.4. Direct object pronoun suffixes (on verb).[12]

/-ne/ (?)[13]	'him, it'
/-le/	'them'

Example: ^{d}haldinili KÁ šidištua*li* (41:6-7)

'He built the Haldi gates.'

8.2.5. Indirect object pronoun suffix (on verb or subject of verb).[14]--The only known form is the first person singular /-*me*/ '(to/for) me' as in

artu*me* DINGIR.MEŠ-še piṣu[še] (122:30) 'May the gods give *me* joy.'

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[10] Perhaps *ma-a-si* (81 left 1) is another example of this form. All the examples occurring are probably dative in sense.

[11] Note also the combination with the particle *ka(i)* 'before': /*kaxuke*/ 'before me' (Chap. X).

[12] For a possible use on a subject pronoun see n. 2. See also 6.9.

[13] Whether /-*ne*/ ever has the value of an object suffix is uncertain (see Fr., *Cauc*. VIII, 136-43 and 6.4.2.1 above).

[14] See 6.9.3 and 7.6.2.

CHAPTER IX

POSTPOSITIONS

The following words have meanings similar to those of prepositions in English, but they follow the word governed. The reasons for treating these as independent words rather than as suffixes are given in Appendix III. The governed noun regularly stands in the general case (see 7.4.1.4), except before *edia* (see 7.4.6.4) and *ištinie* (see 7.4.10).

e-di(-i)-a[1]	'to' (movement)
e-di(-i)-ni, e-din[2]	'for (the sake of)'
iš-ti-ni(-i)-e[3]	'for (on behalf of)'

---

[1] This word occurs only preceded by proper names, e.g.

uštadi $^{\text{KUR}}$urmeue edia (103 VI 22) 'I went to Urme'

except for one occurrence of the logogram LÚ.EN.NAM. The proper name stands in a form which may be the dative singular of a stem ending in *u* (though why only such stems should appear is not clear) or dative plural, but with the usual change of stem vowel to *a* not always present. There are no examples of the same forms appearing elsewhere than before *edia*. That *edia* is an independent word is shown in 103 VI 13, where it stands at the beginning of the line.

[2] A word spelled identically also appears in contexts where it can hardly be a postposition, e.g. 2 BUZÚR.MEŠ-*lili* *edini* *suṭuqubi* '2 kings I took(?) away(?).' However, it seems to be clearly a postposition in *$^{\text{d}}$haldie eurie ini [kubuše $^{\text{m}}$]sarduriše $^{\text{m}}$argištihiniše uštuni ulgušiyani edini* 'SA dedicated this [helmet] to Haldi the lord for (his) life.' (112a). Cf. Ass. 9:12: [*ana*] *pu-ut* *balāṭi*(TI.LA)-*šú* 'for his life,' where the corresponding Urart. 9:13 is certainly to be restored *ul-gu-ši-i-a-n[i* *e-di-ni*]. K's translation "for his life forever" seems very unlikely. Cf. n. 76 to 7.4.1.4.

[3] Note that the postposition is spelled *iš-ti-ni(-i)-e* /*eštenexe*/, while the adverb 'there' is spelled *iš-ti-ni(-i)*, only once *iš-ti-ni-e* /*eštene*/.

ka(-a)-i, ka[4]	'before, to the presence of'
ka-i-ni	'before'[5]
pi(-e)-i	'under'
pi-e-i-ni(-e), pi(-i/e)-ni	'under'[6]

---

[4] /kaxuke/, spelled ka-a-i-ú-ki4, ka-ú-ki, ka-ú-ki-e/⌈i⌉ is clearly a combination of kai with the pronoun suffix /-xuke/ 'me.' The meaning is confirmed by the parallel [ka-a]-ú-ki (122:13) : Ass. [ina] ⌈pāni(IGI)-ya⌉ (122:12) 'before me.' ka-ú-ri (104:7) possibly means 'before him.'

[5] kaini occurs only twice (103 V 27, 6 rev. 45), both occurrences somewhat uncertain in meaning.

[6] pi(ei)ni occurs only in the curse formula, after ^{d}UTU-ni, except for one probable occurrence in a broken context (80 II 17). Its meaning is quite uncertain, but it is conjectured on the assumption of relation to pi(e)i, though the two forms never interchange. The latter form occurs only in the phrase mešini piei ʔaldubi 'I spared(?) (him) under tribute,' and in the passage in 75:8 cited in Appendix III.

CHAPTER X

PARTICLES

There are a number of particles (undeclined as far as the present evidence goes) corresponding in meaning to adverbs and conjunctions of English. Some of these are of frequent occurrence, yet the meaning of most of them is highly uncertain. Some are probably of nominal origin.

a-še	'when'
a-ú-i-e(-i)	'somewhere, anywhere'[1]
e-ˀa, e-ya	'and'
e-ˀa . . . e-ˀa	'both . . . and'
e-a-⌈i⌉. . . e-a-⌈i⌉	'either . . . or'
i-nu-ki	'here' (?)[2]
i-ú, i-ú i-ú (: Ass. *kī*)	'when'
⌈iš?-e⌉-ya-me	'anywhere'[3]
iš-ti-ni(-i)[4]	'there'

---

[1] See G, *RHA* 22, 181-85. K translates "dem Nichts."

[2] This may be the stem form of a noun (cf. *inukani*). K's translation, "etwa oberes, an den Quellen gelegenes Land" seems rather doubtful.

[3] The occurrence is in 9:31; the translation is a guess from the context, the Ass. contains no counterpart. The reading is, of course, uncertain.

[4] Possibly the stem form of a noun.

iš-ti(-i)-ni-ni	'there, from there'
iš-tú-[ni?] (: Ass. *ēli*(UG[U]))	'above, over'
me-i	'and'[5]
ši-iš-ti(-i)-ni	'again'[6]
ši-šú-ha-ni	'again'[6]
ta-ra-ni	'also(?), again(?)[7]
ú-i(-e)	'not, no'
ú-te-e (?)[8]	?
MU.MU-ni	'yearly, annual'

---

[5] 'and' is the most likely translation for *mei* (Fr., *Einf*., 45; *Cauc*. VIII, 135-36; Ts., *NHI*, 35) rather than 'his' as proposed by Sayce (*JRAS* 1882, 438-39, 708) and accepted by L-H (*ZDMG* LVI, 110; LVIII, 850 n. 1) and by G (*ZA* V, 121; *IF* LIII, 313).

[6] See K, p. 225.

[7] See K, pp. 225-26.

[8] It does not seem likely that this is a suffix or a postposition, as it follows fully inflected forms:

[$^{\text{URU}}$ţušpa pat]are ute (20:5)

$^{\text{URU}}$ţušpa(e) URU ⌜ute⌝ (12:8, 24, 40; 18b:5)

agauri u⌜te⌝ (125 obv. 42)

APPENDIX I

tú(-ú)-hi, tú-hi-ni(-e), and tú-hi-ni-na-a

Friedrich (ZA VI, 268-69; Einf., 63) considers tú(-ú)-hi, tú-hi-ni(-e), and tú-hi-ni-na-a to be suffixes. Tseretheli (RA XXXII, 61) has accepted this view, though earlier (NHI, 38, 60, etc.) he had considered them to be separate words. As suffixes they would be formatives for abstract nouns. The following combinations occur:

hu-ṭu tú-hi (80 V 16, 78; 102 I 28)
hu-ṭu tú-ú-hi (124 obv. 32)
BUZÚR tú-hi (81 obv. 9, 102 I 26, 103A:2, 109:3, 124 obv. 23)
LÚ tú-hi (103 I 17, 47; II 32; V 29, VI 25)
LÚ-ta tú-hi (103 III 44)
LÚ-ta-ú tú-hi (103 IV 40)
BUZÚR tú-hi-ni(-e) (102 I 27, 103A:2, 109:4, 116a:7, 8; 116c:9; 124 obv. 26)
BUZÚR tú-hi-ni-na-a (124 obv. 25)

Friedrich shows that these sequences can be treated as single words, but not that they need to be. In particular, his analysis of two passages seems unsatisfactory:

a-li LÚ-ta tú-hi za-du-bi (103 III 44)
a-li LÚ-ta-ú tú-h[i] iš-ti-ni za-du-ú-b[i] (103 IV 40)
'what prisoners(?)[1] I made (were) . . .'

---

[1] The term includes both captured and killed, but the killed seem to have been executed after seizure rather than killed in battle.

He summarizes the form used here as LÚ-*ta(-ú)-tú-hi-ni*. This word, on the face of it, does not seem very likely. Urartian words rarely run to such length (LÚ itself probably represents several syllables in its Urartian form), and phonetic complements are generally limited to two or three signs at most, rather than five. Furthermore, there is not an attested example of -*Ca-u*- appearing in a variant spelling -*Ca*-. On the other hand, -*Ca-u* does appear as a final element (e.g. *?a-a-ha-a-ú* (23:20), where -*ú* may be a case ending).[2] It does seem a little more likely that LÚ-*ta* and LÚ-*ta-ú* are words separate from what follows.[3] On the available data the matter cannot be proven one way or the other. *tuhi(ni)* is entered as a word in the lists in this paper but it can be interpreted as preceded by the elements listed above without affecting the morphological analysis.

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[2] The form ^{m}*ru-sa-a-ú* occasionally referred to in the literature is probably an erroneous reading for ^{m}*ru-sa-a-ni* (131:1).

[3] Tseretheli's analysis of these expressions as abbreviations (*RA* XXXII, 32) seems very unlikely:

^{LÚ}ta-a-(ar-šú)-ú-(a)-tú-ṭi

(he reads *hi* as *ṭi*). Note that the text (103 IV 40 = *NHI* B 39) has LÚ-*ta-ú tú-h[i]*; he also cites 103 III 44 = *NHI* D 32 as

^{LÚ}ta-a-(ar-šú-ú-a)-tú-ṭi

where the text has simply LÚ-*ta tú-hi*.

APPENDIX II

NOUNS IN -na(-a)

The interpretation of forms ending in -na(-a) is very difficult, owing to the inadequacy of the data. In some cases the ending appears to be an inflection, in others it is apparently the ending of the stem.

The following are evidently dative singular forms whose stems end in /na/:

^{d}e-ri-na-a (10:10, 46)
^{d}ú-ni-na-a (10:10, 47)

Perhaps a locative singular adjective (in sense) is

šá-na (77A:3, 77B:3)[1]

Most of the forms ending in -na(-a) seem to be locative plural in sense. The following seem to be adjectives, plural, since they modify KÁ, which is regularly plural in Urartian. Some could be interpreted as ablative in sense, but they are probably all locative.

^{d}al-di-na (9:12, 22)
^{d}hal-di-na (76A:3, 76B/C:4, 76B:5, 6, 7)
^{d}hal-di-na-a (41:28, 97:10)
⌜^{d}⌝hal-di-i-⌜na-a⌝ (41:33)

---

[1] See n. 75 to 7.4.1.3

The following also are probably locative plural adjectives, though the constructions in which they appear usually have a form in the general case or genitive (stem form) in the singular:

šú-si-na (122:28)

DINGIR.MEŠ-na (56:5) (before *kuruni*)

The following are apparently locative plural substantives:

${}^{\text{KUR}}$e-ba-na (103 VI 26)

${}^{\text{(LÚ)}}$hu(-ú)-ra-di-na-a (6:15; 6a:13; 7 obv. 14, 44, rev. 16; 22:22)

${}^{\text{m}}$ru-sa(-a)-hi-na (131:5)

The second seems to have instrumental force,[2] and the third also occurs before *kai* (121:13).

There remains a considerable residue of forms of this type whose functions can only be guessed at:

a-su-a-hi-na, a-su-a-hi-i-na-a (124 obv. 45, 125 obv. 33) (locative?)

${}^{\text{m}}$ar-giš-ti-hi-na (98B:1) (probably locative plural)

i-na-a (74 rev. 5, 6; [17:12]) (locative plural)

mu-na-a (31 rev. 4) (locative or genitive)

pu-lu-si-na-a (79:2, division uncertain)

${}^{\text{d}}$qu-e-ra-a-i-na (33:23) (locative?)

še-⸢ip⸣-tú-si-na (80 IV 78) (division uncertain)

ta-ra-ma-na (33:24)

ti-⸢lu⸣-na (10:83) (= teluni) (reading somewhat uncertain)

tú-hi-ni-na-a (124 obv. 25) (locative?)

šá-ú-i-na (115:2) is uncertain in both division and reading.

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[2] Fr., *Einf.*, 14, 54. Cf. 7.4.10.2 and n. 147 thereto.

APPENDIX III

THE POSTPOSITIONAL USE OF THE GENERAL CASE

It has been customary in the literature to treat *kai* as a suffix.[1] Friedrich states as a reason for this interpretation that it is added to the simple stem in the singular, while in the plural it has the characteristic *a* before it, e.g. ^{m}*menua-kai* 'before Menua,' ^{d}*haldi-kai* 'before Haldi'; plural: ^{m}*rusahina-kai* 'before Rusahinili.' He also says that it does not stand "as an independent postposition behind a complete case form, but was--at least in the singular--joined to the stem like a case suffix."

It is not quite clear how such a form would fit into the morphological system of the language, nor why the construction indicates that *kai* is not an independent word. It is clearly not a case suffix. For one thing, it never stands after an adjective, but only after a noun,[2] e.g.

tequale ^{m}sarduri kai ^{m}argištehini (102 III 14-16)

'He brought them before SA.'

---

[1] Sayce, *JRAS* 1882, 429-30; Belck, *Anatole* I, 58-59; Ts., *NHI*, 28; Fr., *Cauc.* VIII, 138-39; *Einf.*, 14, 49; G., *ZA* V, 101; etc. The form *ka* occurs once (103 I 28) as a variant of *kai*.

[2] The term "adjective" is here used of a syntactic or semantic class. The construction here discussed is further evidence for such a *syntactic* class, but Urartian offers no evidence for a *morphological* class of adjectives. See 7.2.2.4.

If *kai* were accepted as a case ending, then a paradigm for adjectives as distinct from substantives would have to be set up, and the inflecting of adjectives differently from substantives is not attested in Urartian. The same order of words appears with an unquestionably independent word, e.g.:

^{m}argištini urišhusiniei ^{m}menuahini (99a-b)

'the storehouse(?) of AM'

Furthermore, the statement that *kai* stands only after the simple stem of the singular is not quite correct, as it also stands after forms in -*ni*, as Friedrich himself recognized.[3] Since the general case (stem form) stands independently in a number of functions, there seems no reason why it could not be used also as a free form before a postposition. The forms before *kai* are not different from those appearing, for example, in: *Šusina* MU.M[EŠ] (122:28); *šusini* MU (80 II 24); *išani* *aptini* (118:12); *šana* *aptini* (77b:3), which are certainly all separate words.

The following adjectives appear as modifiers of singular nouns which are followed by *kai*:

^{m}ar-giš-ti-hi-ni-e (103 I 28, ⌜59⌝, II 44, IV 7, VI 2)

^{m}ar-giš-ti-e-hi-ni-e (102 III 16)

^{m}ar-giš-ti-hi-ni (104:3)

[^{m}me]-nu-a-hi-ni-e (80 IV 69)

^{m}me-nu-a-hi-ni-i-e (80 IV 45)

These forms, especially the last, certainly look like datives. Compare also the use of a dative(?) before *edia* (7.4.6.4).

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[3] *Cauc*. VIII, 138-39.

On the basis of the very few examples, the construction in the plural remains obscure. Presumably plural are the words preceding *kai* in the following passages:

⌜u⌝-ru-lu-ni i-si-i KI-*T[IM* ^{m}]ru-sa-hi-na ka-i e-ˀa i-nu-s[i
ṣ]u-i-ni-i (121:12-13) (untranslatable)
[. . . ^{d}hal]-di-na-a KÁ ka-i a-lu-si me-ri-ip [. . .] (97:10)
'before the Haldi gate the lord(?) . . .'

With the last example compare 41:27-28 cited above. *^{d}haldina* KÁ is evidently locative; *^{d}haldina* is presumably an adjective, plural.[4]

It is possible that we have here a periphrastic construction which was considered to be either dative or locative in force as the circumstances demanded. The available data are insufficient to make the construction clear.

Since no data on stresses or junctures are available, we can use only morphological analysis in determining word boundaries.[5] There seems no reason to treat *kai* as a suffix, and such treatment needlessly complicates the structure.[6] Therefore *kai* will be interpreted as not belonging morphologically to the preceding word and will be separated from that word by a space in transliteration.

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[4] Cf. 103 VI 26, *ebana*, apparently locative plural substantive. Forms of this type are discussed in Appendix II.

[5] For the same reason the term "enclitic" used by Ts. and others to describe certain Urartian suffixes is unfortunate, since "enclitic" implies the joining of the elements in pronunciation, especially by features of accent, and on such matters for Urartian we have no information.

[6] Ts. (*RA* XXXII, 57-60) recognizes -*ka(i)*, -*di*, -*aṣi(e)*, and -*ašte* as "postpositions" distinct from case endings, but he still considers them to be suffixes. The difference between his analysis as far as *kai* is concerned and that suggested here seems to a considerable extent to be one of transliteration practice only. It would seem to present a clearer analysis if the postposition is not written as part of the preceding word, and there seems to be no valid reason to connect the two.

The same sort of construction is used before *edini*. Some scholars have applied the same sort of reasoning and recognized such unlikely forms as *ul-gu-ši-ya-ni-e-di-ni*.[7] Not only is such a form unlikely on the face of it, but there are a number of occurrences of *edini* separated from the preceding word by a line-end (23:24, 23:28, 26 III 35, 82 rev. 8, 103 I 10, 103A:5).[8] By the usual practices of Urartian scribes, this division indicates also word division.

Some other particles seem to be used as postpositions: *kaini*, *pi(ei)*, *pieini*, *ištinie*, *edia*. Some of these are attested only in restricted environments. *edia* occurs only after a group of proper names ending in -*ue*, perhaps dative singulars. *ištinie* occurs only after ^{d}*haldia* and ^{KUR}*etiunia*. *edini* and perhaps *kaini* occur only after stems ending in -*ni*. *kai*, *pi(ei)*, and *pieini* stand after the stem form of either the simple stem or the -*ni* stem in contexts such as the following:

> te-qu-ni ^{m}me-nu-a ka-i (21:3) 'He brought (them) before Menua.'
>
> ANŠE.KUR.RA ar-ṣi-bi-ni ti-ni ^{m}me-nu-a pi-i a-iš-ti-bi 22 ^{1}KUŠ (75:6-9) 'A horse named Arṣibini under Menua jumped 22 cubits.'[9]

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[7] M 174; contrast Fr., *ZA* VI, 275-76. There are no occurrences of adjectives in constructions with *edini*. The phrase ^{LU}*ipriunani edini* ^{KUR}*biainani edini* (81 left 7-8) apparently involves two substantives in apposition or parallel, not a noun and an adjective. *edini* does show similarity to the allative case ending, but there are no cases in Urartian of a case ending followed by -*ni*. (Cf. n. 2 to Ch. IX.)

[8] The occurrence in 117:3 is apparently of a different *edini*.

[9] On the translation see D'iakonov, *EV* IV, 115-16.

ha-lu-li áš-hu-li-ni e-ˀa ^{d}hal-di-na-a KÁ e-ˀa pu-lu-si-ni ka-i
(41:27-28) 'Let a libation(?) be poured out(??), both at
the Haldi gate and before the stele.'

The term "postposition" is sometimes used to refer to a suffix. Since other terms are available to refer to suffixes, it would seem wiser to reserve "postposition" to refer to an independent word placed after the word it governs, corresponding to the preposition preceding the governed word. In this paper the term "postposition" is used only in this sense.

APPENDIX IV

gi(-e)-i

The word gi(-e)-i has usually been translated 'anything.'[1] However, the translation 'spring, (water) source' was suggested by Tseretheli and argued for at length by Friedrich.[2]

Either translation seems possible in the following contexts:

(1) ui giei šida(g)uri (5a:1, 2; [5b:1])

ui gi(e)i ištini šidauri (10:28, [88]; 57:2; 91:7; 129:4)

ui giei šidaure ištini (81 rev. 19)

'No(t) g. was established (there).'

(2) ui giei ištini manuri (126:8)

'No(t) g. was there.'

(3) ui gi(e)i apsi(e) GÁN $^{\text{(GIŠ)}}$uše uldi/GEŠTIN zari ištini manuri (124 obv. 39-41, 125 obv. 29-30) 'No(t) g., a., garden, field, vineyard, (nor) orchard was there.'

(4) ui gii [aps]i(?) am⌜ga⌝di(?) ištini manuri (125 obv. 40-41)

'No(t) g. . . . was there.'

The meaning "spring" is barely possible in the following context, though the meaning "anything" seems to fit better. The verb šiulie

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[1] M, VDI 1954,1, 2-4; K, p. 183 s.v. G, RHA 22, 181-85 considered it to be temporal, translated "ever."

[2] Ts., RA XXXII, 63 n. 1; Fr., WZKM XLVII, 187-94.

'(he) carries off' is used of booty, prisoners, etc., but could perhaps be understood here as '(he) diverts.'

(5) aluše giei inukani esinini šiulie (80 VIII 11)

'whoever carries off (diverts) g. from that place'

It is, however, more difficult to see how a meaning 'spring' fits other contexts in which this word appears.

(6) mei giei inani arniušinani lakuyani (115:3, 117:6)

'and let him not destroy(?) g. of(?) this deed/structure'

The word arniušinani, to judge from the various contexts in which it appears, means "something which is done/made" (French *fait*). The meaning of the verb lakuyani is somewhat uncertain, but it is Class I, so should take a direct object. The same remarks, in general, apply to

(7) aluše giei inani arniušinani lakudulie (117:7)

'whoever destroys(?) g. of(?) this deed/structure'

The meaning "spring" seems almost impossible in

(8) aluše giei inani INIM.MEŠ-ni šepuyali (117:19-20)

'whoever conceals(?) g. of these words'

The verb šepuyali is used in the curse formula with reference to inscriptions and probably means "he conceals." The same remark applies to

(9) mei giei inani baušinani [šepuyalie] (128:7-8)

'and he [conceals(?)] g. of these words'

It is obvious that gi(e)i is a noun or pronoun, but its meaning remains a little uncertain. The meaning "spring (of water)" does not seem likely on the basis of all the contexts in which the word occurs.[3]

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[3] The form [g]i-⌈e⌉ in 120:1, if correctly read, seems to be a different word.

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Items marked * were not available. Therefore the accuracy of such references, including their transliteration, has not been verified.

The numbers preceded by K following many entries refer to the inscriptions as numbered in F. W. König's Handbuch der chaldischen Inschriften, listing the inscriptions which are treated in the reference. Such correspondences are not listed for the major compilations (CICh, Melikishvili, Mordtmann, Nikol'skiĭ, Sayce, Sandalgian, and Lehmann's Bericht). Except for the last, comparative tables of numbers for these compilations appear in the Handbuch, pp. 30-36.

The following abbreviations are used in the Bibliography:

AfO	Archiv für Orientforschung (Berlin, Graz, 1923-)
AGGW	Abhandlungen der Gesellschaft der Wissenschaften zu Göttingen, Philologisch-historische Klasse (1896-)
AIZ	Arkheologicheskie Izvesti͡ia i Zametki (Moscow, Moskovskoe Arkheologicheskoe Obshchestvo, 1893-96)
AnO	Analecta Orientalia (Rome, 1931-)
ArO	Archiv Orientální (Praha, 1929-)
AV	Archiv für Völkerkunde (Vienna, Museum für Völkerkunde, 1946-)
BAIS	Bulletin de l'Académie Impériale des Sciences de St. Petersbourg (Ser. 1-4, 1836-93)(succeeded by IAN)
BASOR	Bulletin of the American Schools of Oriental Research (New Haven, Conn., 1919-)

Bell.	Türk Tarih Kurumu, Belleten (Ankara, 1937-)
Ber.	Bericht (see under C. F. Lehmann)
BO	Bibliotheca Orientalis (Leiden, 1943-)
BSLP	Bulletin de la Société de Linguistique de Paris (1871-)
Cauc.	Caucasica, Zeitschrift für die Erforschung der Sprachen und Kulturen des Kaukasus und Armeniens (Leipzig, 1924-34)
CICh	Corpus Inscriptionum Chaldicarum (see under Lehmann-Haupt)
DAN	(1) Doklady rosiĭskoĭ Akademii Nauk (Leningrad, 1924-25) (2) Doklady Akademii Nauk SSSR (Leningrad, 1926-31) All references are to Series B.
DLZ	Deutsche Literaturzeitung (Berlin, 1880-)
DWAW	Denkschriften der kaiserlichen Akademie der Wissenschaften, Philosophisch-historische Classe (Vienna, 1850-)
Einf.	Einführung ins Urartäische (see under Friedrich)
EV	Ėpigrafika Vostoka (Akademii͡a Nauk SSSR, Leningradskoe otdelenie instituta istorii material'noĭ kul'tury, Moscow, 1947-)
GGA	Göttingische Gelehrte Anzeigen (Göttingen, Gesellschaft der Wissenschaften, 1739-)
HA	Handēs amsoreay paroyagan arwesdkidagan = Handes Amsorya, Monatschrift für armenischen Philologie (Vienna, 1887-)
IAFAN	Izvestii͡a armi͡anskogo filiala Akademii Nauk SSSR (Erevan, 1939-43)
IAK	Izvestii͡a (Imperatorskoĭ) Arkheologicheskoĭ Komissii (St. Petersburg, 1901-18) (succeeded by IRAIMK)
IAN	(1) Ser. 5-6: Izvestii͡a (imperatorskoĭ) Akademii Nauk (St. Petersburg/Petrograd/Leningrad, 1894-1927) (2) Ser. 7: Izvestii͡a Akademii Nauk SSSR, Otdelenie obshchestvennykh Nauk (Leningrad, 1928-35) (3) Subsequently: Izvestii͡a Akademii Nauk SSSR, Otdelenie literatury i i͡azyka (Leningrad, 1928-35; Moscow, 1935-)
IANA	Izvestii͡a Akademii Nauk Armi͡anskoĭ SSR, Obshchestvennye Nauki (Erevan, 1943-)

I͡aS	I͡afeticheskiĭ Sbornik = Recueil Japhétique (No. I: Institut I͡afetidologicheskikh izuskaniĭ rossiĭskoĭ Akademii Nauk; Nos. II-III: I͡afeticheskiĭ Institut rosiĭskoĭ Akademii Nauk; Nos. IV-VI: I͡afeticheskiĭ Institut Akademii Nauk SSSR; No. VII: Akademii͡a Nauk SSSR, Institut I͡azyka i Myshlenii͡a imeni akademika N. I͡a. Marra; Leningrad, 1922-32)
IF	Indogermanische Forschungen (Strassburg, Berlin, 1892-)
IGAIMK	Izvestii͡a gosudarstvennoĭ Akademii istorii material'noĭ kul'tury (Leningrad, 1925-37)(successor to IRAIMK)
IJ	Indogermanisches Jahrbuch (Strassburg, Berlin, 1913-)
IRAIMK	Izvestii͡a rossiĭskoĭ Akademii istorii material'noĭ kul'tury (Leningrad, 1921-25)(succeeded by IGAIMK)
JA	Journal Asiatique (Paris, 1822-)
JAOS	Journal of the American Oriental Society (New Haven, Conn., 1843-)
JCS	Journal of Cuneiform Studies (New Haven, Conn., 1947-)
JRAS	Journal of the Royal Asiatic Society of Great Britain and Ireland (London, 1834-)
JRGS	Journal of the Royal Geographical Society (London, 1830-)
KlF	Kleinasiatische Forschungen (Weimar, 1927-30)
KSIIMK	Kratkie soobshchenii͡a o dokladakh i polevykh issledovanii͡akh instituta istorii material'noĭ kul'tury (Moscow, Akademii͡a Nauk SSSR, 1939-)
KZ	(Kuhn's) Zeitschrift für vergleichende Sprachforschung (Berlin, 1852-)
MAK	Materialy po Arkheologii Kavkaza sobrannye ekspedit͡sii͡ami imperatorskogo moskovskogo arkheologicheskogo obshchestva (Moscow, 1886-1916)
MAR	Materialy po Arkheologii Russii (Moscow, Moskovskoe Arkheologicheskoe Obshchestvo, 1861-1918)
MVAG	Mitteilungen der Vorderasiatisch-Aegyptischen Gesellschaft (Leipzig, 1896)
NGGW	Nachrichten der Gesellschaft der Wissenschaften zu Göttingen, Philologisch-historische Klasse (1894-)
NHI	M. von Tseretheli, Die neuen ḫaldischen Inschriften König Sardurs von Urartu (see under Tseretheli)

OIP	Oriental Institute Publications (University of Chicago)
OLZ	Orientalistische Literaturzeitung (Berlin, 1898-)
Or.	Orientalia (Rome, 1920-)
RA	Revue d'Assyriologie (Paris, 1884-)
RHA	Revue Hittite et Asianique (Paris, 1930-)
RP	Records of the Past (all references are to the new series, 6 v., London, 1889-93)
RT	Recueil de Travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes (Paris, 1870-1923)
SHAW	Sitzungsberichte der Heidelberger Akademie der Wissenschaften, Philosophisch-historische Klasse (Heidelberg, 1910-)
SPAW	Sitzungsberichte der Königlich Preussischen Akademie der Wissenschaften (Berlin, 1882-1921)
TGAI	Telekagir HXSH Gitowt^{c}yan yev arvesti institowti = Izvestii͡a instituta Nauk i iskusstv SSSR Armenii (Erevan, 1926-)
TVK	Drevnosti Vostochnyi͡a, Trudy Vostochnoĭ Komissii Imperatorskogo Moskovskogo Arkheologicheskogo Obshchestva (Moscow, 1893-1917)
UKN	Urartskie klinoobraznye Nadpisi (see under Melikishvili)
UPMG	Urartskie Pami͡atniki Muzei͡a Gruzii (see under G. T͡sereteli)
VBGA	Verhandlungen der Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte (Berlin, 1870-1902)
VDI	Vestnik Drevneĭ Istorii (Moscow, Akademii͡a Nauk SSSR, Institut Istorii, 1937-)
WA	Wissenschaftliche Annalen (Berlin, Akademie der Wissenschaften, 1952-)
WZKM	Wiener Zeitschrift für die Kunde des Morgenlandes (Vienna, 1887-)
ZA	Zeitschrift für Assyriologie (Leipzig etc., 1886-)
ZDMG	Zeitschrift der Deutschen Morgenländischen Gesellschaft (Leipzig, 1847-)
ZE	Zeitschrift für Ethnologie (Berlin, 1869-)

ZhMNP	Zhurnal Ministerstva narodnogo Prozveshcheni͡a (St. Petersburg, 1802-1914)
ZKO	Zapiski klassicheskogo otdeleni͡a Russkogo Arkheologicheskogo Obshchestva (St. Petersburg, 1904-17)
ZKV	Zapiski kollegii vostokovedov pri aziatskom muzii (Akademi͡a Nauk SSSR, Leningrad, 1925-30)
ZVO	Zapiski vostochnogo otdeleni͡a Russkogo Arkheologicheskogo Obshchestva (St. Petersburg etc., 1886-1921)

Arm.	Armenian
Ass.	Assyrian
descr.	description
diss.	dissertation
ed.	editor(s), edition
Eng.	English
Ger.	German
Inc.	Incerta (used by K of inscriptions of unknown authorship)
pl.	plate(s)
por.	portions
Rsn.	Russian
ser.	series
supp.	supplement(s)
t.	volume (French)
Tab.	plate(s) (Rsn.)
Tf.	plate(s) (Ger.)
unp.	unpublished
vyp.	fascicle or number of a periodical (Rsn.)
w.	with

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