

The Phonology and Morphology
of
Royal Achaemenid Elamite

Herbert H. Paper

Ann Arbor

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FOREWORD

Of all the languages of the ancient Near East recorded in cuneiform symbols, none has been more neglected than the Elamite language. This is apparent when one stops to consider that a century or more after the field of cuneiform studies has made enormous strides in other areas, the analysis of Elamite has remained approximately where it was in 1855 when Norris published an account of it in the *Journal of the Royal Asiatic Society*.

This study is offered as a fresh approach to the whole problem in the hope that when similar studies of the other dialects of Elamite will have been completed, we shall then be in a position to understand the development of this language more fully and possibly discover some clue to the tantalizing question of its ultimate relationship. It was felt that an analysis of the extant linguistic data according to the methods of modern linguistics would prove to be of some aid in gaining a deeper insight into this language. Whether this hope is justified must be left to the reader. If the answer is in the affirmative, we shall have provided an extension of linguistic methodology to "dead-language" research.

The present study is an expansion and revision of a dissertation submitted to and accepted by the Department of Oriental Languages and Literatures of the University of Chicago in August, 1951. The idea for it was originally suggested to me in 1948 by Dr. George G. Cameron, then at the University of Chicago. Since that time, it was my privilege to work with Dr. Cameron both at Chicago and at the University of Michigan, and I wish to take this opportunity to record my thanks to him for his aid and counsel throughout the preparation of this volume. To the American Council of Learned Societies and the Oriental Institute of the University of Chicago I wish to record my gratitude for fellowship and research aid that enabled me to carry on my work both in Chicago and in Ann Arbor. Two ACLS summer study grants to the Linguistic Institutes of 1949 and 1950 at the University of Michigan were of incalculable value to me in providing the opportunity to study with visiting scholars from various parts of America and Europe and exposure to the stimulating atmosphere at the Linguistic Institute. I would also like to express my thanks to the Horace H. Rackham School of Graduate Studies of the University of Michigan for the financial assistance that made it possible to publish this study.

Many teachers and friends at the University of Chicago had an intimate part in discussing with me many of the problems that arose in connection with this study. I would like to express my gratitude to them at this time: Drs. I. J. Gelb, A. L. Oppenheim, B. Landsberger, R. Hallock, H. G. Güterbock, N. A. McQuown, Eric Hamp, G. E. von Grönebaum, and the late S. I. Feigin. To all of them and others, but especially

to Dr. George G. Cameron, I owe a great deal. Their counsel permeates every page of this study, and whatever may be found of value in this analysis of one dialect of Elamite is due to their insight and understanding.

Finally, I should like to dedicate this volume to my parents, Solomon and Rose Paper, without whose aid, understanding, and love I could have achieved nothing.

Herbert H. Paper

October 10, 1954
Ann Arbor, Michigan

SIGNS AND SYMBOLS

[] restored signs, words, or phrases when used with passage citations; in a few cases, square brackets indicate that a phonetic transcription is enclosed.

/ / normalized (i.e., interpreted) Elamite forms.

() with transliterations parentheses indicate that the particular syllable occurs sometimes but not always; in English translations, parentheses enclose words which have no counterpart in the original language but which are needed to help make sense out of the phrase.

< > sign thought to have been omitted by the scribe in the original cuneiform.

- used in transliteral RAE and Bab. forms.

~ to be read "varies with" or "or."

ϕ zero

Av. Avestan.

Bab. Babylonian.

C consonant.

Gk. Greek

OP Old Persian.

RAE Royal Achaemenid Elamite.

Skt. Sanskrit.

V vowel.

Old Persian is cited out of R. G. Kent, Old Persian: Grammar, Texts, Lexicon in the same system of transliteration used therein, except that the OP word-divider is indicated by the space between words and not by : .

Babylonian is quoted according to the memoranda on transliteration and transcription of cuneiform submitted by I. J. Gelb (cf. Bibliography).

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I

INTRODUCTION

1.0. General. — The royal Achaemenid inscriptions provided the key to the decipherment of the cuneiform scripts used for the Old Persian and Babylonian languages.¹ The decipherment and interpretation of these texts came about by comparing lexical evidence from the then known Indo-Iranian languages with Old Persian, and similarly by the recognition of Semitic cognates for the elucidation of the Babylonian. These two versions of the royal Achaemenid inscriptions were unraveled thanks to the immediate recognition of the one as Indo-European and of the other as Semitic. This recognition of linguistic relationship was, of course, an enormous advantage. But no such advantage existed for the Elamite version of these inscriptions. No sound linguistic relationship could be established for it, and the analysis of Elamite had to proceed on a formally descriptive basis with the other versions supplying the general content. The best and most complete work of this kind was done by F. H. Weissbach in his Die Achämenideninschriften zweiter Art. This book, however, was published in 1890 and has long been out of date.²

It is the purpose of this study to provide a phonological and morphological analysis of the Elamite versions of the royal Achaemenid texts on a descriptive, synchronic basis, with considerations of form the prime factor in the analysis. Requirements of translation into modern languages will be of secondary importance, and no use will be made of grammatical categories from other languages without formal counterparts in Elamite. If there were a definitely established relationship between Elamite and any other linguistic stock, it would certainly have been used. But as has often been said, Elamite has long been a step-child of cuneiform studies, and no relationship of this kind has ever been satisfactorily established. The claims of earlier writers as to the

¹R. W. Rogers, History of Babylonia and Assyria (6th ed.; Cincinnati: Abingdon Press, 1915), pp. 1-106; A. P. Booth, The Discovery and Decipherment of the Trilingual Cuneiform Inscriptions (London: Longmans, Green and Co., Ltd., 1902); L. W. King and R. C. Thompson, The Sculptures and Inscriptions of Darius the Great on the Rock of Behistün in Persia (London: British Museum, 1907), pp. xi-xlv; E. A. Wallis-Budge, The Rise and Progress of Assyriology (London: M. Hopkinson and Co., 1925); R. G. Kent, Old Persian: Grammar, Texts, Lexicon (New Haven: American Oriental Society, 1950), pp. 9-12.

²The following are the chief grammatical treatments of Elamite: F. H. Weissbach, Die Achämenideninschriften zweiter Art (Leipzig: J. C. Hinrichs'sche Buchhandlung, 1890); H. Winkler, Die Sprache der zweiten Columne der dreisprachigen Inschriften und das Altäische (Programm-Städtisches Johannes-gymnasium, Breslau, 1896); F. Bork, "Elam (Sprache)," Reallexikon der Vorgeschichte, III (1925), 70-83; T. Kluge, "Das Elamische," Le Muséon, XLVI (1933), 111-156. The Elamite language has been referred to by any of the following names: Elamite, Hozisch, Susisch, Neusuisch, and Anzanite.

relationship of Elamite to the Caucasian or Dravidian languages are founded upon possible chance occurrences of lexical and morphological similarities.³ In any event, one must a priori reserve judgment about the linguistic affinities of Elamite. While we cannot rule out the possibility that Elamite may some day be shown to represent an ancient form of Caucasian speech, it is necessary first of all that more of Elamite itself be understood in and of itself before we may search confidently for possible linguistic relatives. The lack of systematic descriptive work up to the present time renders impossible any conclusions concerning the relationship of Elamite to any known linguistic stock.

This study, then, will make no attempt to speculate on the linguistic relationship of Elamite. Its primary aim is to order and systematize the linguistic data of a specific dialect of the language. What should result therefrom is a formal description of this dialect of Elamite — the groundwork for further descriptive studies of other Elamite dialects, and the *sine qua non* for historical, diachronic study of the Elamite language as a whole, and of studies in linguistic relationship. The grammatical categories which will be derived from study of the linguistic forms will in general grow out of these forms themselves.

I have tried to resist the ever-present temptation to allow the categories of Old Persian and Babylonian to influence the analysis of Elamite forms. This has made it necessary in a number of cases to use entirely new terms, which have no background of usage in the grammars of other languages; and it is imperative to stress the fact that where familiar grammatical terms have been used they are not to be taken in their usual sense. All of them will be defined in the appropriate sections, and are to be understood as applying only to this particular dialect of Elamite.

It must be stressed at this point that this whole study is exclusively based on extant written records — the facts of history make access to living informants impossible. It is a reasonable expectation, however, that the writing system of a particular language will mirror in some degree its phonology. The degree of correspondence between writing system and actual phonology may vary considerably. Pehlevi may be cited as a case where there is almost no phonetic correspondence between the individual written symbols and the actual pronunciation of those symbols. At the other extreme is the IPA system which generally uses one symbol for one sound. The writing system of Elamite upon which this study is based is at neither of the extremes. But working with the assumption that the cuneiform signs which Elamite uses have a proven relationship to phonemes in other, better known languages, I have culled a good deal of phonological information from the material at hand. These phonological deductions have been subjected to predictive tests in a variety of cases, and have generally passed the tests. In a number of instances, the use of the words 'may,' 'perhaps,' 'possibly' will give adequate warning of the tentativeness of the interpretations

³Bork, *op. cit.*

offered. I must finally mention that the phonological system here described should not be assumed to be completely equivalent to the actual phonemic system of the spoken language, nor should precise phonetic identifications of these reconstructed phonemes be attempted.

The term 'dialect' as used here is defined as any stage of a language delimited spatially and temporally. Royal Achaemenid Elamite (hereafter RAE), the dialect to be discussed in this study, is the language of that body of Elamite linguistic material recoverable from the Elamite versions of the royal inscriptions of the Achaemenid rulers of the Persian Empire. A complete bibliography of these texts can be found in R. G. Kent, Old Persian: Grammar, Texts, Lexicon; These texts will be referred to by Kent's system of abbreviations and numbers. The pertinent Elamite versions comprise more than eight hundred lines of Elamite. The following abbreviations are used: (In every case the first capital letter identifies the ruler alluded to as author: C = Cyrus [559-529 B. C.], D = Darius [521-486 B. C.], X = Xerxes [486-465 B. C.], A2 = Artaxerxes II [405-359 B. C.], A? = Artaxerxes II or III [359-338 B. C.])

CM	Murghab	DSeal	Seal-inscriptions
DB	Behistun	XP	Persepolis
DN	Naqš-i-Rustam	XS	Susa
DP	Persepolis	XE	Elvend
DH	Hamadan	XV	Van
DS	Susa	XVase	Vase-inscriptions
DZ	Suez	A2S	Susa
DE	Elvend	A2H	Hamadan
DWeight	Weight-inscriptions	A?P	Persepolis

2

WRITING SYSTEM

2.0 General. — The cuneiform system used in writing RAE is essentially the Sumero-Akkadian type, with certain modifications in principle that will be discussed presently.¹ The modifications of the RAE cuneiform system are probably of two basic types: (1) those inherited from earlier periods of the Elamite language and system of writing, representing native Elamite adaptations of the Sumero-Akkadian cuneiform system; and (2) those which reflect borrowing from contemporaneous usage in the writing of Akkadian in successive historical periods. The final determination of the background of each orthographic usage in each Elamite period must await comparative-historical study.

It is important to keep in mind also that many of the phonological problems to be discussed below are inherent in the very nature of the cuneiform medium and are similarly plaguing in other areas of cuneiform study such as Hurrian, cuneiform Hittite, and Urartean, for example.

2.1. CV and VC signs of RAE (cf. chart p.5).

2.2. CVC signs of RAE.

	-p	-k	-t	-š	-š	-l	-m	-n	-r
p-			<i>pát</i>					<i>pan</i>	<i>pár</i> <i>pír</i>
k-	<i>kúp</i>	<i>kak</i>			<i>kaš</i>	<i>kal</i>	<i>kam</i>	<i>kán</i> <i>kin</i> <i>kín</i>	<i>kar</i> <i>kur</i>
t-	<i>tup</i>	<i>tak</i> <i>tuk</i>			<i>taš</i>	<i>tal</i>	<i>tam</i> <i>tam₄</i>	<i>tan</i> <i>tin</i>	<i>tar</i> <i>tur</i>
š-	<i>šip</i>					<i>šil</i>			<i>šir</i> ₇
š-	<i>šap</i>	<i>šik</i>							<i>sir</i>
h-						<i>hal</i>			<i>har</i>
l-		<i>lak</i>							
m-			<i>mat</i> <i>mit</i>	<i>máš</i>	<i>maš</i> <i>muš</i>			<i>man</i> <i>mín</i>	<i>mar</i> <i>mur</i>
n-	<i>nap</i>								
r-	<i>ráp</i>	<i>rak</i>	<i>rat</i>		<i>rás</i>				

¹Two excellent sign lists are to be found in F. H. Weissbach, Die Keilinschriften der Achämeniden, pp. lxxvii-lxxxii with discussion on pp. xxxix-ii; and G. G. Cameron, Persepolis Treasury Tablets (Chicago: University of Chicago Press, 1948), pp. 74-81. Some of the signs in Cameron's list are not to be found in RAE, since the list is primarily one for the treasury tablets from Persepolis. The list in Weissbach is to be amended in general according to F. H. Weissbach, "Die dreisprachige Inschrift Darius Susa e," Zeitschrift für Assyriologie, NF X (XLIV) (1938), 157.

		/a/	/i/		/u/	/a/	/i/		/u/
		Ca	Ci	Ce	Cu	aC	iC	eC	uC
/p/	{ b p	ba		be		ap	(ip) ² ip		
/k/	{ g k	ka ³	ki		ku	ak	ik		uk
/t/	{ d t	da			du (tu ₄) tu	at			ut
/š/	š	(šà) šá	ši	še	šu	áš	iš		
/s/	s	sa	si		su	aš	iš		
/ç/	ç	ša	çi						
/y/	y	ya							
/l/	l	la	li		lu		EL ⁴		ul
/m/	m	ma	mi	me	mu	am			um
/n/	n	na	ni		nu ⁵	an	in	en	un
/r/	r	ra	ri		ru		ir		ur
	{ h ø	ha ⁶	hi		hu	ah			
		a	i	e	u ú				

²The signs enclosed in parentheses are used in restricted cases and may be considered to be marginal to the syllabic system. Each of the three cases will be discussed in the appropriate consonant section below.

³The sign transliterated throughout as *ka* is in reality the *qa* or *ka₄* sign. The simplification was made for typographical reasons.

⁴The sign EL occurs but its phonetic value is uncertain; cf. G. G. Cameron, *Persepolis Treasury Tablets*, p. 80, sec. 105.

⁵Weissbach, *op. cit.*, p. 157, suggests the reading of *nu* as *ni₅* and *ni* as *né*. This does not improve the situation in any real sense except to account for the rendering of OP *-niya* by RAE *-nu-ya*. Were this suggestion to be adopted it would leave an unfilled gap in the *nu* position; furthermore, *nu* and *ni* are not known to interchange, as might be expected were they in reality *ni₅* and *né*.



⁶The diacritic under *h* generally used in Sumero-Akkadian transliterations has been left off throughout for typographical ease.



2.3.1. Logograms in RAE. — The following is a list of the logograms thus far found in RAE:

A 'river, water' DB 18², 19²; DZc6; AN.KAM 'sea'¹ DB 6; DNa3; A?P; ANŠU.A.AB.BA 'camel' DB 18; ANŠU.KUR.RA 'horse' DB 18; DSf10-11; DZc3; ITU 'month' passim; UL.ĤI 'estate'⁷ passim; DUB 'inscription' XV 3²; GIŠ.MA 'ship' DB 18; ĤAL 'district, city'¹ passim; ĤAR 'stone' DSf38, 40; DPc; KASKAL 'road, way' DNa6; KI.MIN occurs once questionably in DSf20; KÛ.BABBAR 'silver' DSf34; KUR 'mountain' DB 11, 42; DSf27; SAG 'head' DB 32; KUŠ 'leather' DB 70; KÛŠ 'cubit' DSf23²; ŠU 'hand' DSx6rv; DUMU 'son' passim; NUMUN 'lineage, family' passim;

2.3.2. Other possible logograms. — There may be one possible occurrence of each of the logograms UDU and ZIZ in the general meaning 'flocks' and 'agriculture' respectively in a passage difficult in both OP and RAE. In DB 14, the two RAE hapax legomena *lu-taš* and *áš* occur. If these were to be read UDU-*taš* and ZIZ, the passage would be more meaningful than it has been hitherto, and would supply an inkling of the meaning required.

2.3.3. *sunki* and *ruh* — The RAE writing system utilizes logograms for 'king' and 'man.' The word for 'king,' regularly transliterated *sunki* throughout this study, is written in RAE with but two exceptions

with the sign . The word for 'man,' here transliterated *ruh*, is written both logographically  and phonetically, *ru-uh*. The logogram for 'king' is characteristic of Elamite texts in earlier periods, and is also frequent in texts from Elam written in the Akkadian language. The transliteration as *sunki* is an arbitrary choice which has become standard in Elamite studies in preference to *sunkuk* or *sunkik*, since a plural *sunkuk-ip* is in reality /*sunkip*/ or /*sunkup*/.⁸ The phonetic value *sunki* is based upon phonetic spellings in both RAE and other dialects. For example, the form *su-un-ku-mu-mi* occurs in XPa4.⁹

2.4. Determinatives. — MEŠ is used regularly to indicate that the previous sign is a logogram and will be transliterated throughout with a superscript *lg*. Thus, DINGIR.ITU.MEŠ will appear as ^dITU^{lg}. The vertical wedge  is a determinative which is used with personal names, nouns, and pronouns; it is sometimes used interchangeably with the horizontal wedge. This vertical wedge determinative will be transliterated with a superscript *v*; thus, ^vú *vda-ri-ya-ma-u-iš*. The horizontal wedge  is a determinative used before place names in general, but is sometimes interchangeable with the vertical wedge. It will be trans-

⁷These logograms are known only in Elamite and not in either Sumerian or Akkadian.

⁸Weissbach, *Die Keilinschriften der Achämeniden*, pp. xlviil-il.

⁹For other Elamite dialects, cf. *su-un-ki-ik* apud M. Pézard, *Mission à Bender-Bouchir*, Tome XV, *Mémoires de la Mission Archéologique en Perse*, p. 66, line 2; p. 73, line 1; p. 80, line 1, etc.

literated with superscript *h*; thus, *h^{ti}-ik-ra*, *h^{mu}-ru-um*. The determinative 𐎧 occurs in a one-line text out of a total of six lines attributed to Cyrus (CMc) in the manner of *v*. This may possibly reflect the usage in the Persepolis treasury and fortification texts of 𐎧 before personal names. In the text ASa, the horizontal wedge determinative occurs in groups of two and three in the function of *v*; these will be transliterated *hh* and *hhh*.

In the case of the vertical and horizontal determinative signs, it should be noted that they function as word dividers of a sort, since what follows them must be assumed to be the beginning of a new word. They are thus often a helpful mechanical means of determining word boundaries.

𐎧 is the determinative used with wooden objects.

𐎧 is the determinative used before deity names, ITU, names of months, and deified objects; it will be transliterated with superscript *d*.

2.5. Numbers. — Only the following numerals have been noted in these texts: 1, 2, 3, 5, 7, 8, 9, 10, 12, 13, 14, 15, 18, 19, [20], 22, 23, 25, 26, 27, 40, 60 (written 𐎧𐎠𐎠 MA),¹⁰ and 120.¹¹

2.6. Direction of writing. — RAE, like other cuneiform systems, is written from left to right. The end of a line does not necessarily coincide with the end of a word; in the manner of the OP system, words are continued on to the next line.

2.7. Written double consonants. — One of the phonological problems presented by the writing system of RAE is that of the written double consonant. That is, does a graphically geminated consonant have any phonemic value? The minimal pairs in which the same word is written differently give definite proof that the doubling is an orthographic convention with no phonemic significance. Weissbach disposed of this question in one short paragraph, but did not follow his own solution in his transcription of Elamite. He wrote:

Wie viele andere Sprachen liebt es die neusisische, die Consonanten zu verdoppeln, ohne dass dies einen merklichen Einfluss auf die Aussprache hätte, wie folgende Varianten beweisen: Fraša[m]ma 'Arsāma,' Muzzariya — Muzirraya 'Egypten,' Šattarri[t]ta 'Khšath-rita,' Na[p]puneta 'Nabūna'id,' pāruzana — par-ruzana 'aus vielen Stämmen bestehend,' irše[k]ki 'viel,' hu[p]pe 'jener,' pirša[t]tineka 'fernhin,' titki[m]me 'Lüge,' hupentukki[m]me 'deswegen,' appantukki[m]me 'Unrecht?'.¹²

Although the handful of examples which Weissbach gave appear to be sufficient to indicate the plena nature of this orthographic device and

¹⁰R. T. Hallock, "New Light from Persepolis," Journal of Near Eastern Studies, IX (1950), 240, n. 13.

¹¹For additional material on numbers, cf. Cameron, op. cit., pp. 37-39.

¹²Weissbach, Die Achämenideninschriften zweiter Art, p. 31.

thus the non-phonemic character of the doubled consonants, transcriptions which have been suggested in the past have consistently failed to take cognizance of this solution. It should be stressed that once the 'double consonants' are recognized as graphic conventions only, their interpretation as unit consonants phonemically is justified even for those words which have not as yet appeared in variant orthographic forms. For example, *tal-li-iš* (declarative third person of the verb-base /*tal-/* 'to write') invariably occurs spelled in this manner, never as **ta-liš* or **tal-iš*, possible alternate spellings. The interpretation of double consonants suggested above is sufficient to consider the word as having a single liquid phoneme. This phonological principle has already demonstrated its predictive character in several cases of words which have been found to occur with the posited alternate spelling.

The evidence for the interpretation of graphically geminated consonant phonemes is to be found in the following variants:

ap-pi-in
ap-in

ap-pi-ir
ap-ir

ha-ak-ka-man-nu-š-i-ya
ha-ka-man-nu-š-i-ya
ha-ak-ka-man-nu-iš-š-i-ya
ha-ka-man-nu-iš-š-i-ya
ha-ak-ka-man-nu-u-š-i-ya

ha-iš-ša-ik-ka
aš-ša-ka
ha-ša-ka

ha-ri-ik-ki-ip
ha-ri-ki-ip

ir-še-ik-ki
ir-še-ki

hu-be
hu-ib-be

har-ru-ma-ti-iš
ha-ru-ma-ti-iš

ir-šá-an-na
ir-šá-na

ir-šá-ir-ra
ir-šá-ra

an-la-gi
ap-pan-la-ik-ki-um-me

mu-šir-ra-ya
mu-iš-ša-ra-ya-ip

gi-iš-ši-ma-na
tuk-man-na
tal-li-ma-na
mi-ud-du-man-na

hu-be-in-tuk-ki-me
hu-uh-be-in-tuk-ki-um-me

pír-ra-ma-da-ra-um
pír-ra-ma-ud-da-ra-na-um

pír-šá-at-ti-ni-ka
pír-šá-ti-ni-ka

ir-šá-ma
ir-šá-um-ma

pu-ud-da-a-ya
pu-ú-ti-ya-ap

da-iš-ša-ra-um
da-ša-ra-um

mi-da-ah
mid-da-ah

ka-ni-šá
ka-ni-iš-ni
kán-na

sunki-me
sunki-um-me

ti-ut-ki-me
ti-ut-ki-um-me

2.8. The problem of CV₁-V₂C writing. — The RAE data in transliteration reveal a phenomenon which may be termed ‘broken-vowel’ writing (CV₁-V₂C). The possibilities of interpreting this kind of orthography are varied: (1) the vowels are to be treated as separate phonemes articulated separately with syllabic division between them, as *da-iš* [*da#iš*], or with glottal stop between them, as *da-iš* [*daʔiš*];¹³ (2) this is a way of writing diphthongs of vowel plus *y* or *w* since *i* and *u* are the second vowels involved in all such cases in RAE, so that *da-iš* stands for [*dayš*];¹⁴ (3) the different second vowel indicates that a fronted or backed or more rounded vowel is intended, so that *da-iš* stands for [*dεš*];¹⁵ (4) the ‘broken-vowel’ writing is a means of writing a closed syllable (CVC) in which the graphic second vowel is not meaningful phonologically, and thus represents an intermediate step on the way to the alphabetic principle, thus *da-iš* = *da-(i)š* = *daš*.¹⁶ Of these four possibilities, the evidence overwhelmingly favors the last one.

The first indication for the solution of this problem was given by Weissbach in 1890:

Die neusisische Schrift ist keine reine Sylbenschrift mehr, sondern auf dem Übergang zur Lautschrift begriffen. Mehrere Zeichen, welche aus Vocal *i* oder *u* + Consonant bestehen, werden nach anderen Vocalen nur consonantisch gelesen. . . . Hindurch sind Zeichen wie *ak*, *uk*, usw. überflüssig, da sie ja durch *a-(i)k*, *u-(i)k* umschrieben werden können.¹⁷

Weissbach then gave some examples of variant spellings which bore out his point. He reiterated this solution in a later work, the well-known Die Keilinschriften der Achaemeniden, as follows:

Finden sich die neuelamischen Zeichen für *ik*, *ip*, *in*, *ir*, *iz*, *iš* hinter *a* oder *u*, die für *ul*, *um*, *ut* hinter *a* oder *i*, so wird nur ihr Konsonant gelesen. Die Doppelvokale *ai*, *ui*, *au* und *iu* entstehen in diesen Fällen nur graphisch, und es ist z. B. statt *ša-ir* vielmehr *šar*, statt *ba-ik* vielmehr *bak*, statt *ha-ul* vielmehr *hal* auszusprechen usw.¹⁸

The correctness of this view may be ascertained from the following list of variant spellings for the same words:

¹³Compare the normalization of the Hittite words *ta-ma-is* as *tamais*, *is-hi-ul* as *ishiul*. Cf. E. H. Sturtevant, Hittite Glossary (2d ed.; Philadelphia: William Dwight Whitney Linguistic Series, 1936), pp. 149, 60.

¹⁴This interpretation seems to be implicit in Meillet-Benveniste, Grammaire du Vieux-Perse (Paris, 1931), p. 56: “Le nom de mois *ad^uukniš* se lira *adúkanaiša* d’après él. *ha-du-kan-na-iš*.”

¹⁵Cf. W. von Soden, Das Akkadische Syllabar (Analecta Orientalia 27; Rome: Pontificium Institutum Biblicum, 1948), pp. 8-9; also, F. Thureau-Dangin, “Les graphies rompues en accadien,” in Mémoires ‘Ex Oriente Lux’ (1946), pp. 15-19.

¹⁶Hallock, op. cit., p. 252, n. 50.

¹⁷Weissbach, Die Achaemenideninschriften zweiter Art, p. 30.

¹⁸Weissbach, Die Keilinschriften der Achaemeniden (Leipzig: J. C. Hinrichs’sche Buchhandlung, 1911), p. xlii.

<i>du-na-áš</i>	<i>hu-be</i>
<i>du-na-iš</i>	<i>hu-ib-be</i>
<i>ha-ak-ka-man-nu-iš-ši-ya</i>	<i>ka-at-ba-du-kaš-be</i>
<i>ha-ak-ka-man-nu-ši-ya</i>	<i>ka-ut-ba-du-ka</i>
<i>ha-ka-man-nu-ši-ya</i>	<i>sa-ad-da-ku-iš</i>
<i>ha-ka-man-nu-iš-ši-ya</i>	<i>sa-ud-da-ku-iš</i>
<i>ha-iš-ša-ik-ka</i>	<i>ši-iš-šá-an-tak-ma</i>
<i>as-ša-ka</i>	<i>ši-iš-šá-in-tak-ma</i>
<i>ha-ša-ka</i>	
<i>hu-ud-da-iš</i>	<i>šá-áš-šá</i>
<i>hu-ut-taš</i>	<i>šá-iš-šá</i>
<i>mu-šir-ra-ya</i>	<i>ú-un</i>
<i>mu-iš-ša-ri-ya-ip</i>	<i>ú-in</i>
	<i>un</i>
<i>pír-ra-ma-da-ra-um</i>	<i>mi-iš-ba-da-na-áš-be-na</i>
<i>pír-ra-ma-ud-da-ra-na-um</i>	<i>mi-iš-šá-da-na-iš-be-na</i>
<i>pír-šá-at-ti-ni-ka</i>	<i>áš-šu-ra-ap</i>
<i>pír-šá-ut-ti-ni-ka</i>	<i>áš-šu-ra-ip</i>
<i>pír-šá-ti-ni-ka</i>	
<i>ir-šá-ir-ra-ib-ba</i>	<i>ya-u-na-ap</i>
<i>ir-šá-ir-ra-ab-ba</i>	<i>i-ya-u-na-ip</i>
<i>ir-šá-ir-ra</i>	<i>ba-ik-tur-ru-iš</i>
<i>ir-šá-ra</i>	<i>ba-ak-tar-[ri-iš-mar]</i>
<i>ir-tak-ik-šá-iš-šá</i>	<i>ma-raš-mi-ya-ip</i>
<i>ir-tak-ik-šá-áš-šá</i>	<i>ma-ra-iš-mi-iš</i>
<i>ti-ut-ki-me</i>	<i>da-ša-ra-um</i>
<i>ti-ut-ki-um-me</i>	<i>da-iš-ša-ra-um</i>
<i>ku-uk-da-in-da</i>	<i>šu-uk-da</i>
<i>ku-uk-tan-ti</i>	<i>šu-ik-da</i>
<i>šá-at-tar-ri-da</i>	<i>ku-ik-ti-ra</i>
<i>šá-ut-tar-ri-ud-da</i>	<i>ku-uk-taš</i>
<i>ir-šá-ma</i>	
<i>ir-šá-um-ma</i>	

The theoretically possible and actually occurring 'broken-vowel' spellings can best be exemplified in the following tables (starred forms have not yet been found):

<i>ba-ik</i>	<i>*pa-ik</i>	<i>*ka-ik</i>	<i>*da-ik</i>	<i>*sa-ik</i>	<i>ša-ik</i>
<i>*ba-in</i>	<i>*pa-in</i>	<i>*ka-in</i>	<i>da-in</i>	<i>*sa-in</i>	<i>*ša-in</i>
<i>ba-ip</i>	<i>pa-ip</i>	<i>ka-ip</i>	<i>da-ip</i>	<i>sa-ip</i>	<i>*ša-ip</i>
<i>ba-ir</i>	<i>*pa-ir</i>	<i>*ka-ir</i>	<i>*da-ir</i>	<i>*sa-ir</i>	<i>*ša-ir</i>
<i>*ba-iš</i>	<i>*pa-iš</i>	<i>ka-iš</i>	<i>da-iš</i>	<i>*sa-iš</i>	<i>ša-iš</i>
<i>*ba-iš</i>	<i>*pa-iš</i>	<i>*ka-iš</i>	<i>da-iš</i>	<i>*sa-iš</i>	<i>ša-iš</i>

*šá-ik	*ya-ik	*ha-ik	la-ik	ma-ik	*na-ik	*ra-ik
šá-in	ya-in	ha-in	*la-in	ma-in	*na-in	ra-in
*šá-ip	ya-ip	*ha-ip	*la-ip	ma-ip	na-ip	ra-ip
šá-ir	ya-ir	*ha-ir	la-ir	ma-ir	na-ir	ra-ir
šá-iš	ya-iš	ha-iš	la-iš	ma-iš	na-iš	ra-iš
*šá-iš	*ya-iš	ha-iš	*la-iš	*ma-iš	*na-iš	ra-iš
*pu-ik	ku-ik	*du-ik	*tu-ik	*su-ik	šu-ik	
pu-in	ku-in	du-in	*tu-in	*su-in	*šu-in	
*pu-ip	*ku-ip	du-ip	*tu-ip	*su-ip	šu-ip	
*pu-ir	*ku-ir	*du-ir	tu-ir	*su-ir	*šu-ir	
*pu-iš	ku-iš	du-iš	tu-iš	*su-iš	*šu-iš	
*pu-iš	*ku-iš	*du-iš	*tu-iš	su-iš	*šu-iš	
*hu-ik	*lu-ik	*mu-ik	nu-ik	*ru-ik		
*hu-in	*lu-in	*mu-in	nu-in	*ru-in		
hu-ip	*lu-ip	*mu-ip	nu-ip	*ru-ip		
*hu-ir	*lu-ir	*mu-ir	*nu-ir	ru-ir		
hu-iš	*lu-iš	*mu-iš	nu-iš	ru-iš		
*hu-iš	*lu-iš	mu-iš	nu-iš	*ru-iš		
*ba-ul	*pa-ul	*ka-ul	*da-ul	*sa-ul	ša-ul	
*ba-um	*pa-um	ka-um	da-um	*sa-um	*ša-um	
ba-ut	*pa-ut	ka-ut	da-ut	sa-ut	*ša-ut	
*šá-ul	*ya-ul	ha-ul	*la-ul	*ma-ul	*na-ul	*ra-ul
šá-um	*ya-um	ha-um	*la-um	ma-um	na-um	ra-um
šá-ut	*ya-ut	ha-ut	*la-ut	ma-ut	na-ut	*ra-ut
*pi-ul	*gi-ul	*ki-ul	*ti-ul	*si-ul	*ši-ul	
*pi-um	*gi-um	ki-um	ti-um	*si-um	*ši-um	
*pi-ut	gi-ut	*ki-ut	ti-ut	*si-ut	*ši-ut	
*ši-ul	*hi-ul	li-ul	mi-ul	*ni-ul	*ri-ul	
ši-um	*hi-um	*li-um	*mi-um	*ni-um	*ri-um	
ši-ut	hi-ut	*li-ut	mi-ut	*ni-ut	ri-ut	
be-ul ¹⁹	mi-ul	*še-ul	te-ul			
*be-um	*me-um	*še-um	*te-um			
be-ut	*me-ut	*še-ut	*te-ut			

2.9 Written final vowels. — In a large number of cases, a form occurs in variant orthographies with and without a final written vowel. Thus, for example, *vhar-mi-nu-ya-ir* (DB 26, 49) and *vhar-mi-nu-ya-ra* (DB 52) occur in the following contexts:

DB 26:²⁰ *vda-tur-ši-iš hi-še vhar-mi-nu-ya-ir ki-ir vú vli-ba-ru-ri*

DB 52:²¹ *a-ak vha-rak-ka hi-še vhar-mi-nu-ya-ra ti-tuk-ka na-an-ri*

¹⁹The RAE spelling *vnu-ti-ut-be-ul /nutitpil/* for Bab. Nidintu-Bēl (written *Ni-di-in-tu-dEN*) is additional proof for the irrelevance of the second vowel in these spellings.

²⁰‘Dādaršiš, his name, an Armenian, my servant.’

²¹‘and Arxa, his name, an Armenian (he), lied saying.’

These examples make possible the following analysis: /*arminuyar*/ composed of /*arminuya*+*r*/, the written *-ra* to be interpreted as *-r(a)*. (For this suffix /-*r*/, cf. 'substantive' /-*r*/ § 6.10.3.)

Likewise, some verbal forms such as (a) the 'remotive' /-*k*/ (cf. § 5.6) and (b) the 'relative' /-*t*/ (cf. § 5.4.2) appear in actual orthographic occurrence as *-k*, *-ki*, *-ka* and *-da*, *-ti*, respectively.

(a) Examples of the 'remotive:'

DB 25:²² *sa-ap* ^v*ma-da-be-ik-ki-ir pa-ri-ik*

OP *yaθā Mādam parārasa*

DB 41:²³ *sa-ap* ^v[*pār-šip*] *-ik-ki-ir pa-ri-ik*

OP *yaθā Pārsam parārasa*

DB 26:²⁴ *sa-ap* ^v*har-mi-nu-ya-ip-ik-ki-ir pa-ri-ik-ka*

OP *yaθā Arminam parārasa*

DB 29:²⁵ *sa-ap* ^v*har-mi-nu-ya-ip-ik-ki-ir pa-ri-ik-ka*

OP *yaθā Arminam parārasa*

(b) Examples of the 'relative:'

DB 12:²⁶ ^v*sunki-me* [*hu-be ap*] *-pa* ^v*kam-ma-ad-[da ak]-ka* ^v*ma-[ku]-iš*
^v*kān-ḫu-ši-ya e-mi du-iš-ti*

OP *aita xšačam tya Gaumāta hya magus adinā Kabūjiyam*

DB 14:²⁷ *ap-pa* ^v*kam-ma-ad-da ak-[ka]* ^v*ma-ku-iš e-ma ap du-iš-da*

OP *tyadiš Gaumāta h[ya] maguš adinā*

In the case of the relative suffix cited above, the verbal forms would be interpreted as ending in the consonant cluster /-*št*/, and the spelling with a final vowel would only be a device for indicating this consonantal cluster. The foregoing are representative cases for the interpretation of some final written vowels as graphic only. This does not apply to all cases of written final vowels. Each morphological element must be considered independently, with the possibility inherent throughout that a graphic final vowel may or may not have morphological or phonological justification. The same may also be true of some medial vowels in the case of medial clusters (cf. next section).

2.10. Consonant clusters. — A number of OP words with consonant clusters are written in RAE. It is of interest to note these cases and the devices which were used to represent these clusters.

(a) Initial clusters:

OP
Xšaθrita-

xšačapāvan-

xšača-

RAE

šá-at-tar-ri-da

šá-ut-tar-ri-ud-da

šá-ak-šá-ba-ma-na-me

šá-iš-šá-[um]

²²'after among the Medians (he) arrived.'

²³'after among the Persians (he) arrived.'

²⁴'after among the Armenians (he) arrived.'

²⁵'after among the Armenians (he) arrived.'

²⁶'that kingship which Gaumata, who (was) a Magian, from Cambyses took away.'

²⁷'what Gaumata, who (was) a Magian, from them took away.'

OP	RAE
<i>Xšayāršan-</i>	<i>ik-še-ir-iš-šá</i> <i>ik-še-ir-šá</i>
<i>fraša-</i>	<i>pir-ra-šá-um</i>
<i>Frāda-</i>	<i>pir-ra-da</i>
<i>Fravarti-</i>	<i>pir-ru-mar-ti-iš</i>
<i>framātar-</i>	<i>pir-ra-ma-da-ra-um</i>
<i>brazmaniya-</i>	<i>pir-ra-iš-man-nu-ya</i>
<i>Skūⁿxa-</i>	<i>iš-ku-in-ka</i>
<i>Skudra-</i>	<i>iš-ku-ud-ra</i>
<i>stāna-</i>	<i>iš-da-na</i>
<i>Sparda-</i>	<i>iš-pār-da</i>
<i>Zraⁿka-</i>	<i>šir-ra-an-ka</i>

The use of a prothetic vowel in *ik-še-ir-(i)š-šá* for the expression of the initial consonant cluster in the name *Xšayāršan-* is reminiscent of the Hebrew and Arabic practice of spelling prothetic *ʔalif* + vowel in the adaptation of foreign names with initial consonant clusters. Indeed, the form אֶשֶׁר שָׁרַשׁ can only be equated phonologically with *Xšayāršan-* ‘Xerxes,’ the initial *ʔalif* performs the same adaptive function as the vowel in *ik* of the RAE spelling.

The use of the CVC sign *pir* to express both OP *fr-* and *br-* is indicative of another orthographic and adaptive device by means of which the Elamite scribes rendered these otherwise irreproducible clusters in the type of cuneiform used by them. The occurrence of CVC signs with the phonologically irrelevant written vowel points to the impossibility of utilizing these CVC signs for the determination of vowel quality, or for the determination of accurate correspondence of vowels between RAE and OP where these CVC signs are concerned. To this must be added the variations in the vowels of CVC signs used in variant spellings of the same RAE word (cf. § 2.11).

The cuneiform system of writing used by the RAE scribes contains inherent difficulties of interpretation. These difficulties are limited, however, to the analysis of the writing system and have little or no relationship to the phonology of the language for which the system is used. Such was the case with the problem of written final vowels (§ 2.9), and such is the case here too with what seem to be epenthetic vowels that have no phonological or etymological justification (cf. medial clusters, below).

(b) Medial clusters with and without epenthetic vowels.

1. OP loanwords:

Arakadri-	ha-rak-ka-tar-ri-iš	A-ra-ka-ad-ri-i?
Parga-	pár-rak-ka	
Baxtri-	ba-ik-tur-ri-iš ba-ak-tar-[ri-iš] ba-ak-ši-iš ²⁸	Ba-aḥ-tar
Θuxra-	du-uk-kur-ra	
Xšayārša-	ik-še-ir-iš-šá ik-še-ir-šá	
Xšaθrita-	šá-at-tar-ri-da šá-ut-tar-ri-ud-da	
Θāigarci-	sa-a-kur-ri-ši-iš-na	
Uvaxštra-	ma-ak-iš-tar-ra-na	
Mudrāya-	mu-šir-ra-ya mu-iš-ša-ri-ya-ip [mu]-iš-ra-mar	

2. RAE words:

ak-ka-be-na	/akapna/	da-a-ú-iš-be-na ²⁹	/taušpna/
ha-ša-kur-ra	/ačakr/	da-na-iš-be-na ²⁹	/tanašpna/
ap-pa-an-ka	/apanka/	ti-tuk-kur-ra	/titukr/
ap-pa-na-ka		sunki-ip-na	/sunkipna/
ir-še-ik-ki-ip-na		sunki-ip-in-na	/sunkipna/
ir-še-ik-ki-ip-in-na	/iršikipna/	mar-be-ip-da	
hu-pi-be-na	/uḫipna/	mar-ri-be-ip-da	/marḫipta/
pár-ru-sa-na-iš-be-na ²⁹	/paručanašpna/	na-ap-pan-na	/naḫna/
		na-ab-be-ra	/naḫra/
pír-šá-da-ni-ka		na-ap-pi-be-na	/naḫipna/
pi-ra-šá-da-ni-ka	/piršatanika/	šá-ak-ri	
		šá-kur-ri	/šakri/

The Bab. royal name *Nabū-kudurri-ušur* appears in RAE as *naḫ-kur-tur-ra-šir*, *naḫ-kur-tur-ru-šir*, *naḫ-kur-tur-šir* and in OP as *Nabukudra-cara*. The Elamite spellings may represent the Bab. form directly without the OP intermediary. The *tur* in RAE may not then be used as an additional case of an intrusive vowel, but would be etymologically justified.

²⁸The RAE form with /š/ instead of /tr/ corresponds to the difference between the OP form and the Median form also used in OP.

²⁹The stem is OP, but the suffixes are RAE.

The interpretation in the above list of RAE genitive plurals in *-be-na* as /-pna/ (e.g., *ak-ka-be-na*, *ma-da-be-na*, etc.) is made certain by the spellings *sun-ki-ip-(in)-na* and *ir-še-ik-ki-ip-(in)-na*. The interpretation of *ti-tuk-kur-ra* is possible when comparison is made to the same complex of suffixes seen in *hal-pi-ik-ra*.

2.11. Vowel variation in CVC signs. — RAE shows a variety of spellings wherein (1) CVC signs differing only in vowel are used interchangeably in spellings of the same word, and (2) CVC signs are used interchangeably with a CV-VC spelling containing a different vowel. These account for the cases of verb-bases that have vowel variations either in the base or in the vowel class. The following examples³⁰ may be cited:

<i>ha-tam-tar-ra</i>	<i>be-ip-taš</i>	
<i>ha-tam-tur-ra</i>	<i>be-ip-ti-iš</i>	
<i>ha-tam-ti-ra</i>	<i>muš-nu-ka</i>	
<i>ha-tam-ti-ip</i>	<i>mi-iš-nu-ka</i>	
<i>ha-tam-tup</i>	<i>da-tur-ši-iš</i>	
<i>pu-ud-da-ka</i>	<i>da-tar-ši-iš</i>	
<i>pu-ut-tuk-ka</i>	<i>ti-te-iš</i>	
<i>da-ut-tuk</i>	<i>ti-te-in-ra</i>	< /tit - i ~ ui/
<i>da-ut-ti-ra</i>	<i>ti-tuk-ka</i>	
<i>hal-mar-râš</i>	<i>ti-ri-ya</i>	
<i>hal-mar-ri-iš</i>	<i>ti-ri-iš</i>	
<i>hu-ut-taš</i>	<i>ti-ri-ik-da</i>	< /tir- ~ tur-/ 'to speak'
<i>hu-ud-da-iš</i>	<i>tur-ri-ka</i>	
<i>hu-ut-ti-iš</i>	<i>tur-ri-ra</i>	
<i>hu-ud-da-ak</i>	<i>ka-tak-ti-ni</i>	
<i>hu-ut-tuk-ka</i>	<i>ka-tuk-ti-ni</i>	
<i>hu-ut-tuk</i>	<i>ka-ni-šá</i>	
<i>ba-ak-tur-ri-iš</i>	<i>kán-na</i>	< /kan- ~ kin-/ 'to befriend'
<i>ba-ak-tar-[]</i>	<i>kin-ni-en</i>	
<i>ba-ak-ši-iš</i>	<i>mu-šir-ra-ya</i>	
	<i>mu-iš-ša-ri-ya-ip</i>	

Given this fluctuation in CVC signs containing different vowels in variant orthographies of the same word, these CVC signs will not be cited as crucial evidence for the determination of RAE vowel phonemes, nor for the description of correspondence sets between RAE and OP.

³⁰Cf. F. H. Weissbach, "Zur Kritik der Achämenideninschriften," *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, LXVII (1913), 290-296. For the problem of CVC signs in cuneiform in general cf. R. Labat, "Le problème de la notation des homophones nouveaux dans le syllabaire suméro-akkadien," *Semitica*, I (1948), 3-15, especially p. 9, and W. von Soden, *Das Akkadische Syllabar*, signs number 7, 8, 11, 26, 42, 58, 117, 166, 172, 173, 175, 182, 197, 207, 221, 238, 251, 261, 274, 293, and 310.

3

PHONOLOGY

3.1. /a/. — Evidence for the /a/ phoneme in RAE is contained in those cuneiform signs which in Sumero-Akkadian are known to have an *a*-vowel: *ba, pa, ka, da, šá, sa, ša, ya, ha, la, ma, na, ra, a, ap, ak, at, áš, aš, ah, am, an*.¹ In addition, the RAE rendition of OP words and names is helpful in the determination of this vowel phoneme; for example, OP *apadāna* = RAE *ha-ba-da-na*, OP *Adukanaiša* = RAE *ha-du-kán-na-iš-na*, OP *Haxāmanišiya* = RAE *ha-ak-ka-man-nu-ši-ya*, etc.

The symbol /a/ is to be interpreted as a low, central vowel, with no further attempt at a more precise phonetic identification of any allophonic possibilities.

3.2. /i/. — The following CV and VC signs contain evidence for the /i/ phoneme: *pi, gi, ki, ti, ši, si, ši, hi, li, mi, ni, ri, i, ip, ik, iš, iš, in, ir*. The evidence from OP words and names is exemplified by OP *Āçina* = RAE *ha-iš-ši-na*, OP *Āçiyādiya* = RAE *ha-iš-ši-ya-ti-ya-iš-na*, OP *Haldita* = RAE *hal-ti-da*, etc.

The signs *e, be, te, še, me, en* interchange with their analogs with *i*, and in addition there is no situation where a meaning hinges on the differentiation of *i* and *e* as separate vowel phonemes. The nominal 'abstractive' suffix occurs as both *-me* and *-mi*; e.g., *su-un-ku-mu-mi* (XPa4) and *su-un-<ku>-mu-me* (XPda4). Similarly, the pronominal element /i/, evidenced in such forms as *hi, in, ir*, appears in *hi-še </is + i/* 'name + he = his name.' The forms *ti-ib-ba, ti-ib-be, and te-ib-ba* occur, with exactly the same meaning. The pronominal *hu-be* occurs in *hu-pír-ri, hu-pi-be, and hu-pi-me-ir*. The verbal base /ipš-/ 'to fear' occurs in the forms *ip-ši-iš* (DB 13), *ip-ši-ip* (DB 23), and *ip-še-man-ba* (DS x rev.). The verbal root /pil/ 'to impale' occurs in the forms *be-la-ka, be-la, pi-li-ya*. This non-phonemic interchange of graphic *i* and *e* may be helpful in relating the forms *GİSte-tin* 'ornamentation' (?) and *ti-te-in-ra* 'a liar' from the same verb base /tit/ meaning perhaps 'to fashion.'

In general, however, there is consistency in the use of *Ce* signs as opposed to the *Ci* signs within the same word. The discrepancies cited seem to indicate that despite the possible phonetic difference between two varieties of high front vowel characterized by the conventional transliteration of cuneiform signs with *i* and *e*, there was no phonemic distinction between them. At any event, no case of minimal contrast is available, and there is evidence of fluctuation between the two. The

¹Cf. § 2.10 for reasons for not including the CVC signs as evidence for the vowel phonemes.

problem of interpretation posed by the case of *i* and *e* is somewhat parallel to that of the evidence for an *o*-vowel in RAE (cf. § 3.3).

For the purpose of normalization, both graphic *i* and *e* will be interpreted as /*i*/ throughout, the symbol to be understood as representing a front mid or high vowel.

3.3. /*u*/. — The following CV and VC signs contain evidence for the /*u*/ phoneme: *pu, ku, du, šu, su, hu, lu, mu, nu, ru, uk, ut, ul, um, un, ur*. In addition, there are also the signs *u* and *ú*. On the basis of the last mentioned signs and of the consonantal equivalence of the *ba* and *pa, du* and *tu* signs, Hüsing followed Oppert in postulating a fifth vowel *o*.² There are, however, certain difficulties with this procedure, chief among which is the absence of other signs that might be interpreted with *o* after the remaining consonants in the language. It would be methodologically safer to consider the cases of *u* and *ú, ba* and *pa, du* and *tu* as homophonous, rather than to postulate an additional vowel and thus to leave at least seven other cases unaccounted for. In addition, there occur spellings which alternate in the use of some of these signs. For example, *ᵛda-a-ya-u-iš* (DB 7, 8, 10), *ᵛda-a-ya-ú-iš* (DB 14, 25, 37), *u-ri-in-ra* and *ú- [ri-in-ra]* (the contexts are parallel and the reconstruction is very probable).

Some OP words which corroborate the *u* vowel are: OP *Upadarma-* = RAE *uk-ba-[tar]-ra-an-ma*, OP *Uyamā-* = RAE *ú-i-ya-ma*, OP *ucāra-* = RAE *ú-ša-ra-um-mi*, OP *Sugda-* = RAE *šu-uk-da*, etc.

3.3.1. OP *ai* and *au*. — OP has the diphthongs *ai* and *au*, and the RAE renderings of these may give an indication as to the interpretation of the Elamite vowel phonemes. The OP and RAE correspondences are the following:

3.3.1.1. OP *ai* = RAE *Ca-a*.

OP	RAE	Bab.
<i>Ainaira-</i>	<i>ha-a-na-a-ra</i>	<i>a-ni-ri-i-i?</i>
<i>θāigarci-</i>	<i>sa-a-kur-ri-ši-iš-na</i>	
<i>daiva-</i>	<i>da-a-ma</i>	

3.3.1.2. OP *ai* = RAE *a*.

Adukanaiša- *ha-du-kán-na-iš-na*³

3.3.1.3. OP *ai* = RAE *e*.

axšaina- *ak-še-[na]*

² Cf. Weissbach, *Die Achämenideninschriften zweiter Art*, p. 29; G. Hüsing, *Elamische Studien* (Berlin: W. Peiser, 1898); Bork, "Elam (Sprache)," *Reallexikon der Vorgeschichte*, III (1925), 74; Weissbach, "Zur Kritik der Achämenideninschriften," *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, LXVII (1913), 287-290.

³ Meillet and Benveniste, *op. cit.*, p. 56; but see § 2.8 for *na-iš* = /*naš*/.

OP	RAE	Bab.
-mai ^y	-me	
Arbaira-	har-be-ra	ar-ba- [?] i-il
Uvādaicaya-	ma-te- [?] ši-iš	
Naditabaira-	nu-ti-ut-be-ul	ni-din-tu- ^d EN ⁴
3.3.1.4. OP ai = RAE i.		
-mai ^y	-mi	
naucaina-	[na-u] -iš- [?] ši-na	
Nabunaita-	na-pu-ni-da-na na [?] p-pu-ni-da-na	Nabū-na [?] id ⁴
haraiva-	har-ri-ma ha-ri-i-ya-i [p]	a-ri-e-mu
3.3.2.1 OP au = RAE Ca-u		
Autiyāra-	ha-u-ti-ya-ru-iš	ú-ti-ia-a-ri
Yautiya-	ya-ú-ti-ya-iš	i-ú-ti-ia
Yauna-	ya-u-na i-ya-u-na-a [?] p	ia-ma-nu
Va ^h umisa-	ma-u-mi-iš-šá	ú-mi-is-si
Vahauka-	ma-u-uk-ka	ú-ma-aḥ-ku
Višpauzāti-	mi-iš-ba-u-ša-ti-iš	
kapautaka-	ka-ba-u- [da-ka]	
tigraxauda-	ti-ik-ra-ka-u-da	
Dārayava ^h u-	da-ri-ya-ma-u-iš	da-ri-ia-muš, etc.
Sikaya ^h uvati-	ši-ik-ki-ú-ma-ti-iš	sik-kam-ú-ba-at-ti-i [?]
3.3.2.2. OP au = RAE u.		
Auramazdāh-	u-ra-maš-da	ú-ra-ma-az-da a-ḥu-ru-ma-az-da-a [?] , etc.
haumavarga-	u-mu-mar-ka-i [?] p u-mar- [ka]	ú-mu-ur-ga-a [?]
3.3.2.3. OP au = RAE am.		
Gaubaruva-	kam-pár-ma	gu-ba-ru-u [?]
Gaumāta-	kam-ma-ad-da	gu-ma-a-tu

⁴The Bab. form is primary; i.e., Bab. > OP, RAE.

3.3.2.4. Equivalence of *u* and *ú*. — The use of *ú* in *ya-ú-ti-ya-iš* (§ 3.3.2.1) to render what is more generally rendered by *u* seems to imply a similarity in the pronunciation of the two signs, or in any event a single interpretation phonemically of possibly only a phonetic difference. This situation would then be similar to that of *i* and *e*.

3.3.2.5. OP orthographic influence in RAE. — The examples of RAE orthographies of OP words are significant for the further observation that these RAE spellings were heavily influenced by OP methods of writing. Thus, a spelling *ha-a-na-a-ra* to express OP *Ainaira-* is possibly an attempt to emulate the OP practice of writing a vowel sign after a CV sign, although in OP this is generally interpreted as indicative of vowel length or diphthongization. The spelling *Ca-u* or *Ca-ú*, which occurs in the RAE column in the above list, may be interpreted for RAE as simply /*Cu*/ in view of the Bab. forms such as *i-ú-ti-ia* and *da-ri-ia-mus*. To interpret these forms with diphthongs *ai* and *au* for RAE would have the result that RAE would show these sounds only in loanwords from OP, except for two RAE words *ša-u-mi-in* and *ma-u-ri-ya*, *ma-u-ri-iš-šá* where such spellings occur. The first may be interpreted as /*čumin*/ and may be due to a desire to persianize this particular word, occurring as it does in the formulaic phrase *sa-u-mi-in^du-ra-maš-da-na*.⁵ But the word is difficult to explain.⁶ The remaining cases must remain anomalous for the time being, since there is no good explanation as yet for their occurrence; these forms are also known to occur as *mar-ri-ya* and *mar-ri-iš-šá* from the verbal base /*mar-*/ 'to seize.'

A possible alternative explanation for the writing *Ca-u* and *Ca-ú* may be /*Cau*/ with syllable-division between the two vowels. Which interpretation is applicable must be determined independently in each case, and both interpretations may be possible.

Thus, in accord with the method used throughout of extracting a minimum number of phonological units to describe this dialect and to make phonemic distinctions only where minimal contrast is evident, RAE may be considered to have the three vowel phonemes /*a,i,u*/ and no diphthongs.

3.4. /*p*/. — The following cuneiform signs contain the /*p*/ phoneme: *ba*, *pa*, *be*, *pi*, *pu*, *ap*, *ip*, *íp*, *pát*, *pan*, *pír*, *pár*, *kúp*, *tup*, *šip*, *šap*, *nap*, *ráp*. The signs *ba* and *pa* are not known to interchange in RAE, although their consonantal equivalence seems clear. The plural element /-*p*/ occurs in a variety of spellings among which the signs *ip*, *íp*, *pi*, *be*, and *ba* interchange, with the final vowel graphic only (§ 2.9).

⁵This spelling would fill the gap for the sign *šu* in the RAE syllabary, and would be an example of the use of an OP spelling practice in RAE. Another example is evident in the RAE variants *ú-na-in* and *ú-na-ha-in* where the *ha* only re-enforces the *a*-vowel implicit in the *na* sign. Similarly, OP *artācā* is in RAE *ir-da-ha-ši*.

⁶Cf. Cameron, *op. cit.*, p. 49.

DB 16:⁷ [*me*]-*ni* *ʰha-tam-ti-ip ʰú-ik-ki-mar be-ip-ti-ib-ba*

OP [*sāva*] *Ūvjiyā hamiçiyā abava*

DB 24:⁸ *hu-pi-be ʰú-ik-ki-mar be-ip-ti-ip*

OP [*hauv*] *ḥacāma hamiçiyā abava*

Similarly, the forms *ip-še-man-ba* and *ti-ri-man-pi* have the same formative elements which can be interpreted as /-*manp*/; and for the equivalence of *be* and *pi*, one may compare *hal-pi-iš* and *hal-be-in-da* from the same verb base /*alp*-/ 'to slay.'

OP forms with their RAE and Bab. forms that indicate the /*p*/ phoneme are:

OP	RAE	Bab.
<i>Pātiš^huwari-</i>	<i>ba-ut-ti-iš-mar-ri-iš</i>	<i>pa-id-di-iš-ḥu-ri-iš</i>
<i>Patigrabna-</i>	<i>pāt-ti-ik-rāb-ba-na</i>	
<i>patikara-</i>	<i>pāt-ti-kar-ra-um</i>	
<i>Bābiru-</i>	<i>ba-pi-li</i>	
<i>Bāxtri-</i>	<i>ba-ak-ši-iš</i>	<i>ba-aḥ-tar</i>
	<i>ba-ik-tur-ri-iš</i>	
<i>Bagābigna-</i>	<i>ba-ka-pi-ik-na</i>	
<i>Bagabuxša-</i>	<i>ba-ka-ḫu-uk-šá</i>	<i>ba-ga-bu-ki-šu</i>
<i>Pārsa-</i>	<i>ba-ir-šá</i>	<i>pa-ar-su</i>
	<i>pār-šíp, etc.</i>	
<i>Parθava-</i>	<i>pār-tu-ma</i>	<i>pa-ar-tu-ú</i>
<i>Ka^mbujiya-</i>	<i>kán-ḫu-ši-ya</i>	<i>kam-bu-zi-ia</i>
<i>Katpatuka-</i>	<i>ka-ut-ba-du-ka</i>	<i>ka-at-pa-tuk-ka</i>
	<i>ka-at-ba-du-kaš-be</i>	
<i>xšaçaḫpāvan-</i>	<i>šá-ak-šá-ba-ma-na-me</i>	
<i>Garmapada-</i>	<i>kar-ma-pāt-taš</i>	
<i>Cišpi-</i>	<i>ši-iš-pi-iš</i>	<i>ši-iš-pi-iš</i>
<i>Taxmaspāda-</i>	<i>tak-maš-ba-da</i>	
<i>Dubāla-</i>	<i>du-ib-ba-[la]</i>	
<i>Nadī^mtabaira-</i>	<i>nu-ti-ut-be-ul</i>	<i>Nidintu-Bēl</i> (^m Ni-din-tu- ^d EN)
<i>ḫaruzanānām</i>	<i>pār-ru-ša-na-na-um</i>	
	<i>ba-ru-ša-na-na-um</i>	

⁷ 'Then the Elamites from me rebelled.'

⁸ 'They from me rebelled.'

The correlation of *ba* with OP *b* and *p* and of *pi* with OP *b* and *p* indicates that the distinction of voiced and voiceless consonants did not exist in RAE. From the loanword material, and from internal morphological analysis (such as the case of plural /*p*/), it appears that the phonology of RAE can be explained by assuming the existence of only a single series of consonants. Perhaps there existed in the spoken language some phonemic distinction such as lenis versus fortis unvoiced phonemes, or aspirated versus unaspirated phonemes, etc. There is thus far, however, no case of minimal contrast to indicate anything but a single consonantal series. For the purpose of this study the ordinary voiceless consonantal symbols have been used, without suggesting in any way that voicelessness was necessarily one of their phonetic components.

3.5. /*t*/. — The following cuneiform signs contain the phoneme /*t*/: *da*, *ti*, *te*, *du*, *tu*, *tu*₄, *at*, *ut*, *tup*, *tak*, *tuk*, *taš*, *tal*, *tam*, *tam*₄, *tan*, *tin*, *tar*, *tur*, *pāt*, *mat*, *mit*, *rat*. One of these, *tu*₄/*íp* (i.e., TUM), is used with the dental value in RAE in only one occurrence of a single word, *tu*₄-*ru-iš* (DB 60),⁹ the imperative form of the verb-base /*tir*- ~ *tur*-/ 'to speak' (in this context, the Bab. version has *ki*-[*bi*]). (In the Persepolis treasury tablets and in the fortification texts the imperative of this same verb root also occurs in the shape *tu*₄-*ru-iš* albeit much more frequently than in RAE). The singular occurrence of this reading as *tu*₄ may thus be considered to be marginal to the rest of the system. Its identity with a reading containing /*t*/ may be justified by the occurrence of the remaining forms from this same verb-base: *ti-ri-ya*, *ti-ri-iš*, *tur-ri-ka*, *ti-ri-in-ti*. However, a reading *íp-ru-iš* remains a theoretical possibility.

The *da* sign is the only sign with *a*-vowel in the CV dental series. The *ti* and *te*, *du* and *tu* signs are, for reasons outlined above, homophonous. The following list of OP loanwords in RAE orthography gives an indication of the value of these dental consonant signs.

OP	RAE	Bab.
<i>Autiyāra-</i>	<i>ha-ut-ti-ya-ru-iš</i>	<i>ú-ti-ia-a-ri</i>
<i>Auramazdāh-</i>	<i>u-ra-maš-da</i>	<i>ú-ra-ma-az-da</i> , etc.
<i>Āçiyādiya-</i>	<i>ha-iš-ši-ya-ti-ya-iš-na</i>	
<i>Adukanaiša-</i>	<i>ha-du-kān-na-iš</i>	
<i>Anāhitā-</i>	<i>an-na-hi-ud-da</i>	<i>a-na-aḥ-i-tu-u?</i>
<i>artācā</i>	<i>ir-da-ha-ši</i>	
<i>Artaxšaça-</i>	<i>ir-da-ik-šá-iš-šá</i> <i>ir-tak-</i> (elsewhere)	<i>ar-tak-šat-su</i>
<i>*astuv</i>	<i>áš-du</i>	

⁹This passage was verified by Cameron in 1948.

<i>Artavardiya-</i>	<i>ir-du-mar-ti-ya</i>	<i>ar-ta-mar-zi-ia</i>
<i>Aršādā-</i>	<i>ir-šá-da</i>	
<i>Asagarta-</i>	<i>áš-šá-kar-ti-ya</i>	<i>sa-ga-ar-ta-a-a</i>
<i>išti-</i>	<i>iš-ti</i>	
<i>utā-</i>	<i>ud-da</i>	
<i>Utāna</i>	<i>hu-ud-da-na</i>	<i>ú-mi-it-ta-na-a?</i>
<i>Uvādaicaya-</i>	<i>ma-te-ši-iš</i>	
<i>Katpatuka-</i>	<i>ka-at-ba-du-kaš-be</i> <i>ka-ut-ba-du-ka</i>	<i>ka-at-pa-tuk-ka</i>
<i>Gaⁿdutava-</i>	<i>kán-du-ma-ka</i>	
<i>Tigra-</i>	<i>ti-ik-ra</i>	<i>di-iq-lat</i>
<i>Dātuwahya-</i>	<i>da-ad-du-man-ya</i>	<i>za-a?-tu-?u-a</i>
<i>Dubāla-</i>	<i>du-ib-ba- [la]</i>	
<i>Parθava-</i>	<i>pár-tu-ma</i>	<i>pa-ar-tu-ú</i>
<i>Putāya-</i>	<i>pu-ú-ti-ya-ap</i> <i>pu-ud-da-a-ya</i>	
<i>Marduniya-</i>	<i>mar-du-nu-ya</i>	
<i>Haldita-</i>	<i>hal-ti-da</i>	
<i>Hīⁿdu-</i>	<i>hi-in-du-iš</i>	
<i>artāvā</i>	<i>ir-da-ma</i>	
<i>θuxra-</i>	<i>du-uk-kur-ra</i>	<i>su-uh₂-ra-a?</i>
<i>θūravāhara-</i>	<i>tu-ir-ma-ir-na</i>	

In addition, there are inner RAE variations in the use of dental consonant cuneiform signs in spelling variants.

ad-da-da ~ *at-te-ri*

EL-man-da ~ *EL-man-ti*

hu-ud-da-man-ra ~ *hu-ut-ti-man-ra*

hu-ud-da-hu-ut ~ *hu-ut-ti-ú-ut* ~ *hu-ud-du-ud-da*

be-ip-taš ~ *be-ip-ti-iš*

pi-ik-da ~ *pi-ik-ti*

hu-be-da ~ *hu-be-te*

hu-ud-da-ak ~ *hu-ut-tuk* ~ *hu-ut-tak-ka*

hu-ut-taš-da ~ hu-ut-taš-ti

du-iš-da ~ du-iš-ti

tar-ti-in-ti ~ tar-ti-in-da

Despite the consistency of the spelling of particular forms such as *du-iš*, *du-nu-iš*, etc. with the same sign, the interchange of *du* and *tu* in certain OP loanwords and the absence of any case in which a distinction in dental consonants is crucial assures the extraction of a single dental phoneme /t/ in all cuneiform signs containing dental consonants. The crucial cases from the above list are those in which OP *t*, *d*, *θ* are rendered indifferently by the RAE *du* and *tu* signs.

3.6. /k/. — The following cuneiform signs in RAE contain the /k/ phoneme: *ka*, *ki*, *gi*, *ku*, *ak*, *ik*, *uk*, *kak*, *kaš*, *kal*, *kam*, *kán*, *kin*, *kín*, *kar*, *kur*, *tak*, *tuk*, *šik*, *lak*, *rak*. Though the cuneiform sign with the emphatic velar stop *q* is used for the *Ca* sign in this series, it cannot be assumed that this type of phoneme is intended. Rather, this sign serves to express a palatal or velar stop with the *a* vowel, and there is no reason to assume the existence in RAE of phonemes of the Semitic emphatic type. In the one ambiguous case in this series of signs, that of *gi* and *ki*, there are several forms which prove their consonantly homophonous character: *an-la-gi* 'a crossing' and *ap-pan-la-ik-ki-um-me* < *apa* + *anlaki* + *mi* 'what-across-ness = transgression, wrongdoing'¹⁰ and also the case of *nu-iš-gi-iš-ni* and *ni-iš-ki-iš-ni* (= OP *pātuv*, Bab. *liššur*). Furthermore, the OP loanwords are revealing for the interpretation of the /k/ phoneme:

3.6.1. OP *k*.

<i>Anāmaka-</i>	<i>ha-na-ma-ak-kaš</i>	
<i>Arakadri-</i>	<i>ha-rak-ka-tar-ri-iš</i>	
<i>Katpatuka-</i>	<i>ka-at-ba-du-ka</i>	<i>ka-at-pa-tuk-ka</i>
<i>Ka^mpaⁿda-</i>	<i>ka-um-pan-taš</i>	[<i>ħa</i>]- <i>am-ba-nu</i>
<i>Kāpišakāni-</i>	<i>ka-ap-pi-iš-šá-ka-nu-iš</i>	
<i>Karka-</i>	<i>kur-ka-ap</i>	<i>kar-sa</i>
<i>Kāsaka-</i>	<i>ka-si-ka</i>	
<i>Kuganakā-</i>	<i>ku-uk-kán-na-ka-an</i>	<i>ku-gu-na-ak-ka</i>
<i>Kuⁿduru-</i>	<i>ku-un-tar-ru-iš</i>	<i>ku-un-du-ur</i>
<i>Maka-</i>	<i>ma-ak-ka</i>	<i>ma-ak</i>
<i>Saka-</i>	<i>šá-ak-ka</i>	
<i>Skuⁿxa-</i>	<i>iš-ku-in-ka</i>	

¹⁰Cf. H. H. Paper, "An Elamite Etymology," *Language*, 29 (1953), 66-68.

3.6.2. OP *g*.

<i>Kugamakā-</i>	<i>ku-uk-kán-na-ka-an</i>	<i>ku-gu-na-ak-ka</i>
<i>θatagu-</i>	<i>sa-ad-da-ku-iš</i>	<i>sa-at-ta-gu-ú</i>
<i>Pargā-</i>	<i>pár-rak-ka</i>	
<i>Bāgayādi-</i>	<i>ba-gi-ya-ti-iš</i>	
<i>magu-</i>	<i>ma-ku-iš</i>	<i>ma-gu-šu</i>
<i>Ragā-</i>	<i>rak-ka-an</i>	<i>ra-ga-a?</i>

3.6.3. OP *x*.

<i>axšaina-</i>	<i>ak-še-[na]</i>	
<i>Arxa-</i>	<i>ha-rak-ka</i>	<i>ar-ḫu</i>
<i>Artaxšaça-</i>	<i>ir-tak-šá-áš-šá</i> <i>ir-da-ik-šá-iš-šá</i>	<i>ar-ta-a?-ḫa-ša-is-su</i> <i>ar-tak-ša-as-su</i>
<i>Uvaxštra-</i>	<i>ma-ak-iš-tar-ra</i>	<i>ú-ma-ku-iš-tar</i>
<i>xšayārsan-</i>	<i>ik-še-ir-iš-šá</i>	<i>ḫi-ši-?a-ar-ša</i>
<i>Ciⁿcixri-</i>	<i>ši-in-ša-ak-ri-iš</i>	<i>ši-in-ša-aḫ-ri-iš</i>
<i>Ciçaⁿtaxma-</i>	<i>ši-iš-šá-an-tak-ma</i>	<i>ši-it-ra-an-taḫ-ma</i>
<i>θuxra-</i>	<i>du-uk-kur-ra</i>	<i>su-uḫ-ra-a?</i>
<i>Viyaxna-</i>	<i>mi-(ya)-kán-na-iš</i>	
<i>Skūⁿxa-</i>	<i>iš-ku-in-ka</i>	
<i>Haxāmaniš-</i>	<i>ha-ak-ka</i> <i>ha-ka-</i>	<i>a-ḫa</i>
<i>Raxā-</i>	<i>rak-ka-an</i>	

3.7. *h*-signs. — The signs *ha*, *hi*, *hu* regularly interchange with *a*, *i*, *ú*, indicating that the phonetic character of the consonant involved could not have been the velar voiceless fricative [*x*] as in Semitic.¹¹ The variation between *h*-containing signs and zero is as predictable and as regular as the spelling variations of double and single consonants. This regularity has been assumed to indicate that no consonant phoneme is involved. The explanation of this orthographic practice must await full historical study. If it is ever shown that a consonant of glottal, pharyngeal, or laryngeal character is involved, the symbol *h* may be reinserted as required.

The following are some attested examples of this graphic fluctuation:

¹¹OP *x* rendered by Bab. *ḫ* appears in RAE as *k* but never as *h* (cf. § 3.6.3).

hu-ud-da ~ *ú-ud-da*

ú ~ *hu*

ha-sa-ka ~ *ha-is-sa-ik-ka* ~ *as-sa-ka*

hi/i/ pron. nom. 3d sing. ~ *ir/i + r/*, pron. acc. 3d. sing.

ú-na-in ~ *ú-na-ha-in*

i-da-ka ~ *hi-da-ka*

hi-nu-ib-ba-ak ~ *in-nu-ip-pád-da*

hu-ut-taš-da ~ *ú-ut-taš-da*

hu-ud-da-hu-ut ~ *hu-ut-ti-ú-ut*

hu-ut-ti-nu-um-hu-ba ~ *hu-ut-ti-nu-um-ú-ba*

hu-ma-nu-iš ~ *ú-ma-nu-iš*

da-ah ~ *be-la* ~ *ti-ri-ya*, etc. (/V/ declarative first person singular suffix.)

OP *āham* = RAE *ha-um*

OP *apadāna* = RAE *ha-ba-da-na*

OP *artācā* = RAE *ir-da-ha-ši*

Because of this evidence, forms which are graphically consistent in the use of either V- or HV- will also be normalized as /V-/, since this seems to be part of the graphic system and since the awareness of this graphic interchange has served as a means to recognize dissimilar graphic forms as related.

3.8. /š/. — The following cuneiform signs contain the /š/ phoneme: šá, šà, ši, še, šu, áš, iš, šíp, šil, šir₇, kaš, taš, maš, muš, ráš.

No phonetic definition of the phoneme symbolized by /š/ will be attempted beyond the statement that it represents a sibilant different from two other sibilant phonemes symbolized by /s/ and /š/ for which there are other cuneiform signs and other correspondences. The sign šà occurs in a limited number of words with this value and may represent an archaic or historical spelling; it may indeed have the value líp as it was formerly read. In any event, it is off the main stream of orthographic usage, šá being the general and more usual Ca sign in this consonant series.

The OP forms with the /š/ value in RAE are the following:

3.8.1. RAE š = OP š.

Aršāma-

ir-šá-um-ma

išti-

iš-ti

kāpišakāni-

ka-ap-ḫi-iš-šá-ka-nu-iš

karša-

kur-šá-um

<i>Maruš</i>	<i>ma-ru-iš</i>
<i>Marguš</i>	<i>mar-ku-iš</i>
<i>Višpauzāti-</i>	<i>mi-iš-ba-u-ša-ti-iš</i>
<i>šiyāti-</i>	<i>ši-ya-ti-</i>
<i>Hiⁿduš</i>	<i>hi-in-du-iš</i>

3.8.2. RAE š = OP š = Bab. š.

<i>Imaniš</i>	<i>um-man-nu-iš</i>	<i>im-ma-ni-e-šu</i>
<i>Kūruš</i>	<i>ku-raš</i>	<i>ku-ra-áš</i>
<i>Kūša-</i>	<i>ku-ši-ya</i> <i>ku-šá-a-ya</i> <i>ku-šá-mar</i>	<i>ku-ú-šu</i>
<i>Cišpiš</i>	<i>ši-iš-pi-iš</i>	<i>ši-iš-pi-iš</i>
<i>Čūšā-</i>	<i>šu-šá-an</i>	<i>šu-ša-an</i>
<i>Dādarši-</i>	<i>da-tur-ši-iš</i>	<i>da-da-ar-šu</i>
<i>Dārayavauš</i>	<i>da-ri-ya-ma-u-iš</i>	<i>da-ri-ia-muš, etc.</i>
<i>Pātiš^huvari-</i>	<i>ba-ut-ti-iš-mar-ri-iš</i>	<i>pa-id-di-iš-ḥu-ri-iš</i>
<i>maguš</i>	<i>ma-ku-iš</i>	<i>ma-gu-šu</i>
<i>maškā⁻¹²</i>	<i>maš-ka-um-ma</i>	<i>maš-ku-u</i>
<i>Vištāspa-</i>	<i>mi-iš-da-áš-ba</i>	<i>uš-ta-as-pa</i>
<i>Haxāmaniš-</i>	<i>-nu-iš-ši-ya</i> <i>-nu-ši-ya</i>	<i>-ni-iš-a?</i>

3.8.3. RAE š = OP xš.

<i>xšaçam</i>	<i>šá-iš-šá-um</i>
<i>xšaçaṣāvan-</i>	<i>šá-ak-šá-ba-ma-na-me</i>

3.8.4. RAE kš = OP xš.

<i>axšaina-</i>	<i>ak-še-[na]</i>
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3.8.5. RAE kš = OP xš = Bab. kš.

<i>Bagabuxša-</i>	<i>ba-ka-ṣu-uk-šá</i>	<i>ba-ga-bu-ki-šu</i>
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3.8.6. RAE š = OP xš = Bab. ḥš.

<i>Xšaθrita-</i>	<i>šá-at-tar-ri-da</i>	<i>ḥa-ša-at-ri-it-ti</i>
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¹²The direction of the borrowing is from Bab. to OP in this case, *mašku* 'skin.'

3.8.7. RAE š = OP s.

<i>*visadana</i> - ¹³	<i>mi-iš-šá-da-na</i>
<i>Saka</i> -	<i>šá-ak-ka</i>
<i>Skuⁿxa</i> -	<i>iš-ku-in-ka</i>

3.8.8. RAE š = OP s = Bab. s.

<i>Asagarta</i> -	<i>áš-šá-kar-ti-ya</i>	<i>sa-ga-ar-ta-a-a</i>
<i>Aspacanah</i> -	<i>áš-ba-ša-na</i>	<i>as-pa-[si-na]</i>
<i>Pārsa</i> -	<i>ba-ir-šá</i> <i>pār-šíp</i>	<i>pa-ar-su</i>
<i>Va^humisa</i> -	<i>ma-u-mi-iš-šá</i>	<i>ú-mi-is-si</i>
<i>Sikaya^huvati</i> -	<i>ši-ik-ki-ú-ma-ti-iš</i>	<i>sik-kam-ú-ba-at-ti-i?</i>
<i>Sugda</i> -	<i>šu-uk-da</i>	<i>su-ug-du</i>
<i>Skudra</i> -	<i>iš-ku-ud-ra</i>	<i>is-ku-du-ru</i>
<i>Sparda</i> -	<i>iš-pār-da</i>	<i>sa-par-du</i>

3.8.9. RAE š = OP s = Bab. š.

<i>visadahyu</i> -	<i>mi-iš-šá-da-a-hu-iš</i>	<i>u-?i-iš-pi-da-a-?i-i¹⁴</i>
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3.8.10. RAE š = OP s = Bab. š.

<i>siⁿkabru</i> -	<i>ši-in-ka-ab-ru-iš</i>	<i>ši-in-ga- [] -ru-ú</i>
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3.8.11. RAE š = OP ç.

<i>Āçiyādiya</i> -	<i>ħa-iš-ši-ya-ti-ya-iš</i>
<i>xšaçam</i>	<i>šá-iš-šá-um</i>
<i>xšaçaṣāvan</i> -	<i>šá-ak-šá-ba-ma-na-me</i>

3.8.12. RAE š = OP ç = Bab. š.

<i>Açina</i> -	<i>ha-iš-ši-na</i> <i>ha-ši-na</i>	<i>a-ši-na</i>
<i>Çūsā</i> -	<i>su-sá-an</i>	<i>šu-ša-an</i>

3.8.13. RAE š = OP ç = Bab. tr.

<i>Ciçāⁿtaxma</i> -	<i>ši-iš-šá-an-tak-ma</i>	<i>ši-it-ra-an-taḥ-ma</i>
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¹³The actually occurring OP form is *vispazana*-, but the RAE transliteration shows the OP s and not the Median *sp*; cf. *Asagarta*-, *Aspacanah*-.

¹⁴The Bab. form betrays the Median *sp*, but both the OP and RAE forms of this word show the true Persian reflex of this cluster.

3.8.14. RAE š = OP θ = Bab. š.

Aθurā- *áš-šu-ra* *áš-šur*

3.8.15. RAE š = OP θr = Bab. tr.

Miθra- *mi-iš-šá* *mi-it-ri*

3.8.16. RAE š = OP c = Bab. š.

Čiçaⁿtaxma- *ši-iš-šá-an-tak-ma* *ši-it-ra-an-taḫ-ma*

3.8.17. RAE š = OP z = Bab. z.

Uvarazmī- *ma-ra-iš-mi-iš* *ḫu-ma-ri-iz-ma-a?*

Vahyazdāta- *mi-iš-da-ad-da* *ú-mi-iz-da-a-tú*

3.9. /s/. — The following cuneiform signs contain the /s/ phoneme in RAE: *sa, si, su, as, is*. The following correspondences are pertinent:

3.9.1. RAE s = OP θ.

θika- *si-ka*

θāigarci- *sa-a-kur-ri-ši-iš*

3.9.2. RAE s = OP θ = Bab. s.

θatagu- *sa-at/ut-da-ku-iš* *sa-at-ta-gu-ú/u*
sa-at-gu-šu

3.9.3. RAE s = OP z = Bab. z.

Zūzahya- *šu-iš-ša* *zu-ú-zu*

3.9.4. RAE evidence for /s/ and /š/. — The grounds for distinguishing a sibilant phoneme /s/ in addition to /š/ lie in the nonoverlapping correspondence set § 3.9.2 and in the internal RAE evidence which follows.

There occurs the declarative first singular *še-ra* (DZc3; DB 50; XV 3) 'I commanded' and in the same grammatical form *si-ra* (DB 32) 'I impaled.' By assuming a phonemic distinction between two sibilants symbolized as /š/ and /s/, these two verbal forms may be normalized as /šira/ and /sira/, respectively. Thus, there is a verb base /sir/ 'to command' and a verb base /šir/ 'to impale.'¹⁵

No precise phonetic definition of the sibilants /š,s/ will be attempted. The use of these particular symbols is based on the conventional transliteration of the Sumero-Akkadian signs which contain these consonant phonemes.

3.10. /č/. — There are the following cuneiform signs which contain the /c/ phoneme: *ša, ši, aš, iš, šap, šik, máš, šir*.

¹⁵Perhaps, ^{G1Š}*si-ru-um* 'lance' is to be connected with the latter base, whereas the other forms of /šir/ are *še-ra-iš-da, še-ra-iš*.

3.10.1. RAE č = OP c.

<i>artāča</i>	<i>ir-ta-ha-ṣi</i>
<i>Aspacanah-</i>	<i>áš-ba-ša-na</i>
<i>Uvādaicaya-</i>	<i>ma-te-ṣi-iš</i>
<i>Ṡāigarci-</i>	<i>sa-a-kur-ri-ṣi-iš</i>
<i>hacā</i>	<i>ha-iṣ-ša¹⁶</i>

3.10.2. RAE č = OP c = Bab. š.

<i>Ciⁿcixri-</i>	<i>ṣi-in-ša-ak-ri-iš</i>	<i>š-i-in-ša-aḥ-ri-iš</i>
<i>Cišpi-</i>	<i>ṣi-iš-pi-iš</i>	<i>š-i-iš-pi-iš; Gk. Τείσπιης</i>
<i>Ciçaⁿtaxam-</i>	<i>ṣi-iš-šá-an-tak-ma</i>	<i>š-i-it-ra-an-taḥ-ma; Gk. Τριτανταίχιης</i>

3.10.3. RAE č = OP j = Bab. z.

<i>Ka^mbūjiya-</i>	<i>kán-ṣu-ṣi-ya</i>	<i>kam-bu-zi-ia</i>
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3.10.4. RAE č = OP z.

<i>Izalā-</i>	<i>iṣ-ṣi-la</i>
<i>Višpauzāti-</i>	<i>mi-iš-ba-u-ša-ti-iš</i>

3.10.5. RAE č = OP z = Bab. z.

<i>Zazāna-</i>	<i>ša-iṣ-ša-an</i>	<i>za-za-an-nu</i>
<i>brazmaniya-</i>	<i>ṣír-ra-iṣ-man-ny-ya</i>	<i>bi-ra-za-man-ni-i</i>
<i>Zūzahya-</i>	<i>su-iṣ-ša</i>	<i>zu-ú-zu</i>

3.10.6. Summary of sibilant correspondence-sets. — The following is the abstracted list of correspondences of the various sibilants:

	RAE	OP	Bab.	
a.	š	š		(§ 3.8.1)
b.	š	š	š	(§ 3.8.2)
c.	š	xš		(§ 3.8.3)
d.	kš	xš		(§ 3.8.4)
e.	kš	xš	kš	(§ 3.8.5)
f.	š	xš	ḥš	(§ 3.8.6)
g.	š	s		(§ 3.8.7)
h.	š	s	s	(§ 3.8.8)
i.	š	s	š	(§ 3.8.9)

¹⁶In the late text A2Sda, the word ordinarily spelled *ša-u-mi-in* is written *šá-u-mi-in*. In an OP version of this text, A2Sde, the OP word *hacā* is spelled *hašā*. Adding to the difficulty is the fact that a scribal error may be involved in the RAE variation since RAE *ša* is 𐭮𐭮 and *šá* is 𐭮 .

	RAE	OP	Bab.	
j.	š	s	š	(§ 3.8.10)
k.	š	ç		(§ 3.8.11)
l.	š	ç	š	(§ 3.8.12)
m.	š	ç	tr	(§ 3.8.13)
n.	š	θ	š	(§ 3.8.14)
o.	š	θr	tr	(§ 3.8.15)
p.	š	c	š	(§ 3.8.16)
q.	š	z	z	(§ 3.8.17)
r.	s	θ		(§ 3.9.1)
s.	s	θ	s	(§ 3.9.2)
t.	s	z	z	(§ 3.9.3)
u.	č	c		(§ 3.10.1)
v.	č	c	š	(§ 3.10.2)
w.	č	j	z	(§ 3.10.3)
x.	č	z		(§ 3.10.4)
y.	č	z	z	(§ 3.10.5)

The sets q, t, and y are the only ones which coincide in the OP and Bab. with only the RAE differing in each case. However, each of the three RAE sibilants has discrete correspondences both in the loanwords and internally, and thus there is justification for assuming three different sibilant phonemes for RAE. These are symbolized throughout as /š, s, č/. Only the last, /č/, regularly written with the *šade*-signs, can be identified with an affricative phonetic component and corresponds chiefly to OP *c j* [č j].

3.11. /y/. — Only the sign *ia* occurs with the consonant phoneme /y/, and this is sometimes re-enforced with a preceding *i*. The loanword evidence consists in the following:

OP	RAE	Bab.
<i>Yautiya</i>	<i>ya-ú-ti-ya-iš</i>	<i>i-ú-ti-ia</i>
<i>Yauna-</i>	<i>ya-u-na</i> <i>i-ya-y-na</i>	<i>ia-ma-nu</i>
<i>yaniy-</i>	<i>ya-na-a</i>	
<i>Autiyāra-</i>	<i>ha-u-ti-ya-ru-iš</i>	<i>ú-ti-ia-a-ri</i>
<i>Āçiyādiya-</i>	<i>ha-iš-ši-ya-ti-ya-iš-na</i>	
<i>Arabāya-</i>	<i>har-ba-ya</i>	<i>a-ra-bi</i>
<i>Ariya-</i>	<i>har-ri-ya</i>	
<i>Ariyāramna-</i>	<i>har-ri-ya-ra-um-na</i>	<i>ar-ia-ra-am-na-a?</i>
<i>Artavardiya-</i>	<i>ir-du-mar-ti-ya</i>	<i>ar-ta-mar-zi-ia</i>
<i>Arminiya-</i>	<i>har-mi-nu-ya</i>	
<i>Asagartiya-</i>	<i>áš-šá-kar-ti-ya-ra</i>	<i>sa-ga-ar-ta-a-a</i>

OP	RAE	Bab.
<i>ahyāyā</i>	<i>a-ya-a-e</i>	
<i>Uyamā-</i>	<i>ú-i-ya-ma</i>	Aramaic <i>huyaw</i> ¹⁷
<i>Ka^mbūjiya-</i>	<i>kán-pu-ši-ya</i>	<i>kam-bu-zi-ia</i>
<i>Kūša-</i>	<i>ku-šá-a-ya</i>	<i>ku-ú-šu</i>
<i>Kūšiya-</i>	<i>ku-ši-ya</i> <i>ku-šá-mar</i>	
<i>Dātuvahya-</i>	<i>da-ad-du-man-ya</i>	<i>za-a?-tu-?a-a</i>
<i>Dārayava^hu-</i>	<i>da-ri-ya-ma-u-iš</i>	<i>da-ri-ia-muš</i>
<i>dahyu/ā-</i>	<i>da-a-ya-u-</i> <i>da-a-ya-ú-</i> <i>da-a-ú-</i> <i>da-a-hu-</i>	
<i>Nisāya-</i>	<i>nu-iš-šá-ya</i>	<i>ni-is-sa-a-a</i>
<i>Putāya-</i>	<i>pu-ú-ti-ya-ap</i> <i>pu-ud-da-ya</i>	<i>pu-u-ta</i>
<i>Bāgayādi-</i>	<i>ba-gi-ya-ti-iš</i>	
<i>Bardiya-</i>	<i>pír-ti-ya</i>	<i>bar-zi-ia</i>
<i>brazmaniya-</i>	<i>pír-ra-iš-man-nu-ya</i>	<i>bi-ra-za-man-ni-i</i>
<i>Maciya-</i>	<i>māš-ši-ya-ap</i>	
<i>Martiya-</i>	<i>mar-ti-ya</i>	<i>mar-ti-ia</i>
<i>Marduniya-</i>	<i>mar-du-nu-ya</i>	
<i>Mudrāya-</i>	<i>mu-iš-ša-ri-ya</i>	
<i>Viyaxna-</i>	<i>mi-(ya)-kán-na-iš</i>	
<i>Haxāmanišiya-</i>	<i>-ši-ya</i>	

Since the *y* element occurs initially as in *ya-u-na*, etc., and medially between two *a*-vowels, it cannot be considered as only a graphic representation of the glide sound occurring between *i* and *a*, for example, and must be considered a separate phoneme.

3.12. /*r*/. — The following cuneiform signs contain the /*r*/ phoneme: *ra, ri, ru, ir, ur, ráp, rak, rat, ráš, pár, pír, kar, kur, tar, tur, šir*, *šir, har, mar, mur*. The OP loanword evidence is, for example:

<i>Ainaira-</i>	<i>ha-a-na-a-ra</i>	<i>a-ni-ri-i?</i>
<i>Autiyāra-</i>	<i>ha-u-ti-ya-ru-is</i>	<i>ú-ti-ia-a-ri</i>

¹⁷A. E. Cowley, *Aramaic Papyri of the Fifth Century B. C.* (Oxford: Clarendon Press, 1923), p. 260.

<i>Frāda-</i>	<i>pír-ra-da-</i>	<i>pa-ra-da-a?</i>
<i>Ragā-</i>	<i>rak-ka-an</i>	<i>ra-ga-a?</i>
<i>Varkāna-</i>	<i>mi-ir-ka-nu-ya-ip</i>	

There is an affinity between RAE /r/ and /n/. For example, the genitive plural *sunki-ip-in-na* /*sunkipna*/ occurs also as *sunki-ip-ir-ra* /*sunkipra*/. Likewise, the accusative occurs both as /-n/ and as /r/: e.g., *ú-in*, *ú-un*, *un* /*un*/ and *ú-ir* /*ur*/; and the resultatatives *ma-da-be-ik-ki-in* /*matapikin*/ and *pár-šíp-ik-ki-ir* /*paršipikir*/. The first explanation which suggests itself to account for this is the possibility that the RAE /n,r/ phonemes were both dentally articulated. Another possibility is that the /n/ and /r/ possibilities of these particular grammatical forms may represent in reality two historically different suffixes which have fallen together. The two phonemes must be kept apart, however, since there is evidence from the loanword correspondences and from the rest of the language to indicate that the phoneme represented by signs containing *n* is different from the phoneme represented by cuneiform signs containing *r*.

3.13. /n/.— The following cuneiform signs contain the /n/ phoneme: *na*, *ni*, *nu*, *an*, *in*, *en*, *un*, *naḫ*, *pan*, *kán*, *kin*, *kín*, *tan*, *tin*, *man*, *mín*. Of these, *en* occurs only once in RAE in the word *kin-ni-en* (DPf3) which may perhaps be part of the paradigm of the verb base /*kan-*/ ‘to befriend,’ though there is as yet no adequate explanation of the entire form. The OP loanword evidence is:

<i>Ainaira-</i>	<i>ha-a-na-a-ra</i>	<i>a-ni-ri-i?</i>
<i>Āçina-</i>	<i>ha-iš-šī-na</i>	<i>a-ši-na</i>
<i>Adukanaiša-</i>	<i>ha-du-kán-na-iš</i>	
<i>Anāmaka-</i>	<i>ha-na-ma-ak-kaš</i>	
<i>Anāhitā-</i>	<i>an-na-hi-ud-da</i>	
<i>aḫadāna-</i>	<i>ha-ba-da-na</i>	
<i>Ariyāramna-</i>	<i>har-ri-ya-ra-um-na</i>	<i>ar-ia-ra-am-na-a?</i>
<i>Arminiya-</i>	<i>har-mi-nu-ya</i>	
<i>Imanis</i>	<i>um-man-nu-iš</i>	<i>im-ma-ni-e-šu</i>
<i>Utāna-</i>	<i>hu-ud-da-na</i>	<i>ú-mi-it-ta-na-a?</i>
<i>Kāpisakāni-</i>	<i>ka-aḫ-pi-iš-šá-ka-nu-iš</i>	
<i>Kuganakā-</i>	<i>ku-uk-kán-na-ka-an</i>	<i>ku-gu-na-ak-ka</i>
<i>Nadiⁿtabaira-</i>	<i>nu-ti-ut-be-ul</i>	<i>ni-din-tu^dEN</i>
<i>Nabukadracara-</i>	<i>naḫ-ku-tur-ra-šir</i>	<i>Nabū-kudurri-ušur</i>
<i>Nabunaita-</i>	<i>na-ḫu-ni-da</i>	<i>Nabū-nā?id</i>

<i>Nisāya-</i>	<i>nu-iš-šá-ya</i>	<i>ni-is-sa-a-a</i>
<i>Patigrabanā-</i>	<i>pát-ti-ik-ráb-ba-na</i>	
<i>brazmaniya-</i>	<i>pír-ra-is-man-nu-ya</i>	<i>bi-ra-za-man-ni-i</i>
<i>Marduniya-</i>	<i>mar-du-nu-ya</i>	Gk. Μαρδονιος
<i>Yauna-</i>	<i>(i)-ya-u-na</i>	<i>ia-ma-nu</i>
<i>Labanāna-</i>	<i>la-ba-na-na</i>	
<i>Varkāna-</i>	<i>mi-ir-ka-nu-ya-ip</i>	
<i>Varkazana-</i>	<i>mar-ka-ša-na-iš-na</i>	
<i>Viyaxna-</i>	<i>mi-ya-kán-na-iš-na</i>	
<i>Vivāna-</i>	<i>mi-ma-na</i>	<i>ú-mi-ma-na-a?</i>
<i>vispazana-</i>	<i>mi-iš-šá-da-na</i>	
<i>Zazāna-</i>	<i>ša-iš-ša-an</i>	<i>za-za-an-nu</i>
<i>Haxāmaniš-</i>	<i>-man-nu-</i>	<i>a-ḥa-ma-ni-iš-i?</i>
<i>Hagmatāna-</i>	<i>ak-ma-da-na</i>	<i>a-ga-ma-ta-nu</i>

RAE also shows n preconsonantly where OP does not write it, though it is etymologically justified and must be assumed for OP. Thus, in such RAE spellings as *hi-in-du-iš* for OP *Hidu-* the etymologically expected *-nd-* cluster appears (cf. Av. *hindu-*, Skt. *síndhu-*); likewise, *si-iš-šá-an-tak-ma* for OP *Ciçataxma-* (cf. Gk. Τοιτανταίχιτης) *kán-da-ra-* for OP *Gadāra-*, etc.

3.14. /l/. – The following cuneiform signs contain the /l/ phoneme: *la, li, lu, ul, lak, kal, tal, šil, hal*. The OP and Bab. evidence for this phoneme is:

<i>Izalā-</i>	<i>iš-ši-la</i>	
<i>Labanāna-</i>	<i>la-ba-na-na</i>	
<i>Nadiⁿtabaira-</i>	<i>nu-ti-ut-be-ul</i>	<i>Nidintu-Bēl</i>
<i>Bābiru-</i>	<i>ba-pi-li</i>	<i>bāb-īli</i> (written DIN.TIR.KI, E.KI, and KÁ.DINGIR.RA.KI)

3.14.1. *lt ~ l*. – The variant spellings for ‘Elam, Elamite’ *hal-tam-ti, ha-tam-ti*, etc., gave rise to the speculation that a phoneme of the *tl* type must have existed in Elamite.¹⁸ However, this is the only word thus far found in RAE with this fluctuation in the presence and absence of *l* in the vicinity of *t*. It does not, therefore, seem justifiable to assume this type of phoneme for Elamite; even less is it possible to use

¹⁸A. Śmieszek, “Bezdźwięczne *l* w języku elamickim i protochetyckim,” *Rocznik Orientalistyczny*, II (1914-24), 145-52.

it as evidence for the relationship of Elamite to the Caucasian languages.¹⁹

3.15. /*m*/.— The following cuneiform signs contain the /*m*/ phoneme: *ma, mi, me, mu, am, um, mat, máš, mit, maš, muš, man, mîn, mar, mur, kam, tam, tam₄*. The existence of /*m*/ as an RAE phoneme seems clear. However, a problem arises with the RAE use of the cuneiform *m*-signs for the expression of OP *v*. In addition, the use of *m*-signs in Neo-Babylonian for the expression not of [*m*] but of *w* is well-known.²⁰ Do the *m*-signs in RAE subsume two separate phonemes /*m*/ and /*v*/? Or is the interpretation to be made of a single phoneme /*m*/ for RAE with an additional statement of correspondence between OP *v* and RAE /*m*/? The correspondences are as follows:

3.15.1. RAE *m* = OP *m*.

<i>Auramazdāh-</i>	<i>u-ra-maš-da</i>	<i>u-ra-ma-az-da</i> , etc.
<i>-maiy</i>	<i>-me, -mi</i>	
<i>Anāmaka-</i>	<i>ha-na-ma-ak-kaš</i>	
<i>Ariyāramna-</i>	<i>har-ri-ya-ra-um-na</i>	<i>ar-ia-ra-am-na-a?</i>
<i>Arminiya-</i>	<i>har-mi-nu-ya</i>	
<i>Aršāma-</i>	<i>ir-šá-um-ma</i> <i>ir-šá-ma</i>	
<i>āham</i>	<i>ha-um</i>	
<i>Imaniš</i>	<i>um-man-nu-iš</i>	<i>im-ma-ni-e-su</i>
<i>Upadarma</i>	<i>uk-ba-[tar]-ra-an-ma</i>	
<i>Uyamā-</i>	<i>ú-i-ya-ma</i>	Aramaic <i>huyaw</i>
<i>Uvārazmi-</i>	<i>ma-ra-iš-mi-iš</i>	<i>ḫu-ma-ri-iz-ma-a?</i>
<i>Gaumāta-</i>	<i>kam-ma-ad-da</i>	<i>gu-ma-a-tú</i>
<i>Garmapada-</i>	<i>kar-ma-pát-taš</i>	
<i>Ciçaⁿtaxma-</i>	<i>si-iš-šá-an-tak-ma</i>	<i>ši-it-ra-an-taḫ-ma</i>

¹⁹Perhaps the most devastating criticism of this supposed *l/t* fluctuation as evidence for Caucasian relationship is contained in the following statement by N. Trubetzkoy, "Les consonnes latérales des langues caucasiques," Bulletin de la Société Linguistique de Paris, XXIII (1922), 202-3: "Il y a donc dans les langues caucasiques-septentrionales une certaine affinité entre les articulations latérale et dorsale. Au contraire, entre l'articulation latérale et l'articulation apicale ('dentale') aucun lien intime ne se manifeste. . . . Une alternance entre *t* et *l* ne peut donc pas passer pour un trait de phonétique caucasique, et on aura tort de voir dans le flottement entre *l* et *t* qu'on observe en élamite une preuve de la parenté de cette langue morte si mystérieuse avec les langues caucasiques."

²⁰Cf. Wolfram von Soden, Das akkadische Syllabar (Rome: Pontificium Institutum Biblicum, 1948), pp. 6-7 and signs Nos. 3, 35, 193, 248, and 287.

<i>Taxmaspāda-</i>	<i>tak-maš-ba-da</i>	
<i>brazmaniya-</i>	<i>pír-ra-iṣ-man-nu-ya</i>	<i>bi-ra-za-man-ni-i</i>
<i>Maka-</i>	<i>ma-ak-ka</i>	
<i>Magu-</i>	<i>ma-ku-iš</i>	<i>ma-gu-šu</i>
<i>Māda-</i>	<i>ma-da</i>	<i>ma-da-a-a</i>
<i>Māru-</i>	<i>ma-ru-iš</i>	<i>ma-ru-u?</i>
<i>Margu-</i>	<i>mar-ku-iš</i>	<i>mar-gu-u?</i>
<i>Martiya-</i>	<i>mar-ti-ya</i>	<i>mar-ti-ia</i>
<i>Marduniya-</i>	<i>mar-du-nu-ya</i>	
<i>maška-</i>	<i>maš-ka-um-ma</i>	<i>maš-ku-u</i>
<i>Miθra-</i>	<i>mi-iš-šá</i>	<i>mi-it-ri</i>
<i>Mudrāya-</i>	<i>mu-iṣ-ša-ri-ya, etc.</i>	<i>mi-šir</i>
<i>Va^humisa-</i>	<i>ma-u-mi-iš-šá</i>	<i>ú-mi-is-si</i>
<i>Haxāmaniš-</i>	<i>-man-nu-</i>	<i>a-ḥa-ma-ni-iš-i?</i>
<i>Hagmatāna-</i>	<i>ak-ma-da-na</i>	<i>a-ga-ma-ta-nu</i>

3.15.2. RAE m = OP v.

<i>Artavardiya-</i>	<i>ir-du-mar-ti-ya</i>	<i>ar-ta-mar-zi-ia</i>
<i>Uvaxštra-</i>	<i>ma-ak-iš-tar-ra</i>	<i>ú-ma-ku-iš-tar</i>
<i>Uvādaicaya-</i>	<i>ma-te-ši-iš</i>	
<i>Uvārazmī-</i>	<i>ma-ra-iš-mi-iš</i>	<i>ḥu-ma-ri-iz-ma-a?</i>
<i>xšaçapāvan-</i>	<i>šá-ak-šá-ba-ma-na-me</i>	
<i>Gaubaruva-</i>	<i>kam-pár-ma</i>	<i>gu-ba-ru-u?</i>
<i>Taravā-</i>	<i>da-ra-ú-ma</i>	<i>ta-ar-ma-a?</i>
<i>θūravāhara-</i>	<i>tu-ir-ma-ir-na</i>	
<i>daiva-</i>	<i>da-a-ma</i>	
<i>Dātuvahya-</i>	<i>da-ad-du-man-ya</i>	
<i>Dārayava^hu-</i>	<i>da-ri-ya-ma-u-iš</i>	<i>da-ri-ia-muš</i>
<i>Pātiš^huvari-</i>	<i>ba-ut-ti-iš-mar-ri-iš</i>	<i>pa-id-di-iš-ḥu-ri-iš</i>
<i>Fravarti-</i>	<i>pír-ru-mar-ti-iš</i>	<i>pa-ar-ú-mar-ti-iš</i>
<i>Va^humisa-</i>	<i>ma-u-mi-mi-iš-šá</i>	<i>ú-mi-is-si</i>
<i>Vāyaspāra-</i>	<i>mi-is-pár-[ra]</i>	
<i>Varkāna-</i>	<i>mi-ir-ka-nu-ya-ip</i>	

<i>Vahauka-</i>	<i>ma-u-uk-ka</i>	<i>ú-ma-aḥ-ku</i>
<i>Vahyazdāta-</i>	<i>mi-iš-da-ad-da</i>	<i>ú-mi-iz-da-a-tú</i>
<i>Viⁿdafarnah-</i>	<i>mi-in-da-pár-na</i>	
<i>Vidarna-</i>	<i>mi-tar-na</i>	<i>ú-mi-da-ar-na</i>
<i>Viyaxna-</i>	<i>mi-ya-kán-na-iš-na</i>	
<i>Vivāna-</i>	<i>mi-ma-na</i>	<i>ú-mi-ma-na-a?</i>
<i>visadahyu-</i>	<i>mi-iš-šá-</i>	<i>ú-iš-pi-da-a-? i-i</i>
<i>vispazana-</i>	<i>mi-iš-šá-</i>	
<i>Vištāspa-</i>	<i>mi-iš-da-áš-ba</i>	<i>uš-ta-as-pa</i>
<i>Višpazāti-</i>	<i>mi-iš-ba-u-ša-ti-iš</i>	
<i>Sikaya^huvati-</i>	<i>ši-ik-ki-ú-ma-ti iš</i>	<i>sik-kam-ú-ba-at-ti-i?</i>
<i>Haraiiva-</i>	<i>har-ri-ma</i> <i>har-ri-ya</i>	<i>a-ri-e-mu</i>
<i>Hara^huvati-</i>	<i>har-ra-u-ma-ti-iš</i>	<i>a-ru-ḥa-at-ti</i>

3.15.3. Note to RAE *m* = OP *m, v* correspondence. — These lists indicate clearly that OP *m* and *v* are both represented by RAE signs which contain the phonetic value *m* known from the history of these particular cuneiform signs. The Neo-Babylonian situation, where the two phonemes /*m, w*/ can be differentiated from these same *m*- signs, is not analogous. For in the case of Neo-Babylonian, this differentiation can safely be made most of the time on etymological grounds. In the case of RAE one must conclude that OP *v* was adapted to RAE /*m*/ as its 'nearest' phonetic analog.²¹ There is no internal RAE evidence which requires the assumption of two different phonemes out of the *m*-containing cuneiform signs.

3.16. Table of phonemes. — The following table represents all of the consonant and vowel phonemes accounted for from the foregoing discussion:

<i>p</i>	<i>t</i>	<i>k</i>		
	<i>š</i>	<i>s</i>	<i>č</i>	<i>i</i> <i>u</i>
<i>m</i>	<i>n</i>	<i>r</i>		
	<i>y</i>	<i>l</i>		<i>a</i>

²¹On the problem of the relative nature of 'nearest' phonemes in bilingual situations, cf. Einar Haugen, "Problems of Bilingualism," *Lingua*, II (1950), 285.

4

MORPHOLOGY

4.0 General. - The morphology of RAE may be subdivided into the following three categories: verbs, nouns, and indeclinables. In RAE the verb may be defined as a form whose last suffix is either personal, relative, or precative. A noun may be defined as a form whose last suffix is one of 'case' or of nominal derivation. For the purpose of this study, a 'case' is any inflected form of the noun in its paradigm of occurring forms, that is, with variations in phonemic shape at the end of a form. Nominal derivations include the 'abstractive,' 'substantive,' and 'generalizing' suffixes to which case suffixes may be added.

It will be seen that verb-roots may take certain nominal suffixes, and in certain cases nouns seem to take verb suffixes. In either situation the particular form will be treated as a noun or verb, as the case may be. This will obviate the necessity for using the terms infinitive, participle, and gerund.

5

VERB

5.1 Verb-base. — The RAE verb is composed of a verb-base plus stem-vowel plus various suffixes that will be taken up below. The verb-base is an abstraction from the paradigm of actually occurring forms and has the following structures: C,¹ VC, CVC, CVCC. The analysis of verb-base plus stem-vowel is made on formal considerations alone, with no implications of meaning to be ascribed to the stem-vowel.² It is a means of further classifying the verb-bases. The following lists illustrate this analysis:

a-class

- t-* (*da-ah; da-iš; da-is-da, da-iš-ti*) ‘to send’
s- (*sa-ak*) ‘to go away, leave’
ač- (*ha-is-sa-iš-ni*) ‘to make great’
al- (*ha-ul-lak*)
im- (*i-ma-ka*) ‘to rise in revolt’
ELm-(**EL-ma-in-ti, EL-man-da, EL-man-ti; EL-man-ra, EL-man-ri, EL-ma-man-ra**) ‘to think, plan’
piš- (*be-šá, pi-iš; be-iš-da; be-sa-ip-pi*) ‘to create, build’
pir- (*be-ra-an-ra; be-ip-ra-an-ti; be-ip-ra-ka*) ‘to read’
kič- (*gi-iš-ša-ma-na*) ‘to cut, hew’
kup- (*kup-pa-ka*) ‘to remain, be left over’
šas- (*šá-sa-ak*) ‘to carry away (?), drown (?)’
šar- (*šá-ra*) ‘to throw (?)’
šil- (*šil-la-ak, šil-la-ka*) ‘to be sufficient’
šir- (*še-ra; še-ra-iš; še-ra-iš-da; [še-ra]-ku*) ‘to command, affirm’
sir- (*si-ra*) ‘to impale’
sut- (*su-da-man*) ‘to beseech’
čam- (*ša-ma-ak*) ‘to beat’ (?)
čik- (*šik-kak, šik-ka-ka*) ‘to fill up (?)’
čiy- (*ši-iš, ši-ya-iš, ši-ya-šá; ši-ya-in-ti; si-ya-ma-ak; ši-ya-man-ra*) ‘to see; seem (?)’
lim- (*li-ma-ik-ka*) ‘to burn’
rap- (*ráb-ba-ka; ráb-ba-[ip]*) ‘to bind’

¹The C bases (*t-*, *s-*, *k-*, *l-*, *t-*) might have been analyzed as CV bases with the vowels to be considered part of the base. This would have placed these five bases in the Ø-Class.

²The former insistence on the RAE verb-base pattern ending in a vowel was tied up with the predisposition to utilize this base pattern as an argument for an Elamite-Caucasian relationship. Cf. Cameron, Persepolis Treasury Tablets (Chicago: University of Chicago Press, 1948), p. 47, n. 2; Bork, “Elam (Sprache),” Reallexikon der Vorgeschichte, III (1925), 75.

turn- (*tur-na-iš*; *tur-na-iš-ti*; *tur-na-in-ti*; *tur-na-um-pi*) 'to know'
lilm- (*li-ul-múk*) 'to record, report (?)'
murt- (*mur-da*; *mur-da-ak*) 'to restore, settle'

i-class

k- (*ki-ik*) 'to follow'
l- (*li-iš-da*)
aþ- (*ha-pi*, *ha-pi-ya*; *ha-pi-iš*)
ur- (*u-ri-iš*; *u-ri-in-ra*, *ú-[ri-in-ra]*) 'to believe'
tal- (*tal-li-ra*; *tal-li-šá*; *tal-li-ik*, *tal-li-ka*; *tal-li-ma-na*) 'to write'
tir- (*ti-ri*, *ti-ri-ya*; *ti-ri-iš*, *ti-ri-ya-iš*, *ti-ri-iš-šá*; *ti-ri-iš-ti*;
ti-ri-ik-ka, *tur-ri-ka*; *ti-ri-in-ti*; *ti-ri-man-pi*; *ti-ri-ma-nu-un*;
tu₄-ru-iš; *tur-ri-ra*) 'to speak, say'
kan- (*kán-na*; *kán-ni-in-ti*; *ka-ni-šá*; *ka-ni-iš-ni*;
kín-ni-en) 'to befriend'
kit- (*gi-ut*; *gi-ud-da*; *ki-ti-in-ti*) 'to be (?)'
kut- (*ku-ti-iš*; *ku-ti-ik*; *ku-ut-ma-um-pi*) 'to bear, carry'
kuš- (*ku-ši-ya*; *ku-ši-ik*, *ku-ši-ka*) 'to build'
šap- (*šà-be-ip*) 'to live, be alive (?)'
sar- (*sa-ri-ya*; *sa-ri-iš-da*; *sa-ri-in-ti*) 'to destroy'
mač- (*máš-ši*, *máš-ši-ya*; *máš-šik*, *máš-šik-ka*) 'to cut off, tear out,
 dig out'
mar- (*mar-ri*, *mar-ri-ya*, *ma-u-ri-ya*; *mar-ri-iš*, *mar-ri-iš-šá*;
mar-ri-iš-da; *mar-ri-ik*, *mar-ri-ka*, *mar-ra-[ka?]*; *mar-ri-ra*;
mar-ri-ip, *mar-[ri-ba]*) 'to seize, hold'
rip- (*ri-ip-pi-iš-ni*) 'to tear down'
pirp- (*pír-pi-iš*)

u-class

t- (*du-ma*; *du-iš*, *du-šá*; *du-iš-da*, *du-iš-ti*) 'to carry off, take away'
šin- (*ši-in-nu-ik*; *ši-in-nu-ip*; *ši-in-nu gi-ud*, *šà-nu gi-ud*;
šà-ni-ik-ti) 'to come, become'

a ~ i-class

pil- (*be-la*, *pi-li-ya*; *be-ip-la*; *be-ip-la-iš-da*; *be-la-ka*; *be-ip-li-ip*,
be-ip-li-ib-ba) 'to set, establish, impale'
mit- (*mi-da-ah*, *mid-da-ah*; *mi-da*, *mi-te*; *mi-te-iš*; *mi-ut-ki-ne*) to
 send, go forth'
kukt- (*ku-uk-ti*; *ku-uk-da-ak*; *ku-uk-taš*; *ku-uk-tan-ti*, *ku-uk-da-in-da*;
ku-ik-ti-ra) 'to guard'

a ~ u-class

put- (*pu-ut-tuk-ka*, *pu-ud-da-ka*) 'to flee, drive away (?)'
dun- (*du-na-áš*, *du-na-iš*, *du-nu-iš*; *du-nu-iš-ni*; *du-nu*;
du-nu-iš-da) 'to give'
kat- (*ka-tuk-ra*; *ka-tuk-da*; *ka-tak-ti-ni*, *ka-tuk-ti-ni*) 'to live'*

* Could the root possibly be /*katk-*/ or /*ktak-* ~ *ktuk-*/?

i ~ u-class

- par-* (*pa-ri-ya; pa-ri-iš; pâr-ru-iš-da; pa-ri-ik, pa-ri-ik-ka; pa-ri-ip*) 'to reach, attain, arrive'
tat- (in the OP loanwords [*t*]e-nu-u[m-d] a-ut-tuk and te-nu-um-da-ut-ti-ra < daina-dāta)
tit- (*ti-te-iš; ti-tuk-ka; ti-te-in-ra; ti-tuk-kur-ra*) 'to fashion, lie'

a ~ i ~ u-class

- ut-* (*hu-ud-da, ú-ud-da, ud-da; hu-ut-taš, hu-ud-da-iš, hu-ut-ti-iš; hu-ut-taš-da, ú-ut-taš-da, hu-ut-taš-ti, ud-da-iš-da; hu-ut-taš* (imptv.); *hu-ud-da-ak, hu-ut-tuk, hu-ut-tuk-ka, hu-ud-d[a-ak-ka]; hu-ut-tan-ti, [hu-ud-da-in-ti]; hu-ud-da-man-ra, hu-ut-ti-man-ra; hu-ud-da-ra; hu-ud-ra (= hu-ud-<da>-ra) hu-ud-da-ri; hu-ud-da-ma-ik; hu-ud-da-hu-ut, hu-ut-ti-ú-ut, hu-ud-du-ud-da; hu-ut-ti-nu-um-hu-ba, hu-ut-ti-nu-um-ú-ba; ú-ut; hu-ud-du; ha-hu-ud-da-ip*) 'to do, make'
pit- (*be-ip-taš, be-ip-taš-ša, be-ip-ti-iš; be-ip-ti-ip, be-ip-ti-ib-ba, vbe-ip-ti-ip-pi; vbe-ti-ip, vbe-ti-ib-be; vbe-ti-ip-na; be-ip-tuk-ka; be-ut, be-ti*) 'to rebel'

∅-class

- lil-* (*li-ul-ma-ak*) 'to venture, try'*
nan- (*na-an-ri; na-an-gi*) 'to speak, declare'
pir- (*pi-ir-ka*)

** [There is a problem in the possible relationship between this form and *li-ul-múk* listed as /*ilm-*/ in the a-class roots.]

There does not seem to be any predictable correlation between the vowel of the verb-base and the stem-vowel. It should also be noted that there are cases (the ∅-Class) where the stem-vowel is zero before a suffix; for example, *pi-ir-ka* < /*pir - ∅ - k*/. There are also some verb-bases whose base vowel varies, but this problem is tied up with that of the interpretation of the CVC signs (cf. § 2.11).

5.2. Reduplication. — The verb-base may be reduplicated, although no definite meaning can as yet be assigned to the reduplication. The reduplication formula is: $C_1VC_2 \sim C_1VC_1C_2$.³ The reduplicated forms which are thus far known to occur in the RAE texts are:

5.2.1. /pit-/ ~ /pipt-/.

<i>be-ti-ip</i>	<i>be-ip-ti-ip</i>
<i>be-ti-ib-be</i>	<i>be-ip-ti-ib-ba</i>
	<i>be-ip-ti-ip-pi</i>

³The form *ha-hu-ud-da-ip* cannot be considered to be a reduplicated form of /*ut*/ 'to make,' since it does not follow the reduplication formula. One would expect something like **hu-uh-da-ip* or **hu-ú-da-ip*. This rejection of *ha-hu-ud-da-ip* as a reduplicated form is verified by the occurrence of the prefix or independent particle *ha-* with verbs beginning with other consonants in the Fortification texts (from private communication with Dr. Richard T. Hallock).

be-ti-ip-na

be-ip-taš
be-ip-taš-šá
be-ip-ti-iš
be-ip-tuk-ka

5.2.2. /pil-/~ /pipl-/.

be-la
pi-li-ya

be-ip-la

be-la-ka

be-ip-li-ib-ba
be-ip-li-ip
be-ip-la-iš-da

5.2.3. /pir-/~ /pipr-/.

be-ra-an-ra

be-ib-ra-an-ti
be-ib-ra-ka

5.2.4. /kut-/~ /kukt-/.

ku-ti-iš

ku-uk-taš

ku-ti-ik

ku-uk-da-ak

ku-ut-ma-um-ḫi

ku-uk-tan-ti
ku-uk-da-in-da
ku-ik-ti-ra

5.3. Verb inflection. — The verb is inflected for person in a form corresponding in general to the OP indicative. The personal suffixes are further classified as occurring in the ‘declarative’⁴ paradigm set. The suffixes are:

Sing. 1. $\frac{-V}{-ti \sim -ta}$ / $\frac{-ut}{-š}$ Plur.

5.3.1. First singular. — The following are the declarative first singular forms in RAE:

<i>hal-ḫi</i>	<i>ud-da</i>	<i>da-ah</i>	<i>kán-na</i>	<i>ku-š-i-ya</i>
<i>hal-ḫi-ya</i>	<i>hu-ud-du (?)</i>	<i>du-ma</i>	<i>kuk-ti</i>	<i>na-an-gi</i>
<i>ha-ḫi</i>	<i>be-la</i>	<i>tin-gi-ya</i>	<i>šá-ra</i>	<i>mar-ri-ya</i>
<i>ha-ḫi-ya</i>	<i>pi-li-ya</i>	<i>ti-ri</i>	<i>še-ra</i>	<i>mar-ri</i>
<i>hu-ud-da</i>	<i>be-ip-la</i>	<i>ti-ri-ya</i>	<i>si-ra</i>	<i>ma-u-ri-ya</i>
<i>ú-ud-da</i>	<i>pa-ri-ya</i>			

⁴This term is applied as part of the neutral nomenclature generally adopted throughout this study in an attempt to avoid the pitfalls encountered in the use of the more familiar grammatical terms. Where a well-known grammatical term is used, however, it should not be taken as possessing all the connotations it may have in Indo-European or Semitic grammar.

máṣ-ṣi *mi-da-ah* *mur-da* *du-nu(?)* [*sa-ri-ya*]
máṣ-ṣi-ya *mid-da-ah*

The meaning identification of these forms is evident from the following contexts:

- DB 17:⁵ *me-ni* ^v*ú* *ir* *hal-pi*
 OP *adamšim avājanam*
 Bab. *ana-ku ad-du-uk-sú*
- DB 16:⁶ *sa-ap* ^v*kam-ma-ad-da ak-ka* ^v*ma-ku-iš* ^v*ú* *hal-pi-ya*
 • OP *yaθā adam Gaumātam tyam Magum avājanam*
 Bab. *al-la šá ana-ku a-du-ku a-na* ^m*Gu-ma-a-tú* LU *Ma-gu-šú*¹⁷
- DB 8:⁸ *hu-pír-ri* *šil-la-ka mi-ul-e* *ha-pi*
 OP *avam ufrastam aparsam*
- DB 63:⁹ *hu-* [*pír-ri šil-la-ka ir*] *ha-pi-ya*
 OP *avam ufrastam aparsam*
- DB 43:¹⁰ *GIŠ* [*ru-ir-ma*] *ap-pi-in* *be-la*
 OP *avadašiš uzmayāpatiy akunavam*
- DB 18:¹¹ *ap-pa* ANŠU.A.AB.BA^{lg} *-ma ap-pi-in* *be-ip-la*
 OP *aniyam ušabārim akunavam*

The correspondence of these RAE forms with OP indicative active first singular verb forms (*avājanam*, *aparsam*, *akunavam*) is clear. The use of the first person singular pronoun ^v*ú* /*u*/ in two of the cases cited assures the identification of this verbal form.¹²

5.3.2. Second person. – The following are the declarative second person forms in RAE:

<i>hal-be-in-da</i>	<i>be-ib-ra-an-ti</i>	<i>ti-ri-in-ti</i>
<i>an-šu-da-in-ti</i>	<i>máṣ-te-in-ti</i>	<i>tur-na-in-ti</i>
<i>hu-ut-tan-ti</i>	<i>tar-tan-ti</i>	EL- <i>ma-in-ti</i>
[<i>hu-ud-da-in-ti</i>]	<i>tar-ti-in-da</i>	EL- <i>man-da</i>
	<i>tar-ti-in-ti</i>	EL- <i>man-ti</i>

⁵‘Then I him slew.’

⁶‘Afterwards Gaumata who (was) a Magian (obj.) I slew.’

⁷Cf. O. Rössler, Untersuchungen über die akkadische Fassungen der Achämeniden-inschriften, p. 10, on the use of *ana* before the direct object.

⁸‘Him *šil-la-ka mi-ul-e* I beat.’

⁹‘Hi[m *šil-la-ka* him] I beat.’

¹⁰‘On a stake them I placed.’

¹¹‘Some on camels them I placed.’

¹²The OP preterite correspondence is subsumed within the term ‘declarative.’ Cf. § 5.3.2.2 for ‘tempus.’

<i>ki-ti-in-ti</i>	<i>ku-uk-tan-ti</i>	<i>sa-ri-in-ti</i>
<i>kān-ni-in-ti</i>	<i>ku-uk-da-in-da</i>	<i>ṣi-ya-in-ti</i>

The meaning identification of these forms is evident from the following sample context:

DB 66:¹³ *a-ak an-ka ḥtup-pi hi ṣi-ya-in-ti hi in-na-ak-ka-nu-ma*
[a-ak in-ni sa]-ri-in-ti sa-ap in-nu-ip-pād-da ṣi-la
ku-uk-da-in-da

OP *ya [diy] imām di [pim] vaināh[y] imaivā patikarā naiydiš*
vikanāhiy utātaiy yāvā taumā [ahatiy] paribarāhadiš

Bab. *ki-i* ^{NA}₄NA.DU₈.A *šu-a-tú tam-ma-ri u ṣal-ma-a-nu*
a-gan-nu-tu [. . .]

The form *ṣi-ya-in-ti* corresponds to OP *vaināhy* (subjunctive second singular of *vaina-*) and to Bab. *tam-ma-ri* (pres.-fut. second singular of *amāru*); RAE *sa-ri-in-ti* = OP *vikanāhiy* (subjunctive second singular of *vi + kan-*); RAE *ku-uk-da-in-da* = OP *paribarāha* (subjunctive second singular of *pari + bar-*).

5.3.2.1. Analysis of second person suffix. — It would seem obvious that the suffix elements *-nti - -nta/* carry the meaning ‘second person.’ And indeed, an examination of the above list will reveal that all forms contain this element. However, *-ti/* alone occurs elsewhere with the second person connotation, so that the further analysis has been made that *-nti - -nta/* is composed of a ‘future’ element *-n-/* plus the second person suffix *-ti - -ta/*.

For example, the forms *ka-tak-ti-ni* and *ka-tuk-ti-ni* occur as follows:

DB 60:¹⁴ *a-ak ku-ud-da vnu me-ul-li-ik-da ka-tak-ti-ni*
 OP *utā dargam jtvā*

DB 66:¹⁵ *[a-ak ku-ud-da vnu me]-ul-li-da ka-tuk-ti-ni*
 OP *utā dargam jtvā*

In both cases,¹⁶ the analysis of the forms as verb-base *kat^a_uk-*, plus *-ti*, second person suffix, plus *-ni*, precative suffix, seems possible especially in light of the third person forms *hal-pi-iš-ni*, *ka-ni-iš-ni*, with the same precative suffix following the personal ending. And since *-ti/* appears here as the second person element, it is suggested that it

¹³‘And if this inscription you will see, this image, and you will not destroy it, so long-at-all as you will preserve (it).’

¹⁴‘And also may you live *me-ul-li-ik-da*.’

¹⁵‘And also may you live *me-ul-li-da*.’

¹⁶These two forms (cf. Weissbach, *Die Keilinschriften der Achämeniden*, p. 68) were formerly read *da-ka-tuk-ti-ni* and *da-ka-tak-ti-ni*. But comparison with *ka-tuk-ra* (XPh45) and *ka-tuk-da* (XPh39) with the same meaning suggests that the *da* should be part of the preceding word as the ‘generalizing’ *-ta/*.

is the same element which appears above in the /-nti - nta/ forms. Nor is it surprising that all of the second person forms in these inscriptions (except for the precative which is another kind of future) should occur in a 'future' form, i.e., in combination with 'future' /-n-/.¹⁷ It is perhaps to be expected that any address to the second person in a royal historical text would be either an imperative form or else an appeal to future events and times.

5.3.2.2. RAE verb type. — With this analysis in mind, the RAE verb may be analyzed as belonging to the following type:

¹ verb-base + ² stem-vowel + ³ tempus + ⁴ person + ⁵ mode

The stem-vowel may alternate with Ø in some cases. Positions 3 and 5 are mutually exclusive, and position 3 has a zero alternant in the declarative.

5.3.2.3. Equivalence of /-nti/ and /-nta/ suffixes. — The following parallel context is important for the determination of the equivalence of the second person forms in the orthographic variants /-nti/ and /-nta/:

- DB 66: *a-ak an-ka^htup-pi hi ši-ya-in-ti hi in-na-ak-ka-nu-ma*
 [a-ak in-ni sa] -ri-in-ti sa-ap in-nu-*ip-pád-da ši-la*
ku-uk-da-in-da
 OP *paribarāhadiš*
- DB 67: *a-ak an-ka^htup-pi hi [in-na-ak-ka-nu-ma sa] -ri-in-ti*
in-ni ku-uk-tan-ti
 OP [nai]ydiš *paribarāhy*

5.3.3. Third person. — The following are the declarative third person forms of RAE:

<i>hal-pi-iš</i>	<i>tal-li-šá</i>	<i>še-ra-iš</i>	<i>be-šá</i>
<i>ha-pi-iš</i>	<i>tin-gi-iš</i>	<i>be-ip-taš</i>	<i>pi-iš (?)</i>
<i>pa-ri-iš</i>	<i>ti-ri-ya-iš</i>	<i>be-ip-ti-iš</i>	<i>hu-ut-taš</i>
<i>pír-pi-iš</i>	<i>ti-ri-iš</i>	<i>be-ip-taš-šá</i>	<i>hu-ud-da-iš</i>
	<i>ti-ri-iš-šá</i>	<i>ši-iš</i>	<i>hu-ut-ti-iš</i>
<i>da-iš</i>	<i>ti-te-iš</i>	<i>ši-ya-iš</i>	<i>ku-uk-taš</i>
<i>du-iš</i>	<i>tur-na-iš</i>	<i>ši-ya-šá</i>	<i>ip-ši-iš</i>
<i>du-šá</i>		<i>mar-ri-iš</i>	<i>u-ri-iš</i>
<i>du-na-áš</i>	<i>ka-ni-šá</i>	<i>ma-ri-iš-šá</i>	
<i>du-na-iš</i>	<i>ku-ti-iš</i>	<i>ma-u-ri-iš-šá</i>	<i>ha-[ri-ik]-ka-iš</i>
<i>du-nu-iš</i>		<i>máš-te-ma-iš-šá</i>	

¹⁷Compare for example the complete absence of any person but the third in the South Arabic inscriptions.

Since these forms vary graphically *-iš* and *-šá*, one possible interpretation is that the final vowel is graphic only and the suffix may be considered to be simply */-š/*. Another possibility is that the final written *-a* is a connective which occurs with a verb in a series, since this *-šá* does not occur in absolute final position. Cf. DB 23 below: *ir mar-ri-iš-šá ir hal-ḫi-iš* 'him they seized and (?) him they slew.' The third person element would still have to be considered to be */-š/*.

The following contexts may be indicative of the equivalence of the graphic variations of this suffix and are especially clear for the meaning identification of this form.

DB 33:¹⁸ *vtaš-šu-īb-be hi-ṣi-la ap ti-ri-iš*
 OP *kārahyā avaθā aθaha*

DB 24:¹⁹ *vtaš-šu-īb-be hi-ṣi-la ap ti-ri-iš-šá*
 OP *kārahyā avaθā aθaha*

DB 32:²⁰ *vtaš-šu-īp mar-be-ip-da ir ṣi-ya-iš*
 OP *haruvašim kāra avaina*

DNa 4:²¹ *d^hu-ra-maš-da sa-ap ṣi-ya-šá*
 OP *Auramazdā [ya]θā avaina*

DB 23:²² *me-ni vhal-tam-ti-ip v^hú-ik-ki-mar ip-ṣi-ip v^hmar-ti-ya*
hu-pír-ri ak-ka ir-šá-ir-ra ap-ḫi-ni ti-ri-iš-ti ir
mar-ri-iš-šá ir hal-ḫi-iš
 OP *pasāva hacā[ma atarsa Ūv] jiyā avam Martiyam agarbaya*
hyašām maθišta āha [utāšim av]ājana
 Bab. *ár-ki iṣ-ṣab-tu-u? a-na m^hMar-ti-iá a-ga-šu-u šá ina*
muḫ-ḫi-šú-nu GAL-ú ina ra-ma-ni-šú-nu id-du-ku-šú

This */-š/* third person suffix does not distinguish singular and plural except by context, as can be seen from DB 23 as compared to the other passages cited.

5.3.4. First person plural. — The declarative first plural suffix */-ut/* occurs only in the following cases:

<i>hu-ud-da-hu-ut</i>	<i>sunki-ip-ú-ut</i>
<i>hu-ut-ti-ú-ut</i>	
<i>hu-ud-du-ud-da</i>	<i>šá-lu-ú-ut</i>

The following contexts illustrate the meaning of these forms:

¹⁸'His army then to them he said.'

¹⁹'His army then to them he said.'

²⁰'The whole army him saw.'

²¹'After Ahuramazda saw.'

²²'Then the Elamites from me were afraid, that Martiya who the great one of them was called, him they seized, him they slew.'

- DB 31:²³ *me-ni šá-ṗár-rak-um-me hu-ud-da-hu-ut*
 OP *pasāva hamaranam akumā*
 Bab. *ár-ki ni-te-ṗu-uš ṣa-al-tam*
- DB 31:²⁴ *hi-ši-la šá-ṗár-rak-um-me hu-ut-ti-ú-ut*
 OP *avaθā hamaranam akumā*
- XPa 3:²⁵ *hu-be mar-ri-da ṣa-u-mi-in^d u-ra-maš-da-na hu-ud-du-ud-da*
 OP *ava visam vašnā Auramazdāhā akumā*
 Bab. *ul-lu-ú-tu gab-bi ina GIŠ.MI šá^dA-ḥu-ru-ma-az-da-a?*
ni-te-ṗu-uš

The correspondence of expression between the three versions is clear for the determination of the RAE forms as first person plural. The case of *hu-ud-du-ud-da* (XPa3) is decisive for considering the word boundary to fall after the graphic *hu-ut* and *ú-ut* (the final graphic *a* in this form may be considered to be phonologically irrelevant; cf. § 2.9).

5.3.4.1. *sunki-ip-ú-ut* and *šá-lu-ú-ut*. — Accordingly, the forms *sunki-ip-ú-ut* and *šá-lu-ú-ut* emerge as first person plural forms, even though they are basically nominal and not verbal, and the suffix /-ú-ut/ must thus be classed as ‘hybrid.’ The alternative is to consider the *ú-ut* in the two cases as separate, that is, as a free form. However, in view of *hu-ud-da-hu-ut*, *hu-ut-ti-ú-ut*, and *hu-ud-du-ud-da*, it seems to be preferable to treat *ú-ut* as a suffix even with *sunki-ip* and *šá-lu*, and to class these forms as hybrid, since only in this way can the stems *hu-ud-da* and *hu-ut-ti* be treated as bound forms. The relevant contexts are:

- DB 4, DBa4:²⁶ *šá-ma-ak-mar^v nu-ku^v sunki-ip-ú-ut*
 OP *duvitāparanam vayam xšāyaθiyā amahy*
- DB 3, DBa3:²⁷ *šá-áš-šá-da ka-ra-da-la-ri^v šá-lu-ú-ut*
 OP *hacā paruwiyata āmātā amahy*

5.3.4.2. *ti-ri-ma-nu-un*. — There is a further problem with the form *ti-ri-ma-nu-un*, since it may also express the first person plural because it corresponds to an OP first person plural. The pertinent context is:

- DB 3, DBa3:²⁸ *hu-uh-be-in-tuk-ki-me^v nu-ku^v NUMUN^{lg}*
ha-ak-ka-man-nu-ši-ya ti-ri-ma-nu-un
 OP *avahyarādiy vayam Haxāmanišiyā θahyamahy*

²³‘Then battle we made.’

²⁴‘Thereupon battle we made.’

²⁵‘That all by the favor of Ahuramazda we did.’

²⁶‘From *šá-ma-ak* we are kings.’

²⁷‘From of old (?) we are noble.’

²⁸‘For this reason, our lineage Achaemenid we are called.’

The verbal base of this form is /ⁱ_ur-/ 'to speak, call.' In these passages the form conveys the meaning (freely translated) 'we were called, named' (without a necessity that the passival English expression existed in the RAE form). There are several possible explanations of this form: (1) The writing *-un* may indicate a graphic and a possible phonetic variation between /n/ and /t/, in the manner of the fluctuation of /n/ and /r/ described in § 3.12. This would re-enforce the supposition of the dental articulation of the /r/ phoneme, since it would vary both with /n/ and with /t/. Thus, the form *ti-ri-ma-nu-un* may be morphologically equivalent to an expected /*tirimanut*/ **ti-ri-ma-nu-(ú)-ut*. (2) The presence of the infix or root extension /-*man*-/ (whose meaning is still uncertain) may be a determining factor in the use of a first plural suffix /-*un*/ and not /-*ut*/, with the theoretical possibility that a declarative first person plural of this verb-base should be /*tiriut*/ **ti-ri-ú-ut*. These are only conjectures on the possible interpretation of the form *ti-ri-ma-nu-un*. As in many cases of specific forms in RAE, the general meaning seems clear from the context, but owing to the paucity of occurrences, the form cannot be satisfactorily analyzed or fitted into a paradigmatic set.

5.4. Relative verb forms. — RAE declarative forms in the first person singular and in the third person take special suffixes when the verb form occurs in construction with some form of the relative pronouns *ak-ka* /*aka*/ 'personal ~ animate' and *ap-pa* /*apa*/ 'non-personal ~ inanimate' (cf. § 7.1).

5.4.1. Relative first singular. — The relative first person singular suffix added to the declarative first person singular is /-*ra* - *-ri*/, occurring graphically as *-ra* and *-ri*. The following are all of the relative first singular forms thus far found in RAE:

<i>hu-ud-da-ri</i>	<i>tal-li-ra</i>
<i>hu-ud-da-ra</i>	<i>tur-ri-ra</i>
<i>hu-ud-ra</i> ²⁹	
<i>hu-ud-da-in</i>	<i>mar-ri-ra</i>

Some pertinent contexts to illustrate the use of these forms follow.

XV	3: ³⁰	<i>vú</i> ^d <i>u-ra-maš-da ú-un nu-iš-gi-iš-ni</i> ^d <i>na-ap-pi-be</i> <i>i-da-ka ku-ud-da šá-iš-šá-[um ku-ud-da ap-pa</i> ^{vú} <i>hu]-ud-da-ri</i>
OP		<i>mām Auramazdā pātuv hadā ba[gaibiš utāmai y xšačam utā</i> <i>tyamai y kartam]</i>
Bab.		<i>a-na-ku</i> ^d <i>A-ḥu-ur-ma-az-da-a?</i> <i>li-iš-šur-an-ni it-ti</i> DINGIR.MEŠ <i>ga-ab-bi ù a-na LUGAL-ú-ti-is ù šá a-na-ku</i> <i>e-pu-uš-šu</i>

²⁹Perhaps this form should be interpreted as *hu-ud-<da>-ra*.

³⁰'May my Ahuramazda me protect together with the gods, also the kingship and what I did.'

- XPca3:³¹ *vú^d u-ra-maš-da vú-um nu-is-gi-iš-ni^d na-ap-pi-be
i-da-ka ku-ud-da ap-pa hu-ud-da-ra ku-ud-da ap-pa
vad-da-da vda-ri-ya-ma-u-iš^v sunki hu-ut-taš-da (cf. §5.4.2)*
- OP *mām Auramazdā pātuv hadā bagaiḫiš utā tyamaiy kartam
utā tyamaiy piça Dārayavahauš XŠhyā kartam*
- Bab. *a-na-ku^d A-ḫu-ur-ma-az-da-a[?] li-iš-ṣur-an-ni it-ti
DINGIR.MEŠ ga-ab-bi ù šá a-na-ku e-pu-uš-šu ù šá
mDa-a-ri-ia-a-muš LUGAL AD-ú-a at-tu-ú-a i-pu-uš-šu*
- DB 65:³² *vnu ak-ka me-iš-ši-in^h tup-pi hi ši-ya-in-ti ap-pa
vú tal-li-ra*
- OP *tuvam kā hya aparam imām dipim vaināhy tyām adam
niyapai[ša]m*
- DN a4:³³ *ap-pa vú ap tur-ri-ra hu-be hu-ut-taš
[tya] šām adam aṬaham ava akunava*
- Bab. *u šá ana-ku a-gab-ba-aš-ši-na-a-tú ip-pu-uš-šá-a[?]*
- DN a3:³⁴ *ša-u-mi-in^d u-ra-maš-da-na hi vda-a-ya-u-iš^v ap-pa
vú mar-ri-ra*
- OP *vašnā Auramazdāhā im[ā] dahyāva tya adam agarbāya[m]*
- Bab. *ina GIŠ.MI sá^d A-ḫu-ur-ma-az-da-a[?] an-ni-ti KUR.KUR.MEŠ
šá ana-ku aš-ba-at*

These sample cases seem conclusive in determining the correlation between the relative pronoun and the /-ra/ suffix added to the verb. The following three cases, however, are the only ones which do not show the expected relative suffix, exclusive of the cases where a relative is used with the 'remotive' (§ 5.6). On the other hand, there are no cases where the /-ra/ suffixed first singular form occurs without a relative pronoun. (Contrast the Akkadian verb form in -u, the so-called subjunctive, without relative pronoun expressed).

- DB 52: *hi ap-pa vú hu-ud-da*
- DB 60: *am vnu u-ri-iš^v ap-pa vú hu-ud-da*
- DB 62: *hi ap-pa vú hu-ud-da*

The case of *hu-ud-da-in* may suggest the interpretation of the first singular relative suffix as /-r/ alone, with the graphic vowel in -ra - -ri phonologically irrelevant, and may also provide an additional case of the /n-r/ fluctuation already noted (cf. § 3.12).

- DSj34: *[v]ú^d u-ra-maš-da vú-in ka-ni-šá ap-pa EL-ma hu-ud-da-in
hu-be mar-ri-da ú-ša-ra-um-mi*

³¹ 'May my Ahuramazda me protect together with the gods, both what I did and what father Darius the king did.'

³² 'You who later this inscription will see which I wrote.'

³³ 'What I to them said that they did.'

³⁴ 'By the favor of Ahuramazda, these (are) the lands which I seized.'

'my Ahuramazda me befriended, what EL-ma I did, that all (was) successful.'

- OP [mā]m AM dauštā āha tya aku[navam avamiy visam ucāram āha]
 Bab. [dA-ḥu-ur-ma-az-da-a?] i-ra-ma-an-ni šá e-pu-šu gab-bi m[a-la] etc.

This passage was previously read *hu-ud-da in hu-be*³⁵ without any adequate explanation for the *in*. It appears to be quite possible that the form *hu-ud-da-in /utan/* is to be interpreted as verb-base /*ut-*/ + stem-vowel /*-a-*/ + alternant of relative suffix /*-n-*/.

5.4.2. Relative third person.³⁶ – The relative third person suffix is /*-t-*/ with the resultant form ending in the consonant cluster /*-št-*/. This suffix is graphically represented by both *-da* and *-ti*. The following are the relative third person forms of RAE:

<i>hu-ut-taš-da</i>	<i>du-iš-da</i>
<i>hu-ut-taš-ti</i>	<i>du-iš-ti</i>
<i>ú-ut-taš-ti</i>	<i>ti-ri-iš-ti</i>
<i>ud-da-iš-da</i>	<i>tur-na-iš-ti</i>
<i>be-ip-la-iš-da</i>	<i>še-ra-iš-da</i>
<i>be-iš-da</i>	<i>sa-ri-iš-da</i>
<i>pár-ru-iš-da</i>	<i>li-iš-da</i>
<i>da-áš-da</i>	<i>mar-ri-iš-da</i>
<i>da-iš-ti</i>	

The following contexts are indicative of the correlation between a /*-t-*/ suffixed third person declarative form and the use of a relative pronoun form in construction with it.

- DN a1:³⁷ *ak-ka* ^v*da-ri-ya-ma-u-iš* ^v*sunki-ir hu-ut-taš-da*
 OP *hya Dārayavaum xšāyaθiyam akunauš*
 Bab. [šá a] -na ^m*Da-a-ri-ia-muš* LUGAL šá LUGAL.MEŠ
ma-du-tum ib-nu- [u]

³⁵Cf. V. Scheil, "Inscriptions des Achéménides á Suse," Mémoires de la Mission Archéologique en Perse, XXI (Paris, 1929), p. 44.

³⁶The earliest reference to this explanation is in P. Jensen's review of Weissbach, Die Achämenideninschriften zweiter Art, which appeared in Zeitschrift für Assyriologie, VI (1891), 179: "Aufgefallen ist mir dass WEISSBACH nicht die r e l a t i v i s c h e Bedeutung der Endungen *ta(da)* und *ti* in Formen wie *ḥuttašta*, *imidušti* erkannt hat. *ḥuttaš* heisst 'er hat gemacht,' *ḥuttaš-ta* wird n u r in Relativsätzen verwandt. Das erkannte unabhängig von mir auch Herr Meissner." The recent attempt by W. Hinz, "Elamisches," Archiv Orientalní, XVIII (1950), 162-184, to disregard this solution for the /*-t-*/ suffixed verb forms because the same regularity of occurrence with relative pronouns is not found in the Persepolis treasury tablets, can only make for additional confusion. It seems clear that this solution is adequate for the royal Achaemenid data. The regularity here is too great to be ignored.

³⁷'Who made Darius king.'

- XV 1:³⁸ *ak-ka* *v*ik-še-ir-iš-šá *v*sunki-ir ú-ut-taš-da
 OP *hya Xšayāršam xšāyaθiyam akunauš*
 Bab. *šá a-na* *m*Hi-ši-?a-ar-šá-[a?] LUGAL *ib-nu-ú*
- DB 47:³⁹ [*a-ak me-ni v*ru]-*uh* [*ak-ka*] *v*taš-šu-ib-na ir-šá-ir-ra
*v*mi-iš-da-ad-da ir hu-ut-taš-ti
 OP *pasāva hauv mart[ia]* *hya avahyā kārāhyā maθ[išta ā]ha*
- DB 12:⁴⁰ *v*sunki-me [hu-be ap]-pa *v*kam-ma-ad-[da ak]-ka
*v*ma-[ku]-iš vkán-pu-ši-ya e-mi du-iš-ti
 OP *aita xšačam tya Gaumāta hya Maguš adīnā Kabūjīyam*
- DB 14:⁴¹ *ap-pa* *v*kam-ma-ad-da ak-[ka] *v*ma-ku-iš e-ma ap du-iš-da
 OP *tyadiš Gaumāta h[ya] Maguš adīnā*

Compare especially the following contexts:

- DB 10:⁴² [*s*] *a-[ap v*kán-pu-ši]-ya vpír-ti-ya-ir hal-pi-iš
*v*taš-[šu]-ip in-ni tur-na-iš ap-pa vpír-ti-ya-ir
hal-pi-ka
 OP *yaθā Kabūjiya Bardiyam avāja kārāhy[ā naiy] azdā abava*
tya Bardiya avājata
- DB 13:⁴³ *v*taš-šu-íp ir-še-ik-ki hal-pi-iš vak-ka-be šá-āš-šá
*v*pír-ti-ya-ir tur-na-iš-ti
 OP *kāram vasiy avājaniyā hya paranam Bardiyam adānā*

5.5. Precative. — The precative suffix /-ni/ occurs in the second and third person forms suffixed to the personal ending; thus, precative second person is /-ti-ni/ and precative third person is /-š-ni/. The only second person forms found are *ka-tak-ti-ni* and *ka-tuk-ti-ni* (cf. § 5.3. 2.1). The precative third person forms are:

<i>hal-pi-iš-ni</i>	<i>ka-ni-iš-ni</i>
<i>ha-iš-ša-iš-ni</i>	<i>nu-iš-gi-iš-ni</i>
<i>du-nu-iš-ni</i>	<i>ni-iš-ki-iš-ni</i>
	<i>ri-ip-pi-iš-ni</i>

The following contexts illustrate the meaning of this suffix:

- DB 67:⁴⁴ *d*u-ra-maš-da vnu-in hal-pi-iš-ni
 OP *Auramazdātaiy jatā biyā*

³⁸‘Who made Xerxes king.’

³⁹‘And then Vahyazdata made him the man who (was) the great one of the troops.’

⁴⁰‘That kingship which Gaumata who (was) a Magian took away from Cambyses.’

⁴¹‘Which Gaumata who (was) a Magian took away from them.’

⁴²‘When Cambyses slew Bardiya, the troops did not know that Bardiya had been slain.’

⁴³‘The troops greatly he slew, who formerly knew Bardiya.’

⁴⁴‘Māy Ahuramazda slay you.’

- DB 66:⁴⁵ *d_u-ra-maš-da v_{nu}-in ka-ni-iš-ni*
 OP *Auramazdā Ūvām dauštā biyā*
- DN a5:⁴⁶ *v_u d_u-ra-maš-da v_u-un nu-iš-gi-iš-ni*
 OP [*mā*] *m Auramazdā pātuv*
 Bab. *ana-ku d_A-ḥu-ur-ma-az-da-a? li-iš-ṣur-an-ni*

Each of these forms with precative /-ni/ may be translated with ‘may he’ The use of the term ‘precative’ for this suffix is to be understood only in the sense of a desired action to occur in the future. It is not to be understood as belonging to a modal system in which subjunctive, optative, desiderative, or jussive categories, for example, may be expected as well. As suggested above (cf. § 5.3.2.1), this suffix may be possibly connected with the future /-n-/ suffix.

5.6. **Remotive.** — A suffix /-k/ (written *-ak*, *-ik*, *-ak-ka*, *-ik-ka* occurs with many verb-roots which will be termed ‘remotive’ throughout. Its exact connotation is difficult to establish and has elsewhere been termed ‘passive-intransitive-aorist.’⁴⁷ The term ‘remotive’ has been chosen as a colorless equivocation within which the passive, aorist, perfective, and other concepts may perhaps be subsumed. The general meaning of this /-k/ suffix is perhaps to be understood as action occurring before that of the declarative. Whether, in a particular context, translation requires the passive or not depends upon the translation language. This study is concerned primarily with the formal analysis of RAE words, and for the suffix /-k/, which occurs with many and potentially with all verbs, the single overall term ‘remotive’ is suggested. This remotive suffix is discussed here though it is part of the nominal system, since its plural is /-p/, the nominal plural suffix. The following is a list of remotive forms:

<i>ha-ul-lak</i>	<i>pa-ri-ik</i>	<i>ku-ti-ik</i>	<i>ṣik-kak</i>
<i>hal-pi-ik</i>	<i>pa-ri-ik-ka</i>	<i>ku-uk-da-ak</i>	<i>ṣik-ka-ka</i>
<i>hal-pi-ka</i>	<i>pu-ut-tuk-ka</i>	<i>kup-pa-ka</i>	[<i>ṣik</i>]- <i>kak-ka</i>
<i>mur-da-ak</i>	<i>pu-ud-da-ka (?)</i>		<i>li-ip-ka</i>
<i>hu-ud-da-ak</i>	<i>tal-li-ik</i>	<i>ku-ṣi-ik</i>	<i>li-ma-ik-ka</i>
<i>hu-ut-tuk</i>	<i>tal-li-ka</i>	<i>ku-ṣi-ka</i>	
<i>hu-ut-tuk-ka</i>	<i>tin-gi-ik</i>	<i>i-ma-ka</i>	<i>li-ul-ma-ak</i>
<i>hu-ut-tak-ka</i>	<i>tur-ri-ka</i>	<i>šā-sa-ak</i>	<i>li-ul-muk (?)</i>
<i>be-ip-ra-ka</i>	<i>ti-ri-ik-ka</i>	<i>ṣi-in-nu-ik</i>	<i>mar-ri-ik</i>
<i>be-la-ka</i>	<i>ti-tuk-ka</i>	<i>sa-ak</i>	<i>mar-ri-ka</i>
<i>be-ip-tuk-ka</i>	<i>ki-ik</i>		<i>mar-ra-[ka]</i>

⁴⁵‘May Ahuramazda befriend you.’

⁴⁶‘May my Ahuramazda protect me.’

⁴⁷Weissbach, Die Achämenideninschriften zweiter Art, p. 53.

<i>máš-šik</i>	<i>šil-la-ka</i>	<i>hu-ut-lak</i>	<i>hu-ud-da-ma-ik</i>
<i>máš-šik-ka</i>	<i>šil-la-ak</i>	<i>ap-pu-ka</i>	<i>ni-ma-ak</i>
<i>rāb-ba-ka</i>	<i>ša-ma-ak</i>	<i>ap-py-ka-da</i>	<i>ni-ma-an-ki</i>
<i>da-ut-tuk</i>	<i>pi-ir-ka</i>	<i>ši-ya-ma-ak</i>	

For the equivalence of the various graphic forms of the /-k/ suffix, the following contexts may be noted:

- DB 25:⁴⁸ *me-ni* ^v*mi-tar-na* ^v*taš-šu-íp i-da-ka* ^h*ma-da-be-ik-ki*
sa-ak sa-ap ^v*ma-da-be-ik-ki-ir* *pa-ri-ik*
 OP *pasāva hauv Vidarna hadā kārā ašiyava yaθā Mādam*
parārasa
- DB 26:⁴⁹ *me-ni* ^v*da-tur-ši-iš sa-ak sa-ap* ^v*har-mi-nu-ya-íp-ik-ki-ir*
pa-ri-ik-ka
 OP *pasāva Dādaršiš ašiyava yaθā Arminam parārasa*
- DP f2:⁵⁰ GIŠ*ka-at hi-ma-uk-ku* ^h*hal-mar-raš hi ku-ši-ka* *ap-pu-ka*
hi-ma ^h*hal-mar-raš in-ni ku-ši-ik . . . ap-pa hi*
^h*hal-mar-raš ku-ši-ka*
- DB 8:⁵¹ *ap-pa-an-ka* ^v*ú-ik-ki-mar* *ap ti-ri-ik-ka*
 OP *yaθāšām hacāma aθahya*
- DN a3:⁵² *ap-pa* ^v*ú-ik-ka-mar* *ap tur-ri-ka*
 OP *tyašām hacāma aθahya*
- DB 15:⁵³ *hi ap-pa* ^v*[ú-ik-ki-mar]* *hu-ud-da-ak*
 OP *ima tya adam akunavam*
- DN a5:⁵⁴ *hu-be ap-pa hu-ut-tuk-ka hu-be mar-ri-da* *ša-u-mi-in*
d_u-ra-maš-dā-na hu-ud-da
 OP *aita t[ya] kartam ava visam vašnā Auramazdāhā akunavam*
- DSf32:⁵⁵ *ap-pa hi-ma hu-ut-tuk*
 OP *tya [i]d[ā] akariya*
- DSf35:⁵⁶ *ap-pa hi-ma hu-ut-tuk-ka*
 OP *hya idā karta*

⁴⁸‘Then Vidarna the troops with him to the Medians went; after among the Medians he arrived.’

⁴⁹‘Then Dādaršiš went; after among the Armenians he arrived.’

⁵⁰‘Upon this platform (?) this fortress was built, formerly here a fortress had not been built . . . that this fortress was built.’

⁵¹‘Thus from me to them was said.’

⁵²‘What from me to them was said.’

⁵³‘This which by me was done.’

⁵⁴‘That which was done, that all by the favor of Ahuramazda I did.’

⁵⁵‘What here was done.’

⁵⁶Ibid.

;

The OP versions show either the imperfect or aorist indicative active, the imperfect indicative passive, or the past passive participle used as a perfect without the auxiliary verb expressed.

Weissbach⁵⁷ called the /-k/ suffix the aorist third singular of the 'intransitive and passive conjugation.' However, the category of 'intransitive' is one which has no formal mark in RAE. It is, rather, a category dictated by the translation required of a particular verb-base. There should thus be some hesitation to set up a category which cannot be justified by formal criteria. If this form is in reality a 'passive,' it should be considered a passive for all the verbal bases with which it occurs, without distinction of the use of transitive or intransitive verbs in translation. Such a differentiation into transitive and intransitive obscures the fact that this same suffix can occur potentially with all verb-bases and is not limited to a particular meaning category. It also glosses over its formally hybrid character.

The seemingly 'passival' character of this form, however, should not overshadow the fact that in sequences of action the first actions, that is, those of the remoter or more distant past, occur with the /-k/ suffix. Thus, perhaps the form should be called 'remotive-passive' or 'past-passive.' In any event, it is immaterial whether the term 'remotive' or any other term is suggested for this suffix, so long as its form remains potentially distinguishable for any verb-base. The term 'remotive' is here preferred for its colorlessness and lack of associative interference, and because it may serve to explain the use of the same suffix in pronominal forms such as *ap-pu-ka* (see below).

Examples of the temporally distant connotation of the /-k/ suffixed forms are:

- DB 17:⁵⁸ *vha-iš-ši-na hu-pír-ri mar-ri-ka ráb-ba-ka vú-ik-ki*
tin-gi-ik me-ni vú ir hal-pi
 OP. *hauv Áç [i]na basta anayatā a [biy m] ām adamšim avājanam*
- DB 33:⁵⁹ *vru-uh ki-ir vsi-iš-šá-in-tak-ma hi-še hás-šá-kar-ti-ya-ra*
hu-pír-ri vú-ik-ki-mar be-ip-tuk-ka vtaš-šu-ib-be hi-ši-la
ap ti-ri-iš
 OP *I martiya Ciçataxma nāma Asagartiya hauvmaiy hamiçiya*
abava kārāhyā avaθā aθaha

The meaning of 'remote past' may also be the clue to such forms as *ap-pu-ka*, *ap-pu-ka-da* and of the form *hi-nu-ib-ba-ak* as opposed to *in-nu-ip-pád-da*.

It may be possible to relate the forms *ap-pu-ka* and *ap-pu-ka-da* to the pronominal paradigm of *ap-pa* 'which,' with the /-k/ in these forms perhaps to be analyzed as the 'remotive.' Thus, these two forms would

⁵⁷ Weissbach, *Die Achämenideninschriften zweiter Art*, p. 53.

⁵⁸ 'That Acina was seized, bound, to me brought, then I slew him.'

⁵⁹ 'A man, Cicataxma, his name, a Sagartian, he from me rebelled, then his troops to them he said.'

have some inner Elamite basis for the meaning 'formerly' which has hitherto been assigned to them because of their correspondence with OP *paruvam* and *paruvamciy*, respectively. Similarly *hi-nu-ib-ba-ak* (DB 59) may perhaps be analyzed as */inupak/* < */i+ nupa + k/*, the third person 'here'-deixis pronoun */i/* plus a form */nupa/* (meaning uncertain, but perhaps 'so-long') plus the 'remotive' */-k/*, literally 'it — so long — before = as long as it was' or 'all the time before.'

DB 59: *vak-ka-be v^uunki-ip ir-pi-ip-pi ku-iš šà-be-ip*
hu-pi-be-na hi-nu-ib-ba-ak in-ni hu-ud-da-ak sa-ap
v^u [^hbe-ul-ki-ma sa-u-mi-in ^d] u-ra-maš-da-na hu-ud-da
 OP *tyaiy paruvā xšāyaθ[iyā y] ātā āha avaišām manā va[šnā]*
Auramazdāha θarda kartam

R. Kent translates the OP version as follows: "Those who were the former kings, as long as they lived, by them was not done thus as by the favor of Ahuramazda was done by me in one and the same year."⁶⁰ The Elamite version may be translated as follows: "Those who (were) the former kings, while they lived, by them, all the time before, was not done as I in one year by the favor of Ahuramazda did (it)."

Aside from the graphic variations, the distinction between *hi-nu-ib-ba-ak* and *in-nu-ip-pād-da*, remains in the suffix. The final *-da* of the latter form may be identified as the 'generalizing' */-ta/* which also occurs in *ap-pu-ka-da* and in other forms such as *mar-ri-da*, *hu-be-da*, etc. (cf. § 6.10.2). Thus, the */-k/* and the */-ta/* suffixed forms represent two kinds of past time; the one, a remote specific past, but the */-ta/* adds a more general non-specific past meaning. Indeed, the form *in-nu-ip-pād-da* may even subsume a form **in-nu-ib-ba-ak-da* with the alternation of *-kt-* and *-t-* paralleled by the forms *me-ul-li-ik-da* and *me-ul-li-da*. The OP distinction of *paruvam* = RAE *ap-pu-ka* and *paruvamciy* = RAE *ap-pu-ka-da* provides a neat balance of the OP indefinite particle *-ciy* (cf. Skt. *-cid*) with this RAE generalizing */-ta/*.

5.6.1. Remotive plural. — The plural of the remotive form is expressed with the plural suffix */-p/*. The following remotive plurals are thus far attested:

<i>be-ip-li-ib-ba</i>	<i>be-sa-ip-pi</i> ⁶¹
<i>be-ip-li-ip</i>	<i>pa-ri-ip</i>
<i>be-ip-ti-ip</i>	<i>ip-š-i-ip</i>
<i>be-ip-ti-ip-pi</i>	<i>š-i-in-nu-ip</i>
<i>be-ip-ti-ib-ba</i>	<i>šà-be-ip</i>
<i>be-ti-ip</i>	
<i>be-ti-ib-be</i>	

⁶⁰ Kent, *op. cit.*, p. 132.

⁶¹ The form is actually *be-sa-ip-ti* which is unanalyzable. It has been amended here to *be-sa-ip-pi* on the basis of a possible scribal error, since *ti* is *𐎠𐎵* and *pi* is *𐎠𐎶*.

*rāb-ba- [ip]**mar-ri-ip*
mar-[ri-ba]

The parallelism of forms in /-k/ and their plurals in /-p/ is clear from the following contexts:

DB 26:⁶² *me-ni* ^v*da-tur-ši-iš sa-ak sa-ap* ^v*har-mi-nu-ya-ip-ik-ki-ir*
pa-ri-ik-ka

OP *pasāva Dādaršiš ašiyava yaθā Arminam parārasa*

DB 36:⁶³ *sa-ap* ^v*taš-šu-ip hu-pi-be* ^v*mi-iš-da-āš-ba-ik-ki-ir*
pa-ri-ip

OP *yaθā hauv kāra parārasa abiy Vištāspam*

The OP in DB 36 maintains the singular, since *kāra* 'army' is singular. The RAE version of course has the corresponding *taš-šu-ip*, with the 'there'-deixis personal plural *hu-pi-be* and the remotive in the plural, *pa-ri-ip*. (Compare also the singular *ši-in-nu-ik* and the plural *ši-in-nu-ip*.)

DB 31:⁶⁴ *ha-mi* ^v*pīr-ru-mar-ti-iš hu-pīr-ri* *ši-in-nu-ik*

OP *avadā hauv Fravartiš . . . aiš*

DB 30:⁶⁵ ^v*be-ti-ip pīr-ru ir-šá-ir-ra-ib-ba* ^v*ma-u-mi-iš-šá*
ir-ma ši-in-nu-ip

OP *hamiçiyā hagmatā paraitā patiš Vaumisam*

5.7. Imperative. — RAE has two imperative forms. One, occurring only in the examples *mi-da* and *mi-te*, shows only the verb-stem (verb-base + stem-vowel); it is used for the singular. The other coincides with the declarative third person form; it is sometimes used for the plural, but sometimes it is rendered in OP by the singular (see the discussion of the examples below). The question arises whether in such cases the RAE and OP versions differ, or whether one has to accept the strange situation that RAE had a 'singular' and a 'number unspecified' imperative form side by side.

*hu-ut-taš**hal-pi-iš**mi-te-iš**ha-pi-iš**nu-iš-gi-iš**tu₄-ru-iš*

The following contexts may be noted for the identification of the meaning of these forms:

⁶² 'Then Dādaršiš went; after among the Armenians he arrived.'

⁶³ 'After those troops to Hystaspes arrived.'

⁶⁴ 'Then that Fravartiš went.'

⁶⁵ 'The rebels assembled (?), (as for) Vaumisa against him they went.'

- DB 26:⁶⁶ *hu-pír-ri* ^{vú} *vhar-mi-nu-ya-ip-ik-ka-ir hu-ud-da hi-ši-la*
hi ti-ri-ya mi-da
 OP *adam fraišayam Arminam avaθā [šaiy] aθaham paraidiy*
- DB 25:⁶⁷ *hu-pír-ri* ^v *ir-šá-ir-ra ap-pi-ni ir hu-ud-da hi-ši-la ap ti-*
ri-ya mi-te-iš
 OP *avamšām maθištam akunavam avaθāš [am aθa] ham paraitā*

In these two citations, the imperative form agrees in number with *hi ti-ri-ya* 'to him I said' and *ap ti-ri-ya* 'to them I said.' Although the forms *mi-da* and *mi-te* are the only specified singular imperative forms that occur, in some cases, the /-š/ imperative form is also used for the singular.

- DB 55:⁶⁸ *vnu* ^v *sunki vak-ka me-iš-ši-in šā-ni-ik-ti*
ti-ut-ki-um-me-mar šil-la-ka du-in nu-iš-gi-iš
^v *ruh^lg-ir-ra ti-te-in-ra hu-pír-ri šil-la-ka mi-ul-li-e*
ha-pi-iš

Here Darius addresses 'you (sing.) who (sing.) will later become king', and then he commands with what seems to be the imperative plural. Perhaps this is to be explained as including many future kings, and he is addressing them both in a collective and in an individual, segmentalized sense. Indeed, in the two phrases where *mi-da* and *mi-te* occur, Darius is primarily addressing the leader of the troops he is dispatching to quell revolts, and after saying in the singular 'Go forth!', he proceeds to command that his lieutenant slay the rebels. Here, however, the plural is used: 'Slay ye!' This second part of the command is perhaps to be taken as an address to the leader and to the troops as well.

- DB 26:⁶⁹ *hi-ši-la hi ti-ri-ya mi-da* ^v *taš-šu-íp ap-pa vbe-ti-ip*
^{vú} *ni-na in-ni ti-ri-man-pi hu-pi-be hal-pi-iš man-ka*
 OP *avaθā [šaiy aθaham paraidiy kāra hya hamičiya manā naiy*
gaubataiy avam [jad] iy
- DB 29:⁷⁰ *hi-ši-la hi ti-ri mi-te* ^v *taš-šu-íp ap-pa vbe-ti-ip*
^{vú} *ni-na in-ni ti-ri-man-pi hu-pi-be hal-pi-iš man-ka*
 OP *avaθāšaiy aθaham paraidiy kāra hya hamičiya manā naiy*
gaubataiy avam jadiy

It is to be noted that the OP versions of these two citations have two imperative singular forms, while the RAE versions use first the imperative singular and then the imperative, number unspecified.

⁶⁶ 'Him I over the Armenians placed (lit., made), then to him I said, "Go forth!"'

⁶⁷ 'Him the great one of them him I made, then to them I said, "Go forth!"'

⁶⁸ This whole passage was verified by Cameron at Behistun in 1948.

⁶⁹ 'Then to him I said, "Go forth! the troops which (are) rebels, mine are not called, them slay!"'

⁷⁰ 'Then to him I said, "Go forth! the troops which (are) rebels, mine are not called, them slay!"'

5.8. Purposive. — There occurs an RAE verb form suffixed with /-*nuupa*/ here termed ‘purposive’ and corresponding to the OP infinitive. The following graphic forms occur:

hu-ut-ti-nu-um-hu-ba (DB 28, 29, 30)

hu-ut-ti-nu-um-ú-ba (DB 26, 27)

DB 26:⁷¹ *vbe-ti-ip pí-r-ru ir-šá-ir-ra-ib-ba vda-tur-ši-iš ir-ma
ši-in-nu-ip šá-pár-rak-um-me hu-ut-ti-nu-um-ú-ba*

OP *pasāva [hamiç] iyā hagmatā paraitā patiš Dādaršim
hamaranam cartanaiy*

Bab. *a-na e-pi-šú ta-ḥa-za*

DB 29:⁷² *vbe-ti-ip pí-r-ru ir-šá-ir-ra-ib-ba vma-u-mi-iš-šá
ir-ma ši-in-nu-ip šá-pár-rak-um-me hu-ut-ti-nu-um-hu-ba*

OP *pasāva hami[çiy]ā hagmatā paraitā patiš Vaumisam
hamaranam cartanaiy*

Bab. *a-na KAK-eš (epēš) ta-ḥa-za*

No exact explanation of this suffix will be attempted, though it may perhaps be worth pointing out that one of the /*n*/’s of the suffix may be related to the future-precative /*n*/, and that the /-*p*-/ element may be the plural suffix. The meaning of the form seems to be clear, however. A translation ‘in order to . . . ’ or ‘for the purpose of . . . -ing’ seems to fit. Cf. § 5.10.1 for a possible singular purposive form.

5.9. Quotational correlatives. — There occur in RAE three quotational forms which are correlative with verbs of speaking and saying.⁷³ The ‘quotational correlatives’ *man-ka*, *ma-ra*, *na-in-da* mark the end of direct discourse which is introduced by verb forms of the first, third, and second persons, respectively.⁷⁴ Not every occurrence of a verb of speaking in the first, second, or third persons is accompanied by the appropriate quotational correlative. There are, for example, nine occurrences of *na-an-ri* ‘he declares’ in DB 52, but only four of the direct quotations which this form introduces are delimited by the expected *ma-ra*. In any event, the use of these quotational correlatives is otherwise well established; their function as boundary markers for direct quotations is clear. Of the six occurrences of *ti-ri* ~ *ti-ri-ya*, five occur with *man-ka*. *Man-ka* also occurs with the *hapax* form *na-an-gi*, a circumstance which helps prove the analysis of *na-an-gi* as a first person form to *na-an-ri*.

The declarative third person forms *ti-ri-iš* ~ *ti-ri-iš-šá* ~

⁷¹ ‘The rebels assembled (?), (as for) Dādaršiš against him they went in order to do battle.’

⁷² Same as preceding except for Vaumisa in place of Dādaršiš.

⁷³ Cf. especially J. Friedrich, “Die Partikeln der zitierten Rede im Achämenidisch-Elamischen,” *Orientalia*, NS XII (1943), 23-30.

⁷⁴ The recognition of *na-in-da* as a quotational correlative with the second person was contributed by Friedrich, *ibid.*

ti-ri-ya-iš occur altogether seven times; five are followed by *na-an-ri . . . ma-ra*, one occurs as *ti-ri-iš . . . ma-ra*, and one alone without the correlative. The occurrences of *na-an-ri* must be carefully distinguished as falling into two groups: those cases where the form occurs in the introductory phrases *a-ak NN sunki na-an-ri* or *na-an-ri NN sunki*, and those where it does not occur in these formulaic phrases. In the latter category, out of thirty-five total occurrences, *na-an-ri* occurs twenty-two times with *ma-ra*. Although the verb form *EL-man-da ~ EL-man-ti ~ EL-ma-in-ti* occurs four times, the second person quotational correlative *na-in-da* occurs only once (*EL-man-da* NRa4).

The following contexts illustrate the use of the quotational correlatives:

- DB 25: *hi-ši-la ap ti-ri-ya mi-te-iš^v taš-šu-íp^v ma-da-be ak-ka-be^v ú-ni-na in-ni ti-ri-man-pi hu-pi-be hal-pi-iš man-ka*
- DB 33: *hi-ši-la ap ti-ri-ya mi-te-iš^v taš-šu-íp^v ap-pa^v be-ti-íp^v ú-ni-na in-ni ti-ri-man-pi hu-pi-be hal-pi-iš man-ka*
- DB 29: *hi-ši-la hi ti-ri mi-te^v taš-šu-íp^v ap-pa^v be-ti-íp^v ú-ni-na in-ni ti-ri-man-pi hu-pi-be hal-pi-iš man-ka*
- DB h: *hi^v mi-iš-da-ad-da ti-tuk-ka na-an-ri^v ú^v pír-ti-ya DUMU ku-raš-na^v ú^v sunki-me hu-ud-da ma-ra*
- DB 22: *hi-ši-la ap ti-ri-iš na-an-ri^v ú^v um-man-nu-iš^v sunki^v há-tam-tup-na ma-ra*
- DB 45: *hi-ši-la ap ti-ri-iš mi-te-iš^v mi-ma-na-ir hal-pi-iš ku-ud-da^v t[aš-šu-íp hu-p]i-[be ak-ka-be^v da]-ri-ya-ma-u-iš^v sunki-na ti-ri-man-pi ma-ra*
- DN a4: *si-la-an-ka šá-rak EL-man-da ap-pa ha-ma-ak^v da-a-ya-u-iš hu-be ap-pa^v da-ri-ya-ma-u-iš^v sunki mar-ri-iš-da na-in-da*

OP has no counterpart at all to these quotational correlatives, but the Bab. version often has *um-ma* which, characteristically, introduces direct discourse.⁷⁵

5.10. Derivational particle /-ma-n-/. — Some verb-base occur with the element /-man-/ added to the verb stem. This element has in the past been termed 'durative' or 'continuative.'⁷⁶ Weissbach set these forms into a 'Futur und Praesens' category.⁷⁷ However, the various forms which occur with /-man-/ must be sharply differentiated, and the question of a precise meaning identification of this element must be

⁷⁵A. Ungnad, Grammatik des Akkadischen (Munich: Biederstein Verlag, 3rd ed., 1949), p. 80, § 57b.

⁷⁶Cf. Cameron, op. cit., p. 47, for the suggestion that this element indicates that " . . . the action is a continuing one corresponding somewhat to our 'present tense.'"

⁷⁷Weissbach, Die Achämenideninschriften zweiter Art, p. 52.

left open. Indeed, it will be shown that the element is not to be considered as a unit, /-man-/, but as a combination of elements, /-ma-n-/, each of which must perhaps be identified with elements that occur independently elsewhere. The various forms that occur with this element will be discussed in the subsequent section as indicated.

<i>hu-ut-ti-man-ra</i> (§ 5.10.1)	<i>ti-ri-man-pi</i> (§ 5.10.3)
	<i>ip-še-man-ba</i> (§ 5.10.3)
<i>hu-ud-da-man-ra</i> (§ 5.10.2)	<i>ku-ut-ma-um-pi</i> (§ 5.10.3)
EL- <i>man-ra</i> (§ 5.10.2)	
EL- <i>man-ri</i> (§ 5.10.2)	<i>tal-li-ma-na</i> (§ 5.10.4)
EL- <i>ma-man-ra</i> (§ 5.10.2)	<i>gi-iš-ša-ma-na</i> (§ 5.10.4)
<i>ši-ya-man-ra</i> (§ 5.10.2)	<i>su-da-man</i> (§ 5.10.5)

5.10.1. *hu-ut-ti-man-ra*, — The form *hu-ut-ti-man-ra* seems to be the singular to what was termed ‘purposive’ above (§ 5.8). This form also corresponds to OP infinitives, and in each case the RAE phrase in which it occurs is the same, except for a distinction in number, as that in which *hu-ut-ti-nu-um-hu-ba* occurs. Note the following contexts:

- DB 31:⁷⁸ *ha-mi v^upír-ru-mar-ti-iš hu-pír-ri ši-in-nu-ik ak-ka na-an-ri v^u sunki-me v^uma-da-be-na hu-ud-da ma-ra šá-pár-rak-um-me hu-ut-ti-man-ra*
- OP *avadā hauv Fravartiš hya Mādaiy xšāyaθiya agaubatā āiš had[ā] kārā patiš mām hamaranam cartanaiy*
- Bab. ^m*Pa-ar-ū-mar-ti-iš a-ga-šu-u šá i-gab-bu um-ma a-na-ku LUGAL KURMa-da-a-a it-ti ú-qu it-ta-lak a-na e-pi-šu ta-ḫa-za*
- DB 19:⁷⁹ *ha-mi v^unu-ti-ut-be-ul hu-pír-ri ak-ka na-an-ri v^u v^unap-ku-tur-ru-šir v^utaš-šu-íp i-da-ka ir-ru-taš ši-in-nu-ik šá-pár-rak-um-me hu-ut-ti-man-ra*
- OP *avadā [hauv Na]ditabaira hya Nabukudracara agaubatā āiš hadā kārā patiš [mām hamarana]m cartanaiy*

The pertinent passages with *hu-ut-ti-nu-um-hu-ba* ~ *hu-ut-ti-nu-um-ū-ba* (§ 5.8) have *ši-in-nu-íp* (remotive plural) instead of *ši-in-nu-ik* (remotive singular) in the similar contexts just presented.

5.10.2. *hu-ud-da-man-ra*. — Still another form of the verb-base /ut-/ ‘to make, etc.’, pertinent to this problem is *hu-ud-da-man-ra*. It occurs twice, but one of the cases (DS u) is too fragmentary to be of help. The other (XPh44) seems to indicate that *hu-ud-da-man-ra* must be considered different from *hu-ut-ti-man-ra*, and should be included

⁷⁸‘There that Fravartiš came who said, “I the kingship of the Medians exercise” in order to do battle.’

⁷⁹‘There that Nidintu-Bēl who said, “I (am) Nebukadrezzar” the troops with him came *ir-ru-taš* in order to do battle.’

with the rest of the forms in /-nra/ discussed in this section. The pertinent context is as follows:

XPh44:⁸⁰ *ku-ud-da^d u-ra-maš-da ši-ib-be hu-ud-da-man-ra*
ir-da-ha-ši pír-ra-iš-man-nu-ya
 OP *utā Auramazdām yadataiy artācā brazmaniya*
 Bab. *u i-sin-nu a-na^d A-ḫu-ru-ma-az-da-a? ip-ḫu-uš*
ar-ta-šá-a? bi-ra-za-am-man-ni-i

5.10.2.1. Forms in /-nra/ and /-manra/.

/-nra/	/-manra/
EL-man-ra	ši-ya-man-ra
EL-man-ri	
be-ra-an-ra	hu-ud-da-man-ra
ti-te-in-ra	EL-ma-man-ri
u-ri-in-ra	
ú-[ri-in-ra]	

The following contexts are pertinent:

DS j4:⁸¹ [*ša-u-ma*]-in^v u-ra-maš-da-na-ak-ka hi^h UL.ḫi^{lg}
ši-ya-man-ra ap-ḫa^v ú hu-[ud]-da-ra
 OP *vasnā AMhā hya [ima hadiš vainātiy tya manā kartam]*
 Bab. [*ina GIŠ.MI šá^d A-ḫu-ur-ma-az-da-a? e-te-ḫu-uš a-na-ku*]
šá bi-it [a-ga-a] im-ma-ri

DB 5S: *ša-u-mi-in^d u-ra-maš-da-na da-a-ki-da^v ú-ni-na*
ir-še-ik-ki [hu-ut]-tuk-ka šà-ri hu-uh-be tup-ḫi hi-ma
in-ni tal-li-ik hu-be-in-tuk-ki-um-me a-nu^v ak-ka
^htup-ḫi hi me-iš-ši-in be-ra-an-ra hu-pír-ri ir-še-ik-ki
EL-man-ra ap-ḫa^v ú-ni-na hu-ud-da-ak hu-pír-ri in-ni
u-ri-in-ra ti-ut-ki-me EL-man-ri
 OP *vasnā Aura [mazdāha] utāmaiy aniyāšciy vasiy astiy*
kartam ava ahyāyā d[i]p[iy]ā naiy nipištam avahyarādiy
naiy nipištam māt[ya hya apa] ram imām dipim patiparsātiy
avahyā paruv θadayā [taiy tya] manā kartam naiš[im] ima
varnavātaiy duruxtam maniyā [taiy]

Kent translates this OP passage as follows:

By the favor of Ahuramazda and of me much else was done; that has not been inscribed in this inscription; for this reason it has

⁸⁰'And the one who will worship (?) (lit., the one who will ši-ib-be make) Ahuramazda and Arta reverently.'

⁸¹'By the favor of Ahuramazda, who this palace will see which I made.' Note the personal determinative with u-ra-maš-da-na.

not been inscribed, lest whoso shall hereafter read this inscription, to him what has been done may seem excessive, (and) it not convince him, (but) he think it false.⁸²

The RAE version may be rendered as follows: “By the favor of Ahuramazda, many other (things) by me were done [lit., other (things) — in general of me many were done], that on this inscription was not written, for this reason, lest (he) who this inscription later will read, he excessive will think what by me was done; he will not believe, a lie he will think.” Some of the words in the RAE translation receive their precise meaning from the OP version and the translation of the RAE is, of course, only tentative. However, these forms in /-nra ~ -nri/ may be considered to be ‘hybrid’ with the /-n-/ element to be identified with the ‘future’ /-n-/ (§ 5.3.2.1) and the /-ra ~ -ri/ element to be related to the /-r/ element in *har-mi-nu-ya-ra*, etc., the so-called ‘substantive’ /-r/ (cf. § 6.10.3). This form also takes its plural in /-p/ (cf. § 5.10.3). Thus, the /-nra/ element which appears in /-manra/ has been associated with the /-nra/ element which occurs alone without a preceding /-ma-/. And this /-nra/ element is analyzed as /-n-r/, i.e., ‘future’ plus ‘substantive.’ This substantive /-r/ is perhaps to be considered a kind of *nomen actoris*.

The forms EL *-man-ra* ~ EL *-man-ri* probably do not show the derivational element /-man-/. The /m/ in these forms is probably part of the verb-base.⁸³ Thus, these forms are classed as /-nra/ suffixed forms. On the other hand, EL *-ma-man-ra* seems to be the corresponding form in /-manra/.

5.10.3. Forms in /-np/ and /-manp/. — The plural corresponding to the singular forms in 5.10.2.1 are characterized by /-np/ and /-manp/. The occurring forms are:

/-np/ <i>tur-na-um-pi</i>	/-manp/ <i>ti-ri-man-pi</i> <i>ku-ut-ma-um-pi</i> <i>ip-še-man-ba</i>
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The contexts for these forms are the following:

DN a4: ⁸⁴ OP Bab.	<i>vša-ul-me(?) ši-iš ak-ka-be</i> GIŠ <i>ka-at ku-ut-ma-um-pi</i> <i>ha-mi tur-na-in-ti</i> <i>patikarā dīdiy tyai[y] gāθum baratīy a[va] dā xšnāsāhy</i> NU.MEŠ-šú-nu a-mu-ur šá GIŠ.GU.ZA <i>at-tu-u-a na-šu-u</i> <i>ina lib-bi tu-ma-si-iš-šu-nu-tú</i>
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⁸²Kent, *op. cit.*, p. 131 f.

⁸³Phonetic values for the EL sign ending in *m* have been suggested partly on this basis; cf. Cameron, *op. cit.*, p. 80 f., § 105.

⁸⁴‘The image view! (those) who the throne carry, there you will know.’

The forms *ku-ut-ma-um-pi* /*kutmamp*/ and *tur-na-um-pi* /*turnamp*/ suggest the possibility that the /-n-/ element may occur morphophonemically as /-m-/ before the bilabial phoneme which comprises the plural morpheme.

As for the form *tur-na-um-pi*, it may thus be analyzed as /*turnamp*/ < */*turnanp*/, the plural which corresponds to the singular forms in /-nra/. Theoretically, the singular of this should be something like **tur-na-in-ra*. The plural form occurs in the following context:

- DB 13:⁸⁵ *hu-be- [in-tuk-ki-um-me^v] taš-šu-íp ir-še-ik-ki*
hal-pi-iš [a]-nu^v ú-ir tur-na-um-pi ap-pa^v in-ni
^vpír-ti-ya ak-ka^v ku-raš^v šá-ak-ri
- OP *avahyarādiy kāram avājaniyā mātyamām xšnāsātiy tya*
adam naiy Bardiya amiy hya Kūraus puça
- Bab. *i-d [u-ku] um-ma man-ma la ú-ma-as-sa-nu šá la^m Bar-*
zi-iá ana-ku A-šú šá^m Ku-ra-áš

The form *ip-še-man-ba* is included in this group on formal grounds alone, since its context is too broken to allow for precise identification (DSx3 rev.). It may safely be identified with the verb-base /*ipš-*/ 'to fear,' known also from the form *ip-ši-iš*.

All the forms cited and discussed in the last sections whose last suffix is /-r/ or /-p/ must be considered 'hybrid' forms.

5.10.4. *tal-li-ma-na* and *gi-iš-ša-ma-na*. — These two forms occur in the same text and also correspond to OP infinitives, as do the forms termed 'purposive.'

- XV 3:⁸⁶ *ku-ud-da hi^h iš-da-na^v hu-pír-ri še-ra-iš gi-iš-ša-ma-na*
... me-ni^v ú še-ra^h DUB^{lg} tal-li-ma-na
- OP *utā ima stānam haw niyaštāya katanaiy ... pasāva adam*
niyaštāyam imām dipim nipaištānaiy
- Bab. *ù a-ga-a šá-du-ú tē-e-mu [iš] -ta-kan a-na e-piš IGI-šú*
... ár-ki a-na-ku tē-e-mu al-ta-kan a-na šá-ṭa- [r] i-šú

Both of these forms seem to be equivalent in function to the 'purposive' singular *ku-ut-ti-man-ra* discussed above (§ 5.10.1). The verb-base /*kic-*/ represented by *gi-iš-ša-ma-na* occurs only in this form; but /*tal-*/ of *tal-li-ma-na* occurs elsewhere in the meaning 'to write' which is required here also. One possible explanation of these enigmatic forms is that the variation /-mana ~ -manra/ may have some phonemic or morphophonemic basis, seen elsewhere in fluctuations of /n/ and /r/. Whatever the correct explanation of these two forms in /-mana/ may be, their function seems clear, and for the present both must be noted separately among these RAE forms which contain the derivational element /-ma-/ or /-man-/.

⁸⁵For this reason the troops greatly he slew lest me they know that I (am) not Bardiya who (is) Cyrus' son.'

⁸⁶'And this column he ordered to carve (?) . . . then I ordered the inscription to write.'

5.10.5. su-da-man.— The form *su-da-man* (DNa5; XPh50) presents another problem of the same type. The verb-base /*sut-*/ occurs in no other forms, and in each of its two occurrences it is spelled with *-man* where one would expect a first person declarative form.

DN a5:⁸⁷ *hu-be v^u d^u-ra-maš-da-in su-da-man hu-be d^u-ra-maš-da v^u du-nu-iš-ni*

OP *aita adam Auramazdām jadyāmiy aitamaiy Auramazdā dadātuv*

Bab. *a-ga-a ana-ku a-na d^A-[hu-ur]-ma-az-da-a? e-te-ri-iš d^A-hu-ur-ma-az-da-a? li-id-din-nu*

XPh50:⁸⁸ *hu-be v^u d^u-ra-maš-da-in su-da-man hu-be-da d^u-ra-maš-da hu du-nu-iš-ni*

OP *aita adam Auramazdām jadyāmiy aitamaiy Auramazdā dadātuv*

Bab. *a-ga-a? a-na-ku a-na d^A-hu-ru-ma-az-da-a? e-ri-iš an-na-a? d^A-hu-ru-ma-az-da-a? li-i-din-nu*

The parallelism between these two passages seems clear enough. The sense required is ‘I beseech, ask, pray’ but the form *su-da-man* does not fit into any pattern thus far ascertained which can account for the expected meaning. It is probable that the eventual solution of the meaning of the derivational elements /-*ma-*/ and /-*man-*/ will also clear up the residual forms discussed in these last paragraphs.

5.10.6. Forms in /-ma-k/.— Intimately bound up with these derived forms are the following, which also show /-*ma-*/ alone, plus possibly the ‘remotive’ /-*k*/.

hu-ud-da-ma-ik

ši-ya-ma-ak

ni-ma-ak

ni-ma-an-ki

hu-ud-da-ma-ik occurs twice in the text A2Sdb,⁸⁹ but the text is fragmentary and no clear-cut use of /-*ma-*/ can be ascertained which would oppose the usual ‘remotive’ *hu-ut-tak* /*utak*/ to *hu-ud-da-ma-ik* /*utamak*/. *ši-ya-ma-ak*, occurs as follows:

XP a3:⁹⁰ *ap-pa v^u hu-ud-da-ra ap-pa v^u ad-da-da hu-ut-taš-da ap-pa sá-rak hu-ut tuk-ka ši-ya-ma-ak ši-iš-ni-na hu-be mar-ri-da ša-u-mi-in d^u-ra-mas-da-na hu-ud-du-ud-da*

OP *tya adam akūmavam utamaiy tya pitā akūmauš tyapatiy*

⁸⁷That I Ahuramazda beseech (?), that may Ahuramazda me grant.’

⁸⁸That I Ahuramazda beseech (?), all that may Ahuramazda me grant.’

⁸⁹V. Scheil, “Inscriptions des Achéménides à Suse,” Mémoires de la Mission Archéologique Française en Iran, XXIV (1929), p. 129.

⁹⁰‘What I did, what (my) father did, what *šá-rak* was done, appears (?) beautiful, that all by the favor of Ahuramazda we did.’

kartam vainataiy naibam ava visam vašnā Auramazdāhā akumā

Bab. *a-ga-a? šá a-na-ku e-ḫu-uš-šu u šá AD-ú-a i-ḫu-uš-šu u šá íp-šá-a? im-mar-ru tab-ba-nu-ú ul-lu-ú-tu gab-bi ina GIS.MI sá^dA-ḫu-ru-ma-az-da-a? ni-te-ḫu-uš*

Thus, *ṣi-ya-ma-ak ši-iš-ni-na* = OP *vainataiy naibam* = Bab. *im-mar-ru tab-ba-nu-ú*.

Another form possibly to be included among forms in /-ma-k/ may be *ni-ma-ak*, if it is analyzed as from /*nin-ma-k*/. It would then be related to the form *ni-in-da* from /*nin-n-ta*/ (second person future), and this particular root would be represented altogether by the forms: *ni-in-da*, *ni-ma-ak*, *ni-ma-an*, *ni-ma-an-ki*, with the final /n/ of the verb-base assimilating to the immediately following /m/ of the last three forms. The assignment of these four forms to one and the same verb-base will become clear from their respective contexts.

XPh40:⁹¹ *šá-da ha-nu ka-tuk-da ku-ud-da hal-be-in-da ir-da-ma ni-in-da*

OP *šiyāta ahaniy jīva utā marta artāvā ahaniy*
Bab. *dum-qí ina ba-la-ḫu-ia lu-mu-ur u ina mi-it-ú-ti-ia a-na ar-ta-a-ma lu-ú-tu-ru*

XPh46:⁹² *hu-be ku-ud-da ka-tuk-ra šá-ud-da ni-ma-ak ku-ud-da hal-pi-ik-ra ir-da-ma ni-ma-ak*

OP *hauv utā jīva šiyāta bavatiy utā marta artāvā bavatiy*
Bab. *ul-lu-ú dum-qí ina ba-la-tu-šú i-ma-ar u mi-i-ti a-na ar-ta-a-ma i-ta-ar*

Both of these passages are parallel, except that in XPh40 the first person is required, whereas in XPh46 the third person is expected on the basis of the OP version. The RAE form of XPh40 includes both a rendering of OP *ahaniy* as *ha-nu* and then *ni-in-da* instead of *ha-nu* repeated. XPh46 has the same RAE word, *ni-ma-ak*, for the two occurrences of OP *bavatiy*. The Bab. version parallels this situation by replacing precativ first person forms with third person present-future forms of the same verbs: *lu-mu-ur* and *i-ma-ar*, *lu-ú-tu-ru* and *i-ta-ar*. In XPh40, however, the RAE version with *ni-in-da* and *hal-be-in-da* switches to the second person. It is thus clear that whatever the meaning and forms of *ni-in-da* and *ni-ma-ak* may be, their occurrence in this parallel manner is sufficient to indicate their relationship to a common verb-base. Furthermore, the forms *ni-ma-an* and *ni-ma-an-ki* are also probably related to these forms. The following contexts are to be noted:

DB 33:⁹³ *v^sswiki-me v^u hu-ud-da v^u NUMUN^{lg} v^uma-ak-iš-tar-ra-na ni-ma-an*

⁹¹'Happy will I be (when) living and (when) you are dead blessed will you be.'

⁹²'He both (when) living happy will be and (when) dead blessed will be.'

⁹³'The kingship I exercise (lit., do), (of) the family of Uvaxštra I am.'

- OP *adam xšāyaθiya amiy Asagartaiy Uvaxštra[hyā] taumāyā*
 Bab. *ana-ku LUGAL NUMUN šá mŪ-ma-ku-iš-tar*
- DB 24:⁹⁴ *vú všá-at-tar-ri-da vNUMUN l_g vma-ak-iš-tar-ra-na*
 ni-ma-an-ki
- OP [*adam Xšaθrita am*] *iy Uvaxštrahyā taumāyā*
 Bab. *ana-ku mHa-šá-at-ri-it-ti NUMUN šá mŪ-ma-ku-iš-tar*

Both contexts seem to warrant a first person verb form and it may be possible that the suffix elements of *su-da-man* (§ 5.10.5) may also be present in *ni-ma-an*. Likewise, whatever may be the elements suffixed to *ni-ma-an-ki* may also perhaps be found in still another problematic first person form *na-an-gi* (cf. below).

5.11. Remainder of residual verb forms. — The following are the remainder of the residual forms which as yet do not seem to fit into any pattern, though in many cases their general meaning is clear from the contexts in which they occur.

5.11.1. na-an-ri. — One of the most frequent forms in RAE is *na-an-ri* which occurs in the introductory formula *a-ak NN sunki na-an-ri*, or in a variant thereof, *na-an-ri NN sunki*, which follows the OP word order exactly. The equivalence of these RAE phrases with OP *θātiy NN xšāyaθiya* and Bab. *NN LUGAL (ki-a-am) i-gab-bi* is abundantly clear. The RAE form *na-an-ri* must contain a meaning of ‘to speak, say, or declare.’ But its exact morphological analysis is difficult, since it does not fit into the usual verb pattern, unless it is to be related to the forms in */-nra ~ -nri/* discussed in § 5.10.2.1. In this analysis, *na-an-ri* would be explained as verb-base */nan-/*, ‘future’ element */-n-/*, ‘hybrid’ substantive element */-ri/*. However, it was seen that the forms discussed above all seemed to express the ‘future’ connotation of the */-n-/* element. The form *na-an-ri* does not seem to require such a meaning in any of its occurrences, whether in the formulaic phrases cited above or as a re-enforcing element to a form of the verb-base */tir-/* ‘to say’ or */tit-/* ‘to lie.’ For example, a phrase like (DB 22) *hi-ši-la ap ti-ri-iš na-an-ri* might warrant a translation on the order of ‘then to them he said saying,’ with the subsequent statement generally bounded by a quotational correlative. In the one case where the first person is required, the form *na-an-gi* occurs: (DB 38)⁹⁵ *vhu-ut-lak hu-pír-ri-ik-ki tin-gi-ya na-an-gi*, and the phrase which follows is bounded by *man-ka*, the first person quotational correlative.

If *na-an-ri* were to be analyzed as verb-base */nan-/* plus the */-ri/* substantive element then the lack of ‘future’ connotation would be explained. Likewise, *na-an-gi* might be analyzed as verb-base */nan-/* plus a first person element */-ki/* which may also be seen in *ni-ma-an-ki*. These analyses are only suggestions of a highly tentative nature to account for these anomalies within the patterns that have been

⁹⁴‘I (am) Xšaθrita, (of) the family of Uvaxštra I am.’

⁹⁵‘A messenger (?), to him I sent, I said “ ”’

presented. They are by no means to be considered as final. This same verb-base is troublesome in the Persepolis treasury and in the fortification texts where the form *na-an-KI.MIN* occurs in abundance, though no adequate explanation has yet been made.⁹⁶ A final analysis of these forms, it is hoped, will result from future Elamite historico-comparative studies. For the time being, these forms can only be described and noted.

5.11.2. *gi-ut* and *gi-ud-da*. — These related forms must be clearly distinguished in their occurrences. In general, they occur with verbal modifiers that seem to have directional or temporal force, but whose exact meaning is as yet difficult to establish; for example, *pa-ru*, *li-ip-pu*, *li-lu*, etc. (§ 8.4). In every case, *gi-ut* and *gi-ud-da* seem to warrant interpretation as first person forms. The latter may be interpreted as a normal declarative first person /*kita*/, but the form *gi-ut* /*kit*/ is difficult to explain. Confirmation of the normalization of these forms as /*kit*-/ is found in relating both these forms to *ki-ti-in-ti*, a possible 'future' second person of the same verb-base. The contexts in which these forms occur follow in entirety so that they can be readily compared (*gi-ut* and *gi-ud-da* will be transliterated as free forms throughout).

DB 13:⁹⁷ *ku-iš vú ši-in-nu gi-ut*
OP *yātā adam arasam*

DB 21:⁹⁸ *ku-iš vú hba-pi-li šà-nu gi-ut*
OP *yātā adam Bābirauv āha[m]*
Bab. [*ki-i*] *šá ana-ku ina DIN.TIR^{KI} a-tu-ru*

DB 23:⁹⁹ *a-ak vú ha-me-ir vhal-tam-ti-in kán-na šà-nu gi-ut*
OP *adakaiy adam ašnaiy āham abiy Ūvjam*

DB 25:¹⁰⁰ *ku-iš vú ši-in-nu gi-ut vma-da-be-ik-ki*
OP *yātā adam arasam Mādam*
Bab. *a-di muḥ šá ana-ku al-la-ku ana KURMa-da-a-a*

DB 28:¹⁰¹ *ku-iš vú ma-da-be-ik-ki ši-in-nu gi-ut*
OP [*y*]ātā *adam arasam Mādam*

DB 30:¹⁰² *ku-iš vú vma-da-be-ik-ki ši-in-nu gi-ut*

⁹⁶Cameron, *op. cit.*, pp. 47 ff.; W. Hinz, review of G. G. Cameron, *Persepolis Treasury Tablets*, *Zeitschrift für Assyriologie*, NF, XV (1949), 351; for the information on the fortification texts I am indebted to a personal communication from Dr. Richard T. Hallock.

⁹⁷'Until I arrived (?).'

⁹⁸'Until I in Babylon arrived(?).'

⁹⁹'And I then the Elamite befriended *šà-nu gi-ut*.

¹⁰⁰'Until I reached the Medians.'

¹⁰¹*Ibid.*

¹⁰²*Ibid.*

- OP *yātā adam arasam Mādam*
 Bab. *a-di muḥ šá ana-ku ana KUR Ma-da-a-a al-li-ki*
- DB 31:¹⁰³ *sa-ap v^uma-da-be-ik-ki-in pa-ru gi-ut*
 OP *yaθā Mādam parārasam*
 Bab. *a-na ka-sá-di a-na KUR Ma-da-a-a*
- DB 49:¹⁰⁴ *ku-iš v^upār-šíp-ik-ki a-ak v^uma-da-be-ik-ki sà-nu gi-ut*
 OP *yāta adam Pārsai[y] u<t>ā Mādaiy āham*
- DB 63:¹⁰⁵ *sa-ap ap-ḫa-na-ka v^u in-ni ha-ri-ik-ka ha-um a-ak in-ni*
ti-tuk-kur-ra gi-ut a-ak in-ni [ap-ḫan-la-ik-kur-ra
gi-ut]
 OP *[yaθā] naiyari [ka] āham naiy draujana āham naiy*
zūrakara āham
- DN a4:¹⁰⁶ *v^u v^usunki gi-ut*
 OP *adam xšā [yaθ]iya amiy*
 Bab. *ana-ku LUGAL*
- XPh12:¹⁰⁷ *hi h^uda-a-ya-ma ak-ka-be-na v^u v^usunki [šà]-ni gi-ut*
 OP *imā dahyāva tyaišām adam xšāyaθiya āhām*
 Bab. *KUR.KUR.MEŠ an-ni-e-ti šá a-na-ku LUGAL-šú-nu*
- DB 19:¹⁰⁸ *me-ni [v^u v^u] ba-pi-li pa-ri-ya [sa-ap(?)] h^uba-pi-li*
in-ni li-ip-ḫu gi-ud-da
 OP *pasāva a[da]m Bābirum ašiyavam aθiy Bābiru[m yaθā*
naiy u]pāyam
 Bab. *ár-ki ana-ku ana DIN.TIR^{KI} at-ta-lak ana DIN.TIR^{KI}*
la ka-šá-du
- DB 20:¹⁰⁹ *me-ni v^u h^uba-pi-[li X Y] mi-du gi-ud-da*
 OP *pasāva adam Bābirum ašiyavam*
 Bab. *[ár-ki ana-ku a-na DIN.TIR]^{KI} at-ta-lak*
- DB 31:¹¹⁰ *me-ni v^u h^uba-pi-li-mar li-lu gi-ud-da v^uma-da-be-ik-ki*
pa-ri-ya sa-ap v^uma-da-be-ik-ki-in pa-ru gi-ut
 OP *pasāva adam nijāyam hacā Bābirauš ašiyavam Mādam yaθā*
Mādam parārasam
 Bab. *ár-ki ana-ku ul-tu DIN.TIR^{KI} ú-sa-am-ma at-ta-lak a-na*
KUR Ma-da-a-a a-na ka-šá-di a-na KUR Ma-da-a-a

¹⁰³‘After the Medians I reached.’

¹⁰⁴‘Until the Persians and Medians I reached.’

¹⁰⁵‘Afterwards I was not an enemy and not a liar and not an evildoer.’

¹⁰⁶‘I am king.’

¹⁰⁷‘These (are) the lands of which I king am.’

¹⁰⁸‘Then I reached Babylon, after in Babylon I was not *li-ip-ḫu*.’

¹⁰⁹‘Then I in Babylon XY was *mi-du*.’

¹¹⁰‘Then I from Babylon was *li-lu*, the Medians I reached; after the Medians I reached (?).’

- DB 61:¹¹¹ *a-ak ku-ud-da* ^vNUMUN^{lg}-ni a-nu ki-ti-in-ti
 OP *utātaiy taumā mā biyā*
- DB 67:¹¹² *a-ak ku-ud-da* ^vNUMUN^{lg}-ni a-nu ki-ti-in-ti
 OP *utātaiy taum[ā mā biyā]*

From DB 63 it appears evident that *gi-ut* is equivalent, at least in that passage, to OP *āham*, since in the parallel RAE version *ha-um* is the RAE spelling of the OP word. It is tempting to consider *gi-ut* and *gi-ud-da* as bound to the preceding form, especially when a form like *ši-in-nu* precedes. It seems obvious that *ši-in-nu* is related to the forms discussed above, *ši-in-nu-ik* and *ši-in-nu-ip* from /*šin-*/ 'to come.' If, on this basis, *gi-ut* and *gi-ud-da* are to be considered only as suffix elements to whatever immediately precedes, then their relationship to *ki-ti-in-ti* from a verb-base /*kit-*/ is impossible. However, the independent occurrence of *gi-ut* with a nominal form like *sunki* immediately preceding it, and the parallelism between forms of the verb "to be" in OP and occurrences of *gi-ut*, *gi-ud-da*, *ki-ti-in-ti*, seem to point to a relationship among these three forms. But the final explanation of these words must await future study.

¹¹¹ 'And also may you not have a family (???)'

¹¹² Ibid.

6

NOUN

6.0. Noun (general). — The RAE noun is characterized by the suffixation to nominal bases of variable elements for the expression of number, case, and abstractive derivation. Nouns can, of course, also participate in the class of suffixes termed ‘hybrid’ (§ 4.0).

6.0.1. Cases. — The names applied to the ‘cases’ of RAE are not to be understood in their usual Indo-European, Semitic, or Finno-Ugric meanings. They are indicative only of the broad, general function which seems to be associated with the particular suffix. Individual cases sometimes require translation different from the meaning usually assigned to their case label, and hence seem to encroach or overlap on other cases. However, the starting point of this description is primarily form, and each formal difference has been given a name.

There is no predictable restriction of the structure of the noun-stems as was seen in the case of the verb (§ 5.1).

6.0.2. Case-names. — The cases of RAE are the following:

Nominative	/-Ø/	(§ 6.1)
Genitive	/-na ~ -ni/	(§ 6.2)
Accusative	/-n ~ -r ~ -Ø/	(§ 6.3)
Allative	/-ki ~ -ka/	(§ 6.4)
Separative	/-mar/	(§ 6.5)
Locative	/-ma/	(§ 6.6)
Supersessive	/-uku ~ -uki/	(§ 6.7)
Resultative	/-ki-n ~ -r/	(§ 6.8)
Ablative	/-k _a ⁱ - mar/	(§ 6.9)

6.0.3. Plural. — The plural is expressed by the insertion of the plural morpheme /-p-/ between the noun-stem and the case suffix. The absence of this plural suffix is the mark of the singular.

6.1. Nominative. — The nominative in RAE is the actor case and correlates either with the personal suffix of a verb form or with a nominal verb-form. All nominatives, except the non-third person nominative pronoun forms, correlate with third person verb forms. A complete listing of RAE nominatives would only duplicate a glossary of RAE. The form and function of this case are evident from the contexts which

have thus far been cited. Specific nominative contexts will be cited when the nominative pronouns are discussed (§ 7.2.1.1).

6.2. Genitive. — The RAE forms which occur with the genitive suffix /-na ~ -ni/ are the following:

Singular

<i>ha-du-kán-na-iš-na</i>	<i>mar-ka-ša-na-iš-na</i>
<i>ha-iš-ši-ya-ti-ya-iš-na</i>	<i>mi-(ya)-kán-na-iš-na</i>
<i>u-ra-maš-da-na</i>	<i>mi-iš-da-ad-da-na</i>
<i>pár-šir₁-ra-na</i>	<i>mi-iš-da-áš-ba-na</i>
<i>pír-ru-mar-ti-iš-na</i>	<i>mi-ma-na-na</i>
<i>ir-tak-šá-áš-šá-na</i>	<i>ma-ak-iš-tar-ra-na</i>
<i>da-ri-ya-ma-u-iš-na</i>	<i>nu-ti-ut-be-ul-na</i>
<i>tu-ir-ma-ir-na</i>	<i>ruh-ir-ra-na</i>
<i>kar-ma-pát-taš-na</i>	<i>ruh-ra-na</i>
<i>ku-raš-na</i>	<i>da-a-hu-iš-na</i>
<i>ik-sě-ir-šá-na</i>	<i>ḪAR-in-na</i>
<i>na-pu-ni-da-na</i>	
<i>nap-pu-ni-da-na</i>	
<i>ši-iš-ni-na</i>	<u>Pronoun</u>
<i>ši-iš-ni-nu (?)</i>	<i>ú-ni-na</i>
<i>sa-a-kur-ri-ši-iš-na</i>	<i>(ú-ni-ni)</i>
<i>sunki-na</i>	<i>aḫ-pi-ni</i>
	<i>hu-pír-ri-na</i>

Plural

<i>ha-tam-ti-ip-na</i>	<i>ma-da-be-na</i>
<i>ha-tam-tuḫ-na</i>	<i>mar-ku-iš-be-na</i>
<i>ir-še-ik-ki-ip-in-na</i>	<i>na-aḫ-pi-be-na</i>
<i>ir-še-ki-ip-in-na</i>	<i>na-aḫ-pan-na</i>
<i>ir-še-ik-ki-ip-na</i>	<i>na-ab-be-ra</i>
<i>ir-še-ki-ip-na</i>	<i>pár-ru-ša-na-iš-be-na</i>
<i>sunki-ip-na</i>	<i>da-a-ú-iš-be-na</i>
<i>sunki-ip-in-na</i>	<i>da-a-hu-iš-be-na</i>
<i>sunki-ip-ir-ra</i>	
<i>sunki-in-na-ip</i>	<i>taš-šu-ip-na</i>
<i>be-ti-ip-na</i>	

*da-na-iš-be-na*Pronoun*mi-iš-šá-da-na-iš-be-na**ak-ka-be-na**hu-pi-be-na*

The following contexts are illustrative of the use of the genitive:

DB 45:¹ XIII *d*_{na-an} *d*_{ITU}^{lg} *d*_{ha-na-ma-ak-kaš-na} *pi-ir-ka*
 OP *Anāmakahya māhyā XIII raucabiš ōakatā*

In all date expression in RAE this phraseology is used. The form *pi-ir-ka* is possibly a 'remotive' of a verb-base /*pir-*/, but the exact meaning is unknown. It occurs in no RAE context other than date formulae. It may correspond to the Sumerian BA.ZAL and to Akkadian *nasāḫu* which are used regularly in the formula for the number of days of a month.²

DB 38:³ *ša-u-mi-in d*_{u-ra-maš-da-na} *v*_{taš-šu-ip ap-ḫa} *v*_{ú-ni-na}
*v*_{taš-šu-ip ap-ḫa} *v*_{be-ti-ip-na} *hal-pi-iš ir-še-ik-ki*
 OP *vašnā Auramazdāha kāra hya manā avam kāram tyam*
hamiḫiyam aja vasiy
 Bab. *ina GIS.MI šá d*_{u-ra-mi-iz-da} *ú-qu at-tu-u-a id-du-ku*
a-na ni-ik-ru-tú a-ga-šú-nu

DB 40:⁴ *v*_ú *v*_{pir-ti-ya} DUMU *ku-raš-na*
 OP *adam Bardiya amiy hya Kūrauš puḫa*
 Bab. [*ana*]-*ku* ^m*Bar-zi-ia* A-šú *sá* ^m*Ku-ra-áš*

The case of *sunki-ip-in-na* ~ *sunki-ip-ir-ra* is of interest in providing another example of the /*n* ~ *r*/ fluctuation, and possibly provides the key to the interpretation of *na-ab-be-ra* as a genitive plural parallel to *na-ap-pan-na* and *na-ap-pi-be-na*. Compare the following contexts:

DB 1:⁵ *v*_ú *v*_{da-ri-ya-ma-u-iš} *v*_{sunki ir-šá-ir-ra} *v*_{sunki}
*v*_{sunki-ip-in-na}
 OP *adam Dārayavauš xšāyaθiya vazraka xšāyaθi [ya*
xšāya] θiyānām
 DP a:⁶ *v*_{da-ri-ya-ma-u-iš} *v*_{sunki ir-šá-ir-ra} *v*_{sunki}
*v*_{sunki-ip-in-na}
 OP *Dārayavauš xšāyaθiya vazraka xšāyaθiya xšāyaθiyānam*
 Bab. ^m*Da-ri-ia-a-muš* LUGAL GAL -*ú* LUGAL LUGAL.MEŠ

¹'The 13th day of the month Anāmaka *pi-ir-ka*.'

²For full discussion and bibliography, cf. A. L. Oppenheim, Catalogue of the Cuneiform Tablets of the Wilberforce Eames Babylonian Collection (New Haven: American Oriental Society, 1948), pp. 58-59.

³'By the favor of Ahuramazda, the troops which of me (subj.) the troops which of the rebels (obj.) slew greatly.'

⁴'I (am) Bardiya, son of Cyrus.'

⁵'I (am) Darius, great king, king of kings.'

⁶'Darius, great king, king of kings.'

- DH :⁷ *v*da-ri-ya-ma-u-iš *v*sun*ki* ir-šá-ra *v*sun*ki* *v*sun*ki*-ip-na
 OP *Dārayavauš Xš vazraka Xš Xšyānām*
 Bab. *^mDa-a-ri-ia-muš LUGAL GAL-ú LUGAL LUGAL.MEŠ*
- DN a2:⁸ *v*ú *v*da-ri-ya-ma-u-iš *v*sun*ki* ir-šá-ir-ra *v*sun*ki*
*v*sun*ki*-ip-ir-ra
 OP *adam Dārayavauš xšāyaθiya vazraka xšāyaθiya*
xšāyaθiyānām
 Bab. [a-na]-ku *^mDa-a-ri-ia-mus LUGAL GAL-u LUGAL*
LUGAL.LUGAL.MEŠ
- XV 2:⁹ *v*ú *v*ik-se-ir-iš-šá *v*sun*ki* ir-šá-ir-ra *v*sun*ki*
*v*sun*ki*-ip-ir-ra
 OP *adam Xšayārsā xšāyaθiya vazraka xšāyaθiya xšāyaθiyānām*
 Bab. a-na-ku *^mHi-ši-?a-ar-šá-a? LUGAL GAL-ú LUGAL šá*
LUGAL.LUGAL.MEŠ

The equivalence of these contexts is clear. The spelling *sun*ki*-ip-na* re-enforces the interpretation of the genitive plural as /-pna/ without intervening vowel between the plural and the genitive morphemes, as might be expected from a spelling *-ip-in-na* or *-be-na*. The one occurrence of these suffixes in reverse order, *sun*ki*-in-na-ip*, occurs in the late text A2Sa and may serve only to indicate that this text is indeed late and contains a number of deviations in epigraphy and orthography from those in the earlier Darius and Xerxes texts.

In the case of *na-ab-be-ra*, *na-ap-pan-na*, *na-ap-pi-be-na* the following should be noted: The singular presents two forms: *na-ap* ~ *nap* and *na-ap-pi*. The first two genitive plurals cited above may be analyzed as follows: /napⁿa/ < /nap/ 'god' (sing.) + /-p-/ 'plural' + /-na/ 'genitive.' The final consonant of the noun-stem coincides with the plural morpheme, resulting in a coalescence of both equivalent phonemes. The third form shows the genitive plural /napipna/, possibly to be derived from the alternate singular form *na-ap-pi*. That all of these forms must have the same meaning is clear from the following contexts:

- DB 14:¹⁰ *v*ú *d*ši-ya-an *d*na-ap-pan-na hu-ud-da
 OP *adam akunavam āyadanā*
 Bab. *ana-ku e-te-pu-šú É.MEŠ šá DINGIR.MEŠ*
- DH :¹¹ *ap-pa d*u-ra-maš-da *v*ú du-nu-iš-da ak-ka ir-šá-ra
*d*na-ap-pan-na
 OP *tyamaiy Auramazdā frābara hya maθišta bagānām*

⁷Ibid.

⁸'I (am) Darius, great king, king of kings.'

⁹'I (am) Xerxes, great king, king of kings.'

¹⁰'I the temple of the gods made.'

¹¹'What Ahuramazda me granted, who (is) the great one of the gods.'

- Bab. $\check{s}á$ ^dA-*ḥu-ur-ma-az-da-a?* *id-di-nu* $\check{s}á$ *ra-bu-ú al-la*
DINGIR.MEŠ
- DS f8:¹² *d*u-*ra-maš-da ak-ka ir-šá-ir* *d*na-ab-be-ra
OP *Auramazdā [hya] maθišta bagānām*
- XV 1:¹³ *d*na-*ap ir-šá-ir-ra d*u-*ra-mas-da ak-ka ir-šá-ir-ra*
*d*na-ap-pi-be-na
OP *baga vazraka Auramazdā hya maθišta bagānām*
- Bab. DINGIR GAL- \check{u} ^dA-*ḥu-ur-ma-az-da-a?* *ra-bu-ú* $\check{s}á$
DINGIR.MEŠ

6.2.1. Pronominal expression of possession. — As can be seen from what preceded, the genitive primarily expresses possession. However, in the case of the personal pronouns, there is an alternative use of what will here be termed the ‘pronominal possession’ construction. In the first person singular, when the pronoun *vú* /*u*/ precedes the noun, as *vú vad-da-da*, the meaning could be either ‘I (am) the father’ or ‘my father.’ The alternative would be the expression *vtaš-šu-íp (ap-pa) vú-ni-na*, ‘the troops (which) of me.’ In the second and third person singular, suffix forms are used, /-*ni*/ and /-*i*/ respectively. Thus, *v*NUMUN^{lg}-*ni* means ‘your family,’ and *hi-še* means ‘his name’ corresponding to Bab. *šumšu* in the naming expressions. Furthermore, a form *hi-iš* with the possible meaning of ‘name’ alone occurs (DB 70) without pronominal suffix.

This explanation may also serve to explain the form *taš-šu-íb-be* as opposed to *taš-šu-íp*.

- DB 16:¹⁴ [*hu*] -*pír-ri h*ba-*pi-li i-ma-ka* *v*taš-šu-íb-be *hi-ši-la*
ap-pi-ir ti-tuk-ka
OP *hauv udapatatā Bābirauv kāram avaθā adurujiya*
Bab. *šu-u ina* DIN.TIR^{KI} *it-ba-am-ma a-na ú-qu i-par-ra-aš*

The remaining occurrences of this form — with one exception — are in parallel phrases and can be explained in the same way. However, in DB 60, the form *taš-šu-íb-be* seems to be only a variant for *taš-šu-íp* with the final vowel graphic only. It remains, of course, possible that this may be the explanation of all these cases of *taš-šu-íb-be*.

- DB 60:¹⁵ *am v*nu *u-ri-is ap-pa v*ú *hu-ud-da hi-ši-la v*taš-*šu-íb-be*
*v*ap *tu₄-ru-iš*

This ‘pronominal possession’ construction accounts for such phrases as *vú v*li-*ba-ru-ri* ‘my servant’ (OP *manā badaka*; Bab. ^{LÚ}*gal-la-a*);

¹²‘Ahuramazda who (is) the great (one) of the gods.’

¹³‘A great god (is) Ahuramazda, who (is) the great one of the gods.’

¹⁴‘He in Babylon revolted, then he lied to his troops (lit., his troops then to them he lied).’

¹⁵‘Now you believe what I did, then speak to the troops! (lit., the troops to them speak!).’ This passage was confirmed by Cameron in 1948.

it also suggests the translation of a phrase like $v\acute{u} d_u-ra-maš-da v\acute{u}-in$ $nu-iš-gi-iš-ni$ as 'may my Ahuramazda me protect!' even though the OP and Bab. equivalents say simply, 'may Ahuramazda protect me!'

6.3. Accusative. — The accusative is characterized by the suffixation of /-n ~ -r ~ Ø/ to the noun stem. The following accusative forms occur:

<i>hal-tam-ti-in</i>	<u>Pronoun</u>
<i>pír-ti-ya-ir</i>	<i>vú</i>
<i>kán-pu-ši-ya-ir</i>	<i>hu</i>
<i>ši-iš-šá-in-tak-ma-ir</i>	<i>ú-in</i>
<i>mi-iš-da-ad-da-ir</i>	<i>ú-um</i>
<i>mi-ma-na-ir</i>	<i>um</i>
<i>u-ra-maš-da-in</i>	<i>ú-ir</i>
<i>ANŠU.KUR.RA^{lg}-ir</i>	<i>nu-in</i>
<i>šá-pár-rak-um-me</i>	<i>hu-pír-ri-ir</i>
	<i>ap-in</i>
	<i>ap-pi-in</i>
	<i>ap-ir</i>
	<i>ap-pi-ir</i>

The following contexts indicate the direct object use of this suffix and also show the equivalence of the morpheme alternants and the variant orthographies:

DS j: ¹⁶	$[v]ú d_u-ra-maš-da v\acute{u}-in ka-ni-šá$
OP	$[mā]m AM daušta āha$
Bab.	$[d^A-ḫu-ur-ma-az-da-a^?] i-ra-ma-an-ni$
DN a5: ¹⁷	$v\acute{u} d_u-ra-maš-da v\acute{u}-um nu-iš-gi-iš-ni$
OP	$[mā]m Auramazdā pātuv$
Bab.	$ana-ku d^A-ḫu-ur-ma-az-da-a^? li-iš-šur-an-ni$
XP a4: ¹⁸	$v\acute{u} d_u-ra-maš-da um nu-iš-gi-iš-ni$
OP	$mām Auramazdā pātuv$
Bab.	$d^A-ḫu-ru-ma-az-da-a^? a-na-ku li-iš-šur-an-ni$
DB 13: ¹⁹	$hu-be-[in-tuk-ki-um-me^v] taš-šu-íp ir-še-ik-ki$ $hal-pi-iš [a]-nu v\acute{u}-ir tur-na-um-pi$

¹⁶'My Ahuramazda me befriended.'

¹⁷'May my Ahuramazda me protect!'

¹⁸'May my Ahuramazda me protect!'

¹⁹'For this reason, the troops greatly he slew lest me they know.'

- OP *avahyarādiy kāram avājanīyā mātyamām xšnāsātiy*
 DS f9:²⁰ *d_u-ra-maš-da ak-ka ir-šá-ir d_{na}-ab-be-ra hu-pír-ri*
 [^vú-um be-šá
 OP *Auramazdā [hya] maθišta bagānām hauv mām adā*

The occurrence of the orthographies *ú-um*, *ú-in*, *um* provides a unique verification of the interpretation /*um*/ which would have been made for this form on the basis of the occurrence of any of these three spellings alone.

6.3.1. Equivalence of accusative graphic variants. — The following contexts are also to be noted for their graphic variation in expressing the same grammatical form:

- DB 11:²¹ *hu-pír-ri v_{taš}-š_u-íp v_{ap}-ir ti-tuk-ka*
 OP *hauv kārāhyā avaθā [a]durujiya*
- DB 16:²² *v_{taš}-š_u-íb-be hi-ši-la ap-pi-ir ti-tuk-ka*
 OP *kāram avaθā adurujiya*
- DB 52:²³ *v_ú ap-pi-in hal-pi-ya*
 OP *adamšim ajanam*
- DB 60:²⁴ *v_{taš}-š_u-íp ap-in ti-ri-in-ti*
 OP *kārāhyā θāhiy*
- DN a3:²⁵ *hu-be ap-in mar-ri-iš*
 OP *avadi[š] adāriya*
- DB 61:²⁶ *v_{taš}-š_u-íp in-ni ap-pi-in ti-ri-in-ti*
 OP *naiy θāhiy [k]āra[hyā]*
- DB 54:²⁷ *a-ak me-ni d_u-ra-maš-da kur-pi v_ú-ni-na-ma ap-pi-in*
 hu-ut-taš
 OP *pasāva di[š Auramaz] dā manā dastayā akumauš*
 Bab. *ár-ki d_U-ra-ma-az-da a-na ŠU^{II}-ia in-da-na-áš-šú-nu-tú*
- DB 64:²⁸ *v_{ruh}^{lg}-ir-ra ti-tuk-ra hu-pír-ri a-nu in kán-ni-in-ti*
 OP *marti[yahya] draujana ahatiy . . . avaiy mā dauštā [biy]ā*

²⁰‘Ahuramazda who (is) the great one of the gods, he me created.’

²¹‘He lied to the troops (lit., the troops to them he lied).’

²²‘The troops then to them he lied.’

²³‘I them slew.’

²⁴‘The troops to them you shall say (it).’

²⁵‘That them held.’

²⁶‘The troops not to them you will say (it).’

²⁷‘And then Ahuramazda in my hands them put.’

²⁸‘A man, a liar, (as for) him not him shall you befriend.’

- DB 17:²⁹ *me-ni* ^v*ú* *ir* *hal-pi*
 OP *adamšim avājanam*
 Bab. *u ana-ku ad-du-uk-šú*
- DB 32:³⁰ *vtaš-šu-íp mar-be-íp-da* *ir* *ši-ya-iš a-ak me-ni*
hak-ma-da-na *GIŠru-ir-ma* *ir be-la*
 OP *haruvašim kāra avaina pasāvašim Hagmatānaiy uzmayāpatiy*
akunavam
 Bab. *ú-qu gab-bi im-ma-ru-uš ár-ki ina za-ki-pi ina*
URGA-ga-ma-ta-nu al-ta-kan-šú

The explanation of an 'accusative' /-n ~ -r/ suffix seems to be adequate for interpreting the occurrence of *in* and *ir* in a number of passages where they have been left unattached to the preceding form and without any reason for separate existence. The explanation particularly fits the following cases:

- DB 45:³¹ *mi-te-iš* ^v*mi-ma-na-ir* *hal-pi-iš*
 OP *paraitā Vivānam jatā*
 Bab. *al-ka-ma* ^m*ú*-*mi-ma-na-a?* *du-ka-a?*
- DB 10:³² *a-ak* ^v*kán-pu-ši-ya hu-pír-ri* ^v*pír-ti-ya-ir* *hal-pi-iš*
 OP *pasāva Kab [ūjiya a] vam Bardiyam avāja*
- DB 13:³³ *vtaš-šu-íp ir-še-ik-ki* *hal-pi-iš* ^v*ak-ka-be šá-áš-šá*
^v*pír-ti-ya-ir* *tur-na-iš-ti*
 OP *kāram vasiy avājanīyā hya paranam Bardiyam adānā*
- DB 33:³⁴ *ku-ud-da* *ši-iš-šá-in-tak-ma-ir* *mar-ri-iš* ^v*ú-ik-ki ir*
tin-gi-iš
 OP *utā Ciçataxmam agarbāya anaya abiy mām*

6.3.2. Endingless or Ø-accusative. — There is also an endingless accusative symbolized by the zero alternant in /-n ~ -r ~ -Ø/. This occurs in the pronominal forms *hi* and *ap* (the latter varying with *ap-in* and *ap-ir*, and in some nominal forms such as the 'abstractive.')

- DB 26:³⁵ *hi-ši-la* *hi* *ti-ri-ya*
 OP *avaθā [šaiy] aθaham*
- DB 33:³⁶ *hi-ši-la* *ap* *ti-ri-ya*

²⁹'Then I him slew;' note that *ir* must here be separated from the preceding ^v*ú* since the verb is clearly a first person form.

³⁰'The troops all him saw and then at Ecbatana on a stake him I impaled.'

³¹'Go forth! Vivāna (obj.) slay!'

³²'And Cambyses that Bardiya slew.'

³³'The troops greatly he slew who formerly Bardiya knew.'

³⁴'And Ciçantaxma they seized, to me him they brought.'

³⁵'Then to him I said.'

³⁶'Then to them I said.'

- OP [a] *vaθāšām aθaham*
- DB 33:³⁷ *hu-pír-ri^v ú-ik-ki-mar be-ip-tuk-ka^v tas-su-íb-be*
hi-ši-la ap ti-ri-is
- OP *hauvmaiy hamiçiya abava kārahyā avaθā aθaha*

These contexts may be compared to those cited above for *ap-in*, *ap-ir*, *in*, and *ir*. A possible explanation for the endingless accusative forms may lie in their being considered as 'prefixed' to the immediately following verb form. There does not seem to be any underlying reason for the use of the endingless accusative forms in favor of the /-n ~ -r/ suffixed forms, or vice versa.

6.4. Allative. — The 'allative' suffix is most often spelled *-ik-ki* and only occasionally *-ik-ka* and means 'direction toward.' The reason for this variation in final vowel is not clear; but since this suffix occurs in these two forms only it has been interpreted as /-ki ~ -ka/. It is possible to suggest that after vowels the case suffix is /-ki/, whereas after consonants it is /-iki/; compare *ú-ik-ki/uki < u+ki/* and *hu-pír-ri-ik-ki/upiriki < upi+r+iki/*. The following are the 'allative' forms which have been noted:

<u>Singular</u>	<u>Plural</u>
<i>mi-iš-da-áš-ba-ik-ki</i>	<i>ma-da-be-ik-ki</i>
<i>da-a-e-ik-ki</i>	<i>pár-šip-ik-ki</i>
<i>mi-[ma-na-ik-ki]</i>	<i>pár-šip-ik-ka</i>
<i>har-ra-u-ma-ti-[iš-ik-ki]</i>	<i>har-mi-nu-ya-ip-ik-ki</i>
	<i>har-mi-nu-ya-ip-ik-ka</i>
<u>Pronoun</u>	
<i>ú-ik-ki</i>	<i>ha-tam-tup-ik-ki</i>
<i>hi-ik-ka</i>	<i>mu-iš-ša-[ri-ya-ip] -ik-ki</i>
<i>hu-pír-ri-ik-ki</i>	
<i>hu-pír-ri-ik-ka</i>	

The following contexts illustrate the 'allative:'

- DB 17:³⁸ *me-ni^v vhu-ut-lak ha-tam-tup-ik-ki tin-gi-ya*
vha-iš-ši-na hu-pír-ri mar-ri-ka rāb-ba-ka^v ú-ik-ki
tin-gi-ik me-ni^v ir hal-pi
- OP *pasāva adam frāišayam Ūvjam hauv Āç[i]na basta anayatā*
a [biy m] ām adamšim avājanam
- DB 16:³⁹ [me]-ni^v *ha-tam-ti-ip^v ú-ik-ki-mar be-ip-ti-ib-ba*
^[v] *ha-iš-ši-na hu-pír-ri-ik-ka pa-ri-iš*

³⁷ 'He from me rebelled, (as for) his troops then to them he said.'

³⁸ 'Then my messenger (?) to the Elamites I sent; that Açina was seized, bound, to me brought; then I him slew.'

³⁹ 'Then the Elamites from me rebelled, to that Açina (lit., Açina that-to) they went.'

- OP *pa[sāva] Ūvjyā hamiçiyā abava abiy avam [Ā] çinam ašiyava*
- DB 16:⁴⁰ [*me*]-*ni* ^v*taš-šu-íp ap-pa* ^v*ba-pi-li-íp mar-ri-da*
^v*nu-ti-ut-[be]-ul hu-pír-ri-ik-ki pa-ri-iš*
- OP *pasāva kāra hya Bābiruviya haruva abiy avam Naditabairam ašiyava*
- DB 30:⁴¹ *me-ni* ^v*ma-u-mi-iš-šá* ^v*har-mi-nu-ya-íp-ik-ki* *ša-ti-iš*
ku-iš ^v*ma-da-be-ik-ki* *ši-in-nu gi-ut*
- OP *pasāva Vaumisa çitā mām amānaya Arminiya [iy] yātā adam arasam Mādam*

Although in general the meaning of this suffix seems to be ‘direction toward,’ in some cases, such as *har-mi-nu-ya-íp-ik-ki* just cited, it requires a ‘locative’ translation. Of course, the exact force of the verb *ša-ti-iš* is not known, and a directional nuance might be part of the semantic field of this verb in RAE which requires the use of the ‘allative’ and not the ‘locative.’

A practice has arisen in Elamite studies of noting in transliteration a suffix such as /-*ki*/ by means of a dot instead of the usual hyphen. It is intended to indicate a relationship between the nucleus morpheme and a kind of dependent satellite morpheme different from that indicated by the hyphen. But no sound basis has been offered for the distinction of two kinds of suffixed satellites. Throughout this study, transliteration of a morphological unit (=word) regardless of size is indicated by means of the hyphen connecting the syllables which serve to make up the entire unit, with no attempt to suggest degrees of relationship between various suffixes and the stem.

6.5. Separative. — The ‘separative’ case suffix is /-*mar*/. The occurring forms are:

<i>hal-ma-ri-iš-mar</i>	[<i>mu</i>]- <i>iš-ra-mar</i>
<i>ha-mi-mar</i>	<i>hu-be-ma-mar</i>
<i>an-ša-an-mar</i>	<i>rak-ka-an-mar</i>
<i>har-ra-u-ut-ti-iš-mar</i>	[<i>ba-pi-l</i>] <i>i-mar</i>
<i>kán-da-ra-mar</i>	<i>šá-ma-ak-mar</i>
<i>ku-šá-mar</i>	<i>hi-in-du-iš-[mar]</i>
<i>iš-pá[r]-d[a]-mar</i>	<i>ba-ak-tar-[mar]</i>
<i>ya-u-na-mar</i>	<i>ma-[ra-iš-mi-iš-mar]</i>
	[<i>šu-uk-da-mar</i>]

⁴⁰ ‘Then the army which (was made up of) Babylonians all to that Nidintu-Bēl (lit., Nidintu-Bēl that-to) went.’

⁴¹ ‘Then Vaumisa among the Armenians waited (?) until I to the Medians came (?).’

It is to be noted that all of these except *ha-mi-mar*, *hu-be-ma-mar*, and *šá-ma-ak-mar* are actual place-names; but *hu-be-ma-mar* is used in connection with place-names in its two occurrences in DSf27 and [41], and *ha-mi-mar* 'from there' is related to *ha-mi* 'there.' (For separation from persons, cf. 'ablative' below). Thus, only *šá-ma-ak-mar* is a special and difficult case. Illustrative contexts for the 'separative' are the following:

- DB 36:⁴² *me-ni vú vtaš-šu-íp vpar-šíp hrak-ka-an-mar*
vmi-iš-da-áš-ba-ik-ki tin-gi-ya
 OP *pasāva adam kāram Pārsam frāišayam abiy Vištāspam*
hacā Ragāyā
- DSf30:⁴³ [GIŠ] *še-iš-šá-ba-ut hkan-da-ra-mar tin-gi-ik*
 OP *yakā hacā Gadāra a[bar]iya*
 Bab. [MES].MÁ.GAN.NA *šá a-gan-na ip-šu ul-tu KUR Gan-da-ri*
 . . . *na-šá-a*

In the text DSf, there is a series of statements in which Darius describes the places of origin of materials and artisans for the building operations of the palace at Susa. This text provides the majority of occurrences of forms in /-mar/, and the meaning of the suffix is abundantly clear from these contexts.

The form *šá-ma-ak-mar* mentioned above occurs in the following two parallel passages:

- DB 4:⁴⁴ *vú IX-um-me-ma [v sunki-me] hu-ud-da šá-ma-ak-mar*
vnu-ku v sunki-íp-ú-ut
 OP *adam navama IX duvitāparanam [vayam] xšāyaθiyā amahy*
- DB a4:⁴⁵ *vú IX-um-me-ma v sunki-me hu-ud-da šá-ma-ak-mar vnu-ku*
v sunki-íp-ú-ut
 OP *adam navama IX duvitāparanam vayam xšāyaθiyā amahy*

It seems clear that *šá-ma-ak-mar* is equivalent to OP *duvitāparanam*, which Kent translates as 'in succession.' Since *šá-ma-ak* does not occur alone or in any other form elsewhere in RAE, it is difficult to ascribe to it a specific connotation which would be rendered meaningful by the suffixation of what is probably the 'separative' here too.

6.6. Locative. — The 'locative' suffix is /-ma/. The following are the occurrences of this suffix:

<i>ha-ti-ma</i>	<i>hu-be-ma-mar</i>
<i>EL-ma</i>	<i>ú-ni-na-ma</i>
<i>be-ul-ki-ma</i>	<i>hi-uk-ku-ma</i>

⁴² 'Then I the Persian troops (lit., troops Persians) from Raga to Hystaspes sent.'

⁴³ 'The *še-iš-šá-ba-ut* wood from Gandara was brought.'

⁴⁴ 'I the ninth am king (lit., exercise the kingship), from *šá-ma-ak* are we kings.'

⁴⁵ Ibid.

<i>pu-in-ki-te-ma</i>	ANŠU.A.AB.BA ^{lg} - <i>ma</i>
<i>šá-ra-ma</i>	UL.ḪI ^{lg} - <i>e-ma</i>
<i>ru-ir-ma</i>	<i>ir-ma</i> (?)
<i>har-ri-ya-ma</i>	<i>hu-be-ma</i>
A ^{lg} - <i>ma</i>	<i>hi-ma</i>

The function of the 'locative' is illustrated by the following contexts:

- DB 32:⁴⁶ *a-ak me-ni h_{ak}-ma-da-na GIŠ_{ru-ir-ma} ir be-la*
 OP *pasāvašim Hagmatānaiy uzmayāpatiy akunavam*
 Bab. *ār-ki ina za-ki-pi ina URUA-ga-ma-ta-nu al-ta-kan-šú*
- DB 56:⁴⁷ *hi ap-ṣa h_{tup-pi} hi-ma tal-li-ik*
- DB 58:⁴⁸ *hu-uh-be tup-pi hi-ma in-ni tal-li-ik*
 OP *ava ahyāyā d[i]p[iy] ā naiy nipištam*
- DP f2:⁴⁹ *ap-ṣu-ka hi-ma h_{hal-mar-raš} in-ni ku-ši-ik*
- DB 62:⁵⁰ *hi ap-ṣa v_u [hu-ud] -da ṣa-u-mi-in d_u-ra-maš-da-na*
h_{be-ul-ki-ma} hu-ud-da
 OP *ima tya adam akunavam hamahyāyā ʔarda [vašn] ā*
Auramazdāha akunavam
 Bab. [...] MU.AN.NA ina GIŠ.MI šá d_u-ra-ma-az-da e-te-ṣu-uš

The next section deals with the 'superessive' suffix /-uku/ which has the meaning 'over, upon,' nevertheless, the following combinations of the 'locative' and 'superessive' suffixes might be discussed at this point.

- DP f2:⁵¹ *GIŠ_{ka-at} hi-ma-uk-ku h_{hal-mar-raš} hi ku-ši-ka ap-ṣu-ka*
hi-ma h_{hal-mar-raš} in-ni ku-ši-ik
- DE 2:⁵² *v_{sunki} h_{mu-ru-um} hi-uk-ku-ma⁵³ ha-iš-ṣa-ik-ka*
 OP *xšāyaθiya ahyāyā būmiyā vazrakāyā*
 Bab. LUGAL šá qa-q-ru a-ga-a-ta ra-bi-tum

Other texts which include this same (DE 2) formulaic phrase have simply *hi-uk-ku* (XE 2; XV 2; XPda2; XPca2; XPa2; XPh8). DNa2 has

⁴⁶ 'And then (in) Ecbatana on a stake him I impaled.'

⁴⁷ 'This which on this tablet (lit., tablet this-on) was written.'

⁴⁸ 'This on this tablet was not written.'

⁴⁹ 'Formerly in this (place) a fortress was not built.'

⁵⁰ 'This which I did, by the favor of Ahuramazda in one year I did (it).'

⁵¹ 'On upon this platform (?) this fortress was built, formerly in this (place) a fortress had not been built.'

⁵² 'King on upon this great earth (lit., earth this-upon-on great).'

⁵³ In Weissbach, *Die Keilinschriften der Achämeniden*, p. 102, the *ma* has been omitted; but the photograph in A. V. W. Jackson, *Persia, Past and Present* (New York: The Macmillan Co., 1906), p. 172, shows this sign clearly.

the form *hi-uk-ku-ra-ir-ra* which thus far defies explanation. It seems to be possible, however, to consider the *ma* in the two cases cited above (DPf2; DE 2) as the 'locative' suffix, so that the resultant form in each case would show two case suffixes to represent a particular directional relationship with a nuance slightly different from either *-ma* or *-uk-ku* alone. The interchange of the order of the suffixes is reminiscent of the form *sunki-in-na-ip*, where the more frequent order of plural plus genitive is reversed. It may perhaps be reasonable to suggest that such occurrences in particular texts reflect on the particular scribe's fluency in the Elamite language. Again, it may only reflect a fluidity of suffix order in the case of certain combinations of suffixes.

6.7. Superessive. — The 'superessive' suffix mentioned in the previous section is /-uku ~ -uki/ and seems to have the meaning 'upon, over.' The forms in which it occurs in RAE are the following:

<i>hi-uk-ku</i>	<i>ha-la-at-uk-ku</i>
<i>hi-ma-uk-ku</i>	<i>ak-ka-ri-ug-gi</i>
<i>hi-uk-ku-ma</i>	<i>u-ra-maš-da-[uk-ku]</i>
<i>hi-uk-ku-ra</i>	
<i>hi-uk-ku-ra-ir-ra</i>	
<i>ki-ir-ma-ka-uk-ku</i>	
<i>šu-tur-uk-ku</i>	
<i>KUŠ^{lg}-uk-ku</i>	

The following contexts illustrate the use of the 'superessive' suffix:

XP a2:⁵⁴ *v sunki h mu-ru-un hi-uk-ku aš-ša-ka*
 OP *xšāyaθiya ahyāyā būmiyā vazrakāyā*
 Bab. LUGAL *qaq-qa-ru a-ga-a-ta GAL-ti*

DB 63:⁵⁵ *ap-pan-la-ik-ki-um-me ak-ka-ri-ug-gi in-ni hu-ud-da*

DB 70:⁵⁶ *ku-ud-da ha-la-at-uk-ku ku-ud-da KUŠ^{lg}-uk-ku ku-ud-da*
h hi-iš ku-ud-da e-ip-pi hu-ud-da ku-ud-da tal-li-ik

There are exactly equivalent passages of this type in the texts DSf14, XPh8, XPca2, XPda2, XE 2, XV 2, XPb, XPj. As remarked above, the *hi-uk-ku* varies, with *hi-uk-ku-ma*, *hi-ma-uk-ku*, *hi-uk-ku-ra*, *hi-uk-ku-ra-ir-ra* in other texts in this same formulaic phrase equivalent to OP *ahyāyā būmiyā*. The forms with *-ra* and *-ra-ir-ra* remain cruxes.

6.8. Resultative. — The suffixation of the 'accusative' to the 'allative' /-ki-n-r/ is here termed the 'resultative,' since its meaning seems to be that of a completed motion toward. The following are the occurrences:

⁵⁴ 'King upon this great earth.'

⁵⁵ 'Wrong-doing to anyone I did not do.'

⁵⁶ 'And on *ha-la-at*, and on leather, and the name, and *e-ip-pi* I made, and it was written.'

ma-da-be-ik-ki-in
ma-da-be-ik-ki-ir
mi-iš-da-áš-ba-ik-ki-ir
 [*pār-šíp*] -ik-ki-ir
har-mi-nu-ya-ip-ik-ki-ir
har-mi-nu-ya-ip-ik-ka-ir

This explanation, appending the graphic *in* and *ir* to the preceding form, accounts for these otherwise troublesome and seemingly meaningless syllables. The contexts in which they occur are illustrative of the use of this combination of suffixes in contrast to the use of /-ki/ alone.

- DB 36:⁵⁷ *me-ni* ^v*taš-šu-íp* ^v*pār-šíp* ^h*rak-ka-an-mar*
^v*mi-iš-da-áš-ba-ik-ki tin-gi-ya sa-ap* ^v*taš-sú-íp*
hu-pi-be ^v*mi-iš-da-áš-ba-ik-ki-ir* *pa-ri-ip*
 OP *pasāva adam kāram Pārsam frāisayam abiy Vištāšpam*
hacā Ragāyā yaθā hauv kāra parārasa abiy Vištāšpam
 Bab. [. . .] *áš-pur-ma ár-ki šá ú-qu ana muḥ* ^m*Uš-ta-as-pi*
ik-šu-du
- DB 25:⁵⁸ *me-ni* ^v*mi-tar-na* ^v*taš-šu-íp* *i-da-ka* ^h*ma-da-be-ik-ki*
sa-ak sa-ap ^v*ma-da-be-ik-ki-ir* *pa-ri-ik*
 OP *pasāva hauv Vidarna hadā kārā ašiyava yaθā Mādam*
parārasa
 Bab. ^m*Ú-mi-da-ar-na-a?* *it-ti ú-qu it-ta-lak ana* ^{KUR}*Ma-da-a-a*
ana ka-šá-du
- DB 31:⁵⁹ *me-ni* ^v*hba-pi-li-mar* *li-lu gi-ud-da* ^v*ma-da-be-ik-ki*
pa-ri-ya sa-ap ^v*ma-da-be-ik-ki-in* *pa-ru gi-ut*
 OP *pasāva adam nijāyam hacā Bābirauš ašiyavam Mādam yaθā*
Mādam parārasam
 Bab. *ár-ki ana-ku ul-tu* ^{DIN.TIRKI} *ú-sa-am-ma at-ta-lak a-na*
^{KUR}*Ma-da-a-a a-na ka-šá-di a-na* ^{KUR}*Ma-da-a-a*
- DB 41:⁶⁰ *a-ak* ^v*ir-[du-mar-ti]-ya* ^v*t[áš-šu-íp i-da-ka* ^v*pār-šíp-ik]-*
ki sa-ak sa-ap ^v*[pār-šíp]-ik-ki-ir* *pa-ri-ik*
 OP *pasāva Artavardiya hadā kārā ašiyava Pārsam yaθā*
Pārsam parārasa
 Bab. *ár-ki* ^m*Ar-ta-mar-zi-ia it-ti ú-qu* [. . .]

⁵⁷'Then I the Persian troops from Raga to Hystaspes sent; after these troops reached Hystaspes (lit., troops these Hystaspes-to-accusative they arrived).'

⁵⁸'Then Vidarna with the troops to Media (lit., Medians-to) went; after Media he reached (lit., Medians-to-accusative he arrived).'

⁵⁹'Then I from Babylon *li-lu gi-ud-da*, to Media I went; after Media I reached (??).'

⁶⁰'And Artavardiya with an army to Persia went; after Persia he reached.'

- DB 29:⁶¹ *me-ni^v ma-u-mi-iš-šá sa-ak sa-ap^v har-mi-nu-ya-ip-ik-ki-ir pa-ri-ik-ka*
 OP *pasāva Vaumisa ašiyava yaθā Arminam parārasa*

6.9. Ablative. — The ‘ablative’ suffix is also a compound of two case suffixes, /-kⁱ_a-mar/. The occurring ‘ablative’ forms are:

<i>ú-ik-ki-mar</i>	[nu]-ka-mi-ik-[ki]-mar
<i>ú-ik-ka-mar</i>	kán- <u>pu-ši-ya-ik-ki-mar</u>
<i>muš-nu-ka-ik-ka-mar</i>	šá-ak-ka-be-ik-ki-mar
<i>mi-iš-nu-ka-ik-ki-mar</i>	
<i>pár-šíp-ik-ka-mar</i>	

It is to be noted that all of these forms refer to persons in contrast to the ‘separative’ which occurs with place-names or non-personal words. Though the ‘ablative’ in general has the same meaning as the ‘separative,’ it also has an ‘agentive’ use in four cases. However, despite the general overlap of meaning of the ‘ablative’ and the ‘separative’ in expressing motion away from, the two forms must be distinguished for formal reasons.

The following are illustrative contexts of the ‘ablative’ in its two functions as (1) equivalent to the ‘separative’ but used with persons, and (2) the ‘agentive.’

- DB 24:⁶² *me-ni^v taš-šu-ip^v ma-da-be ap-pa^hú-EL-man-nu hu-pi-be^v ú-ik-ki-mar be-ip-ti-ip hu-pír-ri-ik-ki pa-ri-iš*
 OP *pasāva kāra Māda hya [viθāpatiy haw] hacāma hamišiya abava abiy avam Fravartim ašiyava*
- DB 33:⁶³ *^vru-uh ki-ir^v ši-iš-šá-in-tak-ma hi-še^háš-šá-kar-ti-ya-ra hu-pír-ri^v ú-ik-ki-mar be-ip-tuk-ka*
 OP *I mar[t]iya Ciçataxma nāma Asagartiya hauvmai hamišiya abava*
- DB 35:⁶⁴ *^vpár-tu-maš-be a-ak^v mi-ir-ka-nu-ya-ip^v ú-ik-ki-mar be-ip-ti-ib-ba*
 OP *Parθava utā Varkāna [ham]i[ç]iya [aba]va [ha]cāma*
- DB 11:⁶⁵ *me-ni^v taš-šu-ip^v mar-ri-da^v kán-pu-ši-ya-ik-ki-mar be-ipi [ti-ib-ba hu-pír-ri]-ik-ki pa-ri-iš*

⁶¹‘Then Vaumisa went; after Armenia he reached.’

⁶²‘Then the Median troops which (were in the) *ú-EL-man-nu*, they away from me rebelled, to him they went.’

⁶³‘A man, Ciçantaxma, his name, a Sagartian, he from me rebelled.’

⁶⁴‘The Parthians and the Hyrcanians from me rebelled.’

⁶⁵‘Then all the troops from Cambyses rebelled, to him (i.e., to somebody else) they went.’

- OP *pasāva kāra haruva hamiḡiya abava hacā Kabūjiyā*
abiy avam [a]šiyava
 Bab. *ār-ki ú-qu gab-bi la-pa-ni^mKam-bu-zi-ia it-te-ik-ru-u?*
ana muḡ-ḡi-šú it-tal-ku-u?

The 'agentive' use is to be found in the following four cases.

- DB 8:⁶⁶ *ap-pa-an-ka vú-ik-ki-mar ap ti-ri-ik-ka hu-uh-be*
hu-ud-[da-iš]
 OP *yaθāšām hacāma aθahya [a]vaθā akunavayatā*
 DN a3:⁶⁷ *ap-pa vú-ik-ka-mar ap tur-ri-ka hu-be hu-ut-tuk*
 OP *tyāšām hacāma aθahya ava [a]kunava*
 Bab. *šá la-IGI-ia at-tu-u-a ig-gab-ba-áš-šú-nu ana*
ap-pit(!)-tu(!) ip-pu-uš-šú-u?
 DB 23:⁶⁸ *me-ni^vhal-tam-ti-ip vú-ik-ki-mar ip-ši-ip*
 OP *pasāva hacā[ma atarsa Ūv]jiyā*
 XPh14:⁶⁹ *ak-ka-be-na vú-ik-[ka-mar tur-ri-k]a hu-be hu-ut-taš*
 OP *tyāšām hacāma aθahiya ava akunava*
 Bab. *šá ul-tu pa-ni-ia iq-qa-ba-áš-ši-nu-tu šá-a-áš*
ip-pu-šú-ú

Particularly noteworthy is the occurrence of OP *hacā* in these contexts, as well as in the separative. The last four examples, which have been distinguished in meaning from other 'ablative' forms, may thus be only RAE translation forms which indicate a slavish copying of the OP syntax and do not represent actual RAE usage at all.

6.10. Nominal derivational suffixes. — Other nominal suffixes not included in the category of case are the following which may be considered derivational.

<i>/-mi/</i> 'abstractive'	<i>/-r/</i> 'substantive'
<i>/-ta/</i> 'generalizing'	<i>/-k/</i>

6.10.1. Abstractive. — The suffix */-mi/*, written *-me*, *-um-me*, indicates the abstract state of the noun-stem to which it is suffixed;⁷⁰ thus, *sunki* 'king' and *sunki-me* 'kingship.' The RAE 'abstractive' forms are:

<i>ap-pan-la-ik-ki-um-me</i>	<i>tup-pi-me</i>
<i>hu-be-in-tuk-ki-um-me</i>	<i>šá-ak-sá-ba-ma-na-me</i>
<i>hu-uh-be-in-tuk-ki-me</i>	

⁶⁶'As (?) by me to them was said, that they did.'

⁶⁷'What by me to them was said, that was done.'

⁶⁸'Then the Elamites by me were frightened.'

⁶⁹'Of that which by me was said, that they did.'

⁷⁰Cf. Akk. *-utu*; Eng. *-ship*, *-ness*, etc.

<i>ba-li-ik-me</i>	<i>sunki-um-me</i>
	<i>sunki-me</i>
<i>ti-ut-ki-me</i>	<i>su-un-ku-mu-mi</i>
<i>ti-ut-ki-um-me</i>	<i>su-un-ku-mu-me</i>
<i>šá-pár-rak-um-me</i>	<i>ši-um-me</i>
<i>li-ba-me</i>	<i>ti-ut-me</i>
	<i>nu-ka-mi</i>

Some of the above forms (*ti-ut-me*, *ši-um-me*, *nu-ka-mi*) are included on formal grounds alone. They may have to be removed from this category when more is known about them.

The abstractive forms do not inflect for number or case. For example, *šá-pár-rak-um-me* and *sunki-me* occur as objects of the verb-base /*ut-*/ 'to make' without any overt sign of the accusative. Therefore, a zero alternant for the accusative morpheme was set up.

The following simplex forms are related to the derived abstractives listed above:

<i>ap-pan-la-ik-ki-um-me</i>	<	<i>an-la-gi</i>
<i>sunki-me</i>	<	<i>sunki</i>
<i>tup-pi-me</i>	<	<i>tup-pi</i>
<i>nu-ka-mi</i>	<	<i>nu-ku</i>
<i>li-ba-me</i>	<	<i>li-ba-ru-ri</i>

6.10.2. Generalizing /-ta/. — This suffix seems to correspond to the OP enclitic particle *-ciy* which serves to generalize or make indefinite the noun with which it is used. The RAE /-*ta*/ (written generally *-da*, but once *-te*) also has the meaning 'all' or 'at all.' The following are its occurrences:

<i>ap-pu-ka-da</i>	<i>mar-ri-da</i>
<i>in-nu-ip-pád-da</i>	<i>mar-be-ip-da</i>
	<i>mar-ri-be-ip-da</i>
<i>hu-be-da</i>	<i>ma-ad-da</i>
<i>hu-be-te</i>	
<i>da-a-ki-da</i>	<i>me-šá-me-ra-ka-da</i>
<i>šá-áš-šá-da</i>	<i>ap-pi-da (?)</i>

The following contexts are illustrative of the use of this suffix and of the equivalence of the variant orthographies noted in the above list.

XP a4:⁷¹ *ku-ud-da ap-pa^v hu-ud-da-ra ku-ud-da ap-pa^v ad-da-da hu-ut-taš-da hu-be-da^d u-ra-maš-da nu-iš-gi-iš-ni*

⁷¹'And what I did, and what (my) father did, all that (lit., that-all) may Ahuramazda protect.'

- OP *utā tya manā kartam utā tyamaiy piça kartam avašciy Auramazdā pātuv*
- Bab. *u šá a-na-ku e-pu-uš-šu u šá AD-ú-a i-pu-uš-šu ul-lu-ú-um-ma^dA-ḫu-ru-ma-az-da-a? li-iš-šur*
- XPh50:⁷² *hu-be^vú^du-ra-mas-da-in su-da-man hu-be-da^du-ra-maš-da hu du-nu-iš-ni*
- OP *aita adam Auramazdām jadyāmiy aitamaiy Auramazdā dadātuv*
- Bab. *a-ga-a? a-na-ku a-na^dA-ḫu-ru-ma-az-da-a? e-ri-iš an-na-a?^dA-ḫu-ru-ma-az-da-a? li-í-din-nu*
- XPca3:⁷³ *ku-ud-da ap-ḫa hu-ud-da-ra ku-ud-da ap-ḫa ad-da-da^vda-ri-ya-ma-u-iš^vunki hu-ut-taš-da hu-be-te^du-ra-maš-da nu-iš-gi-iš-ni^dna-ap-pi-be i-da-ka*
- OP *utā tyamaiy kartam utā tyamaiy piça Dārayavahauš XŠhyā kartam avašciy Auramazdā pātuv hadā bagaibiš*
- Bab. *ù šá a-na-ku e-pu-uš-šu ù šá^mDa-a-ri-ia-a-muš LUGAL AD-ú-a at-tu-ú-a i-pu-uš-šu ù a-ga-šu-ú^dA-ḫu-ur-ma-az-da-a? li-iš-šur it-ti DINGIR.MEŠ ga-ab-bi*
- DB 32:⁷⁴ *hš-i-ḫi^vú-ni-na-ma ráb-ba-ka mar-ri-ik^vtaš-šu-ḫi^vmar-be-ḫi-da ir ši-ya-iš*
- OP *duvarayāmiy basta adāriya haruvašim kāra avaina*
- DB 33:⁷⁵ *hš-i-ḫi^vú-ni-na-ma ráb-ba-ka mar-ri-ik^vtaš-šu-ḫi^vmar-ri-be-ḫi-da ir ši-ya-iš*
- OP *duvarayāmiy basta adāriya haruvašim kāra a[va]i[na]*
- Bab. *[...]ú-qu gab-bi im-ma-ru-šu*
- XPb13-16:⁷⁶ *ap-ḫa^vú hu-ud-da-ra^hma-ad-da ku-ud-da ap-ḫa^hme-šá-me-ṛa-ka-da hu-ud-da-ra hu-be mar-ri-da^vša-u-mi-in^du-ra-maš-da-na-hu-ud-da*
- OP *tya manā kartam idā utā tyamaiy apataram kartam ava visam vašna Auramazdāha akunavam*
- DN a5:⁷⁷ *hu-be ap-ḫa hu-ut-tuk-ka hu-be mar-ri-da^vša-u-mi-in^du-ra-maš-da-na hu-ud-da*

⁷²'This I beseech (?) Ahuramazda, all that may Ahuramazda grant me.'

⁷³'Both what I did and what (my) father Darius the king did, all that my Ahuramazda protect together with the gods (lit., the gods with him).'

⁷⁴'In my gate (?) he was bound, seized, the troops all saw him (lit., troops all + plural + -ever him saw).'

⁷⁵*Ibid.*

⁷⁶'What I did *ma-ad-da* and what *me-šá-me-ṛa-ka-da* I did that all by the favor of Ahuramazda I did;' notice throughout these citations the clear opposition in the use of *hu-ud-da-ra* with the relative pronoun *ap-ḫa*, and *hu-ud-da* without a relative pronoun.

⁷⁷'That which was done, that all by the favor of Ahuramazda I did.'

OP *aita t[ya] kartam ava višam vasnā Auramazdāhā akunavam*
 Bab. *a-ga-a gab-bi šá íp-šu ina GIŠ.MI šá^dA-hu-[ur]-ma-az-
 da-a? e-te-pu-uš*

Although /*mar(i)*, *mar(i)p*/ seem to mean 'all,' the *-da* suffix may be taken as re-enforcing the general or total concept inherent in these stems, so that the forms may literally be taken as 'all-ever' or 'all-at all' or 'all-whatsoever' or something of the like.

6.10.3. Substantive /-*r*/.— A suffix /-*r*/ occurs with some noun stems in the singular, and is replaced in the plural by /-*p*/. This suffix here termed 'substantive' may mean 'one who.' It has been tentatively identified with the /-*r*/ discussed with verbs (5.10.2.1).

The pertinent forms are the following:

<i>ha-ak-ka-man-nu-iš-ši-ya-ra</i>	<i>sunki-ir</i>
<i>áš-šá-kar-ti-ya-ra</i>	<i>li-ba-ru-ri (?)</i>
<i>ha-tam-tar-ra</i>	<i>máš-ši-ya-ra</i>
<i>ha-tam-tur-ra</i>	<i>mar-ku-iš-ir-ra</i>
<i>[ha-tam]-t[i]-ra</i>	<i>ruh^lg-ir-ra</i>
<i>ir-šá-ir-ra</i>	<i>ruh^lg-ir-ra-ir (?)</i>
<i>ir-šá-ir</i>	<i>ap-pan-la-ik-kur-ra</i>
<i>ir-šá-an-na</i>	<i>ak-ka-ri</i>
<i>ir-šá-na</i>	<i>ha-ša-kur-ra</i>
<i>har-mi-nu-ya-ir</i>	<i>hal-pi-ik-ra</i>
<i>har-mi-nu-ya-ra</i>	<i>ha-ni-ra (?)</i>
<i>i-gi-ri</i>	<i>ha-ri-ir</i>
<i>ba-pi-li-ir</i>	<i>hu-pír-ri</i>
<i>ba-pi-li-ir-ra</i>	<i>da-ut-ti-ra</i>
<i>[ba-pi-li-r]a</i>	<i>ku-ik-ti-ra</i>
<i>pár-tu-[ma-ra]</i>	<i>si-íp-ri</i>
<i>pár-šir₇</i>	<i>ka-tuk-ra</i>
<i>pár-šir₇-ra</i>	<i>ka-tuk-da</i>
<i>ki-ir</i>	<i>hi-uk-ku-ra (??)</i>
<i>šá-ak-ri</i>	<i>hi-uk-ku-ra-ir-ra (??)</i>
<i>šá-kur-ri</i>	
<i>ib-ba-ak-ra</i>	
<i>iš-tuk-ra</i>	

It is to be noted that this /-*r*/ element varies with /*n*/, and with /*t*/ in a restricted case. The evidence for the equivalence of the various orthographies of the suffix and of its function is found in the following contexts.

- XPca2:⁷⁸ *v*sunki *h*mu-ru-un hi-uk-ku ir-šá-ir-ra *h*pír-šá-ut-ti-ni-ka
 OP XŠ ahyāyā būmiyā vazrakāyā dūraiṽ apiy
 Bab. LUGAL qaḡ-qa-ri a-ga-a-ta ra-bi-i-ti ra-ḡa-áš-tum
- XPca2:⁷⁹ *v*ú *v*ik-še-ir-šá *v*sunki ir-šá-ir-ra
 OP adam Xšayāršā XŠ vazraka
 Bab. a-na-ku ^mHī-ši-? a-ar-šá-a? LUGAL GAL-ú
- DN a2:⁸⁰ *v*sunki *h*mu-ru-un hi-uk-ku-ra-ir-ra ir-šá-an-na
 šá-da-ni-ka
 OP xšāyaθiya ahyāyā būmiyā vazrakāyā dūraiṽ apiy
 Bab. LUGAL qaḡ-qar ru-uḡ-tum [r]a-bi-tú
- DS x:⁸¹ *v*sunki *h*mu-[ru-un hi-uk-ku-ra-ir]-ra ir-šá-na
 šá-da-ni-ka
- DS f8:⁸² *d*u-ra-maš-da ak-ka ir-šá-ir *d*na-ab-be-ra hu-pír-ri
 [^v]ú-um be-šá
 OP Auramazdā [hya] maθišta bagānām hauv mām adā
- DH 1:⁸³ *v*da-ri-ya-ma-u-iš *v*sunki ir-ša-ra
 OP Dārayavauš XŠ vazraka
 Bab. ^mDa-a-ri-ia-muš LUGAL GAL-ú
- DH 6:⁸⁴ ḡḡ-ḡa *d*u-ra-maš-da *v*ú du-nu-iš-da ak-ka ir-šá-ra
^dna-ḡḡ-ḡan-na
 OP tyamaiṽ Auramazdā frābara hya maθišta bagānām
 Bab. šá ^dA-ḡu-ur-ma-az-da-a? id-di-nu šá ra-bu-ú al-la
 DINGIR.MEŠ
- XVsb,c:⁸⁵ *v*ik-še-ir-šá *v*sunki ir-šá-ir
 OP Xšayāršā XŠ vazraka
 Bab. ^mHī-ši-? a-ar-šá-a? LUGAL GAL-ú
- XPh45:⁸⁶ hu-be ku-ud-da ka-tuk-ra šá-ud-da ni-ma-ak ku-ud-da
hal-pi-ik-ra ir-da-ma ni-ma-ak
 OP hauv utā jṽva šiyāta bavatiṽ utā marta artāvā bavatiṽ

⁷⁸ 'King upon this great earth pír-ša-ut-ti-ni-ka (lit., king earth this-upon great).'

⁷⁹ 'I, Xerxes, great king.'

⁸⁰ As in n. 1; the alternation of šá-da-ni-ka with and without a preceding *pír* is a crux. The passages are exact equivalents as indicated by the surrounding phraseology and by the OP and Bab. versions.

⁸¹ Same as fn. 78.

⁸² 'Ahuramazda who (is) the great (one) of the gods, he me created.'

⁸³ 'Darius, great king.'

⁸⁴ 'What Ahuramazda me granted (?), who (is) the great (one) of the gods.'

⁸⁵ 'Xerxes, great king.'

⁸⁶ 'And he (when) alive happy shall be (?) and (when) dead blessed shall be (?).'

- Bab. *ul-lu-ú dum-qí ina ba-la-ṭu-šú i-ma-ar u mi-i-ti a-na ar-ta-a-ma i-ta-ar*
- XPh39:⁸⁷ *šá-da ha-nu ka-tuk-da ku-ud-da hal-be-in-da ir-da-ma ni-in-da*
- OP *Šiyāta ahaniy jīva utā marta artāvā ahaniy*
- Bab. *dum-qí ina ba-la-tu-ia lu-mu-ur u ina mi-it-ú-ti-ia a-na ar-ta-a-ma lu-ú-tu-ru*
- DB 49:⁸⁸ *vru-uh ki-ir vha-rak-ka hi-se vhar-mi-nu-ya-ir ki-ir vhal-ti-da šá-ak-ri*
- OP *I martiya Arxa nāma [Arm] iniya Halditahya puça*
- DB 52:⁸⁹ *a-ak vha-rak-ka hi-še vhar-mi-nu-ya-ra ti-tuk-ka*
- OP *I Arxa nāma Armin[iya hauv] adurujiya*
- Bab. *^mA-ra-ḥu šu-um-šú KUR Ū-ra-áš-ṭa a-ga-šu-ú [...]*

6.10.4. Forms in /-k/ and /-kr/. — A suffix /-k/ (phonologically reminiscent of the ‘remotive,’ § 5.6) occurs in certain forms either alone or with a following ‘substantive’ /-r/. The following forms are pertinent:

I	III
<i>ir-še-ik-ki</i>	<i>ib-ba-ak-ra</i>
<i>ir-še-ki</i>	<i>iš-tuk-ra</i>
<i>ha-ri-ik-ki</i>	<i>hal-pi-ik-ra</i>
<i>aš-ša-ka</i>	<i>ha-ša-kur-ra</i>
<i>ha-ša-ka</i>	
<i>ha-iš-ša-ik-ka</i>	
II	
<i>mi-iš-nu-ka</i>	<i>a-ki-lu-ra-ka</i>
<i>mi-iš-na-ka</i>	<i>pír-šá-da-ni-ka</i>
<i>muš-nu-ka</i>	<i>pír-šá-ti-ni-ka</i>
<i>hu-ut-lak</i>	<i>pír-šá-at-ti-ni-ka</i>
<i>tar-ma-ak</i>	<i>pír-šá-ut-ti-ni-ka</i>
<i>šá-rak (?)</i>	<i>pi-ra-šá-da-ni-ka</i>
	<i>šá-da-ni-ka</i>
<i>li-ul-ma-ak</i>	

The group represented by *ir-še-ik-ki*, *ha-ri-ik-ki* and perhaps *aš-ša-ka* is possibly separate from the remainder, since the /-k/ element in the first two remains when the plural morpheme /-p/ is

⁸⁷‘Happy may I be (when) living and (when) you will be dead blessed you will be (?).’

⁸⁸‘A man, Arxa, his name, an Armenian, Haltida’s son.’

⁸⁹‘And Arxa, his name, an Armenian, lied.’

suffixed; thus, *ir-še-ik-ki-ip-in-na*, etc., and *ha-ri-ik-ki-ip*. But since *ir-še-ik-ki* varies with *ir-šá-ir-ra* (whose plural is *ir-šá-ir-ra-ib-ba*), the /-k/ element here is not part of the base but is a derivational element. Likewise, in the case of *aš-ša-ka*, the precative third person *ha-iš-ša-iš-ni* occurs indicating a base /ac-/ for both forms. The remainder of the forms grouped in this section do not occur in the plural, hence there may eventually have to be made a sharp distinction between the suffix elements which occur in each of the three groups in the above list.

In the case of the third group with /-kr/, two forms, *ha-ša-kur-ra* and *hal-pi-ik-ra*, seem to be clearly 'substantive' /r/ suffixed 'remotive' forms. The two forms *ib-ba-ak-ra* and *iš-tuk-ra* are phonologically similar to the other forms in /-kr/ and without being further analyzable are grouped here for formal reasons. They may eventually have to be placed in another grouping. Thus, for example, *ap-pan-la-ik-kur-ra*, which ends in /-kr/ also, cannot be included here, since the /-k-/ in this word is clearly the /-k-/ of one of the words which make up this derivational compound; cf. *an-la-gi*; *ap-pan-la-ik-ki-um-me*.

6.11. Ordinals.— In a number of cases, numerals are written with the syllables *-um-me-ma* immediately thereafter. These are as follows:

II *-um-me-ma* DB 27, 30, 46, 49

III *-um-me-ma* DB 28

IX *-um-me-ma* DB 4, DBa4

This may be the candidate for the ordinal morpheme. In nearly every case the OP shows an ordinal: *duvitiyam*, *çitiyam*, *navama*; (DB 46 *patiy hyāparam*). Unfortunately, no full form of any RAE cardinal or ordinal is known. There may perhaps be a possibility of analyzing the final *-ma* as the locative suffix, but this is mere speculation until more is known about Elamite numerals in general.

7

PRONOUN

7.0. General. — The ‘pronoun’ in RAE is to be considered part of the nominal system, since it participates in the ‘case’ inflection indicated above. However, the paradigmatic fullness of forms, and the occurrence of additional individual forms and distinctions, require that the ‘pronoun’ receive separate description and discussion even though pronominal case forms have already been cited under the nominal case discussions.

The following pronominal types may be distinguished:¹

relative (§ 7.1)

personal (§ 7.2)

7.1. Relative pronoun. — RAE shows two basic relative pronoun forms: *ak-ka /aka/* and *ap-pa /apa/*. The distinction between the two may be indicated by the terms ‘personal’ (animate) and ‘non-personal’ (inanimate), respectively.² However, it is important to investigate the uses of both *ak-ka* and *ap-pa* to determine the validity of this distinction for describing the RAE relative pronominal system and determining its limitations.

The following are the referents or antecedents with which *ak-ka* is used:

- (1) personal names and Ahuramazda
- (2) *ruh-ir-ra* ‘the man’
ru-uh hu-pir-ri ‘that man’
nu ‘you’
- (3) *ak-ka-ri* ‘someone’ (refers to a person).
- (4) *ak-ka* is spelled with the personal determinative ^v in DB 55, 56, 58, 63, 64, 68.
- (5) *ak-ka-be*, the plural form is spelled once with ^v, DB 13; and it occurs with ^v*taš-šu-ip*, *ruh mar-ri-ip*, and *sunki-ip* as referents.
- (6) *ak-ka-be-na* (gen. pl.) occurs twice, XPh 12, 14. Once it refers to *da-a-ya-ma* ‘countries, lands’ (=OP *dahyāva*) which is otherwise

¹ Most of the forms listed below have already been mentioned under their appropriate ‘case’ headings.

²Weissbach, *Die Achämenideninschriften zweiter Art*, p. 51 makes a slightly different distinction: “Relativum *akka* . . . bezieht sich nur auf Personen, *appa* auf Personen und Sachen.” This difference will be discussed presently.

construed with *ap-pa*; and once in the phrase *ak-ka-be-na* ^v*ú-ik-* [*ka-mar tur-ri-k*] *a hu-be hu-ut-taš* 'of which by me was said, that they did.' In the latter case likewise, the same expression occurs with *ap-pa*.

ap-pa is used with the following referents:

(1) <i>da-a-ya-u-iš</i> (<i>hi</i>)		'this land'
<i>hi</i>		'this' (referring to things)
<i>ruh</i>		'men'
<i>taš-šu-íp</i>		'troops'
<i>sunki-me</i>		'kingship'
<i>sunki-ip</i>	(DB 53)	'kings'
<i>te-tin</i>		'ornamentation' (?)
<i>la-áš-da</i>		'gold'
<i>ka-si-ka</i>		'stone'
<i>na-ap</i>	(DB 63)	'gods'
<i>tup-pi hi</i>	(DB 65)	'this inscription'
<i>šá-ak-ka ap-pa</i>		
<i>ti-ik-ra-ka-u-da-ap</i>	(DNa3)	'the Saka'
<i>da-at-tam</i> ₄ :		
<i>da-ad-da-um</i>	(XPh15)	'the law'

(2) a. no referent; introduces connected clause; e.g., DB 10: ^v*taš- [šu]-íp in-ni tur-na-iš ap-pa* ^v*pír-ti-ya hal-pi-ka* 'the troops did not know that Bardiya had been slain.'

b. refers to a thing; e.g., XPh43: *ap-pa* ^d*u-ra-maš-da še-ra-iš-da* 'what Ahuramazda ordered.'

Although this list indicates a general distinction between 'persons' and 'things,' there is an overlap in the use of *ruh* 'man' with both *ak-ka ~ak-ka-be* and with *ap-pa*, and of *taš-šu-íp* and *dahyāva* with both *ap-pa* and *ak-ka-be-na*. However, *taš-šu-íp* 'troops' (=OP *kāra*) may be considered to belong to both categories, inasmuch as it may perhaps refer both to an army as composed of persons and as a unit or instrument which has a non-personal character. The use of *ruh* 'man' with *ap-pa* is more difficult. But closer inspection of its occurrences with *ap-pa* reveals that it so occurs only in the phrase *a-ak* ^v*ruh*^{lg} *ap-pa ha-tar-ri-man-nu-da-mi* 'and the men (pl.) who (were) his foremost allies.' The translation is that of the parallel OP phrase, since the *ha-tar-ri-man-nu-da-mi* is a crux perhaps representing an OP word ending in *-mant* or *-vant*. In any event, both this *ruh* and *taš-šu-íp* refer to indefinite, non-specific persons, and both are plural. Thus, it may be that in addition to a basic 'person vs. thing' opposition there are also the elements of non-specificity and plurality to be considered as integral parts of the *ak-ka/ap-pa* opposition. Indeed, the form *ak-ka-be-na* (gen. pl.) corresponds to the use of *ap-pa* in several cases noted above; and *sunki-ip*, a plural, is used with *ap-pa* in the expression (DB 53) [^v*ap-pi IX* ^v] *sunki-ip ap-pa* ^v*ú be-ul hi ha-ti-ma ma-u-ri-ya* 'these (are the) nine kings whom I in this very year seized' where the individuals are unnamed. Likewise, *na-ap* / *nap* < *nap* + *p*/ 'gods' in the

expression *dna-ap ap-pa da-a-ib-be* (DB 63) ‘the other gods (lit., the gods which others),’ a plural is concerned.

In addition, it is perhaps worth considering for future investigation that the opposition of *ak-ka /aka/* to *ap-pa /apa/* may contain in the /*k ~ p*/ alternation a reflex of singular vs. plural connotation, seen in the singulars in /-*k*/ with plural in /-*p*/, as for example in the ‘remote.’

The relative pronouns will be termed *ak-ka* ‘personal’ and *ap-pa* ‘non-personal,’ with the qualifications noted. In general, *ak-ka* may be translated ‘who’ and *ap-pa*, ‘which.’

Some of the overlapping cases noted may also be due to close translation from OP. In general, *ak-ka* corresponds to OP *hya*, and *ap-pa*, to OP *tya*. The use of *ap-pa* in introducing a connected clause, in the sense of the English subordinate conjunction ‘that,’ may in reality reflect the OP use of *tya* in this very same function.³ Similarly, when *ruh* is used with *ap-pa* it corresponds to the use of *tya* in the equivalent OP phrase. Thus, there are two possible sources for the use of *ak-ka* and *ap-pa* in RAE: (1) the native opposition of person vs. thing, and (2) the close translation of the OP version.

The total occurring paradigms of the ‘personal’ and ‘non-personal’ relatives with illustrative contexts will be found in §7.2.4.1, §7.2.4.2, and §7.2.4.3.

7.2. Personal pronouns.

7.2.1. First person singular. — The first person singular pronoun

occurs in two stem forms: /*u- ~ un^a_i-*/. The stem alternant /*un^a_i-*/ occurs with the genitive forms and with the problematic forms, *ú-na-in*, *ú-na-ha-in*, *ú-na-un-ku*; the stem /*u-*/ occurs elsewhere. The following first person singular forms have been collected:

Nominative:

vú /u/

Accusative:

*vú /u < u-Ø/
hu*

Genitive:

*vú-ni-na /un^a_i-ni-na < un^a_i-ni-
vú-ni-ni /un^a_i-ni-ni < un^a_i-ni-
/*

vú-in

vú-un

ú-un

un

vú-um

vú-ir

*/uⁿ_r < u-n/
r*

Allative:

vú-ik-ki /uki < u + ki/

Ablative:

vú-ik-ki-mar

vú-ik-ka-mar /ukⁱ_a mar <

. u + kⁱ_a + mar/

vú-ik-ka-ma-ir (?)

³ Kent, *op. cit.*, § 302e.

vú-na-in
vú-na-ha-in /*unan* < *una-n*/
vú-na-un-ku /*unanku* < ?/

7.2.1.1. First person singular nominative contexts. – Illustrative contexts for these forms have already been cited in the appropriate ‘case’ paragraphs. The nominative (§ 6.1), however, was left to be illustrated under the pronoun forms (cf. also the correlation of nom. *vú* with declarative first person verbs cited in § 5.3.1).

DB 9:⁴ *a-ak ša-u-mi-in d^u-ra-maš-da-na vú v^sunkⁱ-me mar-ri-ya*
 OP *vašnā Auramazdāha ima xšačam dārayāmiy*
 Bab. LUGAL-tu a-ga-a-[ta] ana-ku aš-bat-šú
 DB 33:⁵ *me-ni h^har-be-ra hi-še ha-mi vú GIŠ^šru-ir-ma ir be-la*
 OP *pasāvašim Arbairāyā uzmayāpati[y] akunavam*
 DB 52:⁶ *sa-u-mi-in d^u-ra-maš-da-na vú ap-pi-in hal-pi-ya*
 OP *vašn[ā Aura]mazdāha adamšim ajanam*

7.2.1.2. ú and hu as Ø-accusatives. – In addition to the accusative forms in /-n ~r/,⁷ the forms *vú* and *hu* occur with accusative suffix /-Ø/. In this form, the pronoun occurs immediately before the verb form which governs it. For example, the phrase *d^u-ra-maš-da pi-ik-ti vú da-iš* ‘Ahuramazda bore me aid (lit., Ahuramazda aid me bore)’ – corresponding to OP *Auramazdāmiy upastām abara* and to Bab. *d^uUramazda is-si-dan-nu* – occurs over and over in this form, with the first person pronoun object occurring immediately before the verb (declarative third person) *da-iš*. The one occurrence of the variant form *hu* (XPh50) is found in the phrase *hu-be-da d^u-ra-maš-da hu du-nu-iš-ni* ‘all that may Ahuramazda me grant’ (OP *aitamaiy Aura-mazdā dadātuv*; Bab. *an-na-a? d^AA-ḥu-ru-ma-az-da-a? li-i-din-nu*) again preceding a verb form.

The accusatives in /-n ~r/ also occur immediately before verb forms, and no explanation comes to mind for the occurrences of these alternant accusative forms, except the possibility that endless or Ø forms may be pronominal object prefixes to the verb forms which follow. (Cf. § 7.2.4.4 and § 7.2.4.5 for the forms *hi* and *ap* in parallel usage as accusative with Ø suffix).

7.2.1.3. Genitive forms. – In the genitive, the first person pronoun shows chiefly the form *vú-ni-na*, but there are three cases –

⁴ ‘And by the favor of Ahuramazda, I the kingship hold.’

⁵ ‘Then (in) Arbela, its name, there I on a stake him impaled.’

⁶ ‘By the favor of Ahuramazda, I them slew.’

⁷ One case of the first person pronoun, DSf9, /-um/ occurs immediately before the verb form *be-šá* and suggests the possibility that this is a case of assimilation of the nasal /-n/ to /-m/ before the bilabial.

unfortunately, all broken – where *ú-ni-ni* may possibly be the form required. Until further confirmation of the latter is at hand it may be compared to the genitive *ap-pi-ni* of the ‘here’-deixis personal plural pronoun (§ 7.2.4.5). Illustrative contexts for *ú-ni-na* are the following:

- DB 26:⁸ *ša-u-mi-in^d u-ra-maš-da-na^v taš-šu-íp ap-pa^v ú-ni-na^v taš-šu-íp ap-pa^v be-ti-íp-na ir-še-ik-ki hal-pi-iš*
 OP *vašnā Auramazdāha kāra hya manā ava[m k] āram tyam hamīçiyam aja*
- DB 28:⁹ *hi-ši-la hi ti-ri mi-te^v taš-šu-íp ap-pa^v be-ti-íp^v ú-ni-na in-ni ti-ri-man-pi hu-pi-be hal-pi-iš*

The parallelism in DB 26 between the genitive *be-ti-íp-na* and the form *ú-ni-na* ensures the identification of the latter as a genitive also (cf. § 6.2.1).

7.2.1.4. Residue: *ú-na-in*, *ú-na-ha-in*, *ú-na-um-ku*. – There remains a troublesome residue of three forms: *ú-na-in* (DNa4), *ú-na-ha-in* (DSi5), and *ú-na-um-ku* (DSf9, [14], 16), that remain unexplained. In their contexts they would appear to be ‘accusatives;’ if this were so then there would be a set of accusatives built upon each of the first person pronoun stem forms, an unlikely situation. The form *ú-na-ha-in* can only be a variant spelling of *ú-na-in* with the *ha* re-enforcing the *a* vowel. Most difficult of all is *ú-na-um-ku*. Perhaps, the sequence *na-um* (this is the only case of it in RAE) actually stands for *na-(u)n=nan*. This would strengthen the view of the alphabetic trend of RAE writing.¹⁰ But the *-ku* in this form remains a mystery. The pertinent contexts of these three forms are:

- DN a4:¹¹ *d_u-ra-maš-da sa-ap ši-ya-šá hi^h mu-ru-um pí-r-ra-um-pi-EL ha-ul-lak me-ni^v ú du-na-áš^v ú^v sunki^v ú-na-in hu-ut-taš*
 OP *Auramazdā [ya]θā avaina imām būmim yau[datim] pasāvadim manā frābara mām [xšā]yaθiyam akunauš¹²*
 Bab. *^dA-ḫu-ur-ma-az-da-a? ki i-mu-ru KUR.KUR.MEŠ an-ni-ti ni-ik-ra-ma a-na lib-bi a-ḫa-meš su-um-mu-ḫu ár-ki ana-ku id-dan-na-áš-ši-ni-ti u ana-ku ina muḫ-ḫi-ši-na ana LUGAL-ú-tú ip-te-qid-an-ni*

⁸ ‘By the favor of Ahuramazda, the troops which mine (subj.) the troops which of the rebels (obj.) greatly slew.’

⁹ ‘Then (to) him I said, “Go forth! the troops which (are) rebels, mine (are) not called them slay!”’

¹⁰ R. T. Hallock, “New Light from Persepolis,” *Journal of Near Eastern Studies*, IX (1950), 252, n. 50.

¹¹ ‘Ahuramazda when he saw this earth *pí-r-ra-um-pi-EL ha-ul-lak* then me he granted [the kingship], (as for) me, king me (?) he made.’

¹² The difficulty in the RAE version stems partly from a slavish word for word copy of the OP.

- DS i5:¹³ *sa-ap ap-pa-na-ka^d u-ra-maš-[da^v sunki] vū-na-ha-in
hu-ut-taš-da^h mu-ru-un hi-uk-ku-[ra]*
OP *ya[Θā AM mām XŠyam akunauš] ahyāyā BUyā*
- DS f9:¹⁴ *d^du-ra-maš-da ak-ka ir-šá-ir^d na-ab-be-ra hu-pír-ri
[^v]ú-um be-šá hu-pír-ri^v sunki vū-na-un-ku hu-ut-taš
OP *Auramazdā [hya] maΘišta bagānām hauv mām adā ha[uv]
mām XŠyam akunauš**
- Bab. *d^dA-ḥu-ur-[ma-az-da-a?] ra-bu-ú [ina muḥ-ḥi DINGIR.MEŠ]
šū-ú a-na-[ku ib-na-an-ni] šū-ú a-na-[ku LUGAL il-ta-
ka-na-a]n-ni*

The remaining two occurrences of *ú-na-un-ku* in this same text are partially broken but contain the same phrase and need not be cited. Again, in this situation, the meaning seems clear, but the details of the form remain obscure.

7.2.2. Second person pronoun. — The stem of the second person pronoun is /*nu-*/. The forms which occur are:

Nominative:

vnu /nu/

Postpos. possessive:

-ni /-ni/

Accusative:

vnu-in /nun < nu + n/

The following contexts illustrate the use of these forms:

- DB 56:¹⁵ *a-ak^v nu^v ak-ka me-iš-ši-in^h tup-pi hi be-ib-ra-an-ti
OP *tuvam kāhya aparam imām dipi[m] patiparsāhy**
- DB 65:¹⁶ *vnu ak-ka me-iš-ši-in^h tup-pi hi ši-ya-in-ti ap-pa
vū tal-li-ra
OP *tuvam kāhya aparam imām dipim vaināhy tyam adam
niyapai[ša]m**

The accusative form *nu-in /nun/* occurs in Db 60, 61, 66, 67; the form indicated by *-ni* occurs in these same contexts.

- DB 60:¹⁷ *d^du-ra-maš-da^v nu-in ka-ni-iš-ni a-ak [ku-ud-da
vNUMUN]^{lg} ni a-ak ku-ud-da^v nu me-ul-li-da ka-tak-ti-ni
OP *Auramazdā Θuvām dauštā biyā utā[ta]iy taumū vasiy biyā
utā dargam jivā**

¹³ 'When Ahuramazda king me (?) made upon this earth.'

¹⁴ 'Ahuramazda who (is) the great (one) of the gods, he me created, he king me (?) made.'

¹⁵ 'And you who later this inscription will read.'

¹⁶ 'You who later this inscription will see which I wrote.'

¹⁷ 'May Ahuramazda you (obj.) befriend, and also your family and also may you long (?) live.'

DB 61:¹⁸ *d*^u-*ra-maš-da* *v*^{nu}-*in hal-pi-iš-ni a-ak ku-ud-da*
v^{NUMUN}*lg-ni a-nu ki-ti-in-ti*

OP *Auramazdātaiy jatā biyā utātaiy taumā mā biyā*

The occurrences of these same forms in DB 66, 67 are repetitious of these same expressions and need not be cited. (Cf. § 6.2.1 for the use of the postpositive possessive pronominal suffix).

7.2.3. First person plural pronoun. — The stem is /*nuku* ~ *nuka*-/ in the forms:

Nominative:

v^{nu}-*ku*

Abstractive:

(*v*)*nu-ka-mi*

The following contexts are pertinent:

DB a3:¹⁹ *hu-uh-be-in-tuk-ki-me v*^{nu}-*ku v*^{NUMUN}*lg v*^{ha}-*ak-ka-man-nu-ši-ya ti-ri-ma-nu-un šā-āš-šā-da ka-ra-da-la-ri*
v^{šā}-*lu-ú-ut a-ak šā-āš-sā-da ka-ra-da-la-ri v*^{NUMUN}*lg*
v^{nu}-*ka-mi v*^{sunki}-*ip*

OP *avahyarādiy vayam Haxāmanišiyā Θahyāmahy hacā*
paruviyata ā[m]ātā amahy hacā paruviyata hyā amāxam
taumā xšāyaθiyā āha

DB 13:²⁰ *v*^{ruh}*lg-ir-ra in-na šā-ri-ir(?) -ni(?) [ak-ka-ri in-ni*
v^{pār}-*šir, -ra in-ni v*^{ma}-*da in-ni v*^{NUMUN}*lg v*^{nu}-*ka-mi*
ak-ka v^{kam}-*ma-ad-da v*^{ma}-*ku-iš v*^{sunki}-*me e-mi [du-iš-da]*

OP *naiy āha martiya naiy Pārsa naiy Māda naiy amāxam*
taumāyā kašciy hya avam Gaumātam tyam magum xšaçam
dītam caxriyā

7.2.4. Third person pronoun forms. — The third person pronoun forms show a ‘personal’ vs. ‘non-personal’ division which parallels exactly the situation in the relative pronoun seen above (§ 4.1). Furthermore, the relative pronoun and the two varieties of third person pronoun — ‘here’-deixis and ‘there’-deixis — show singular and plural forms in the ‘personal’ category, but no differentiation for number in the ‘non-personal’ category. These two categories of deixis subsume the demonstrative use of the third person pronouns. The pronouns of the third person (including the relative) can be divided into the following categories:

relative personal singular (§ 7.2.4.1)

relative personal plural (§ 7.2.4.2)

¹⁸ ‘May Ahuramazda you (obj.) slay, and also your family may you not have (?).’

¹⁹ ‘For this reason, we the Achaemenid family are called, š. k. we are noble, and š. k. our family (are) kings.’

²⁰ ‘A man did not exist (?), anyone, not a Persian, not a Median, and not (of) our family, who took away the kingship from Gaumata the Magian.’

<u>relative non-personal</u>	(§ 7.2.4.3)
<u>'here'-deixis personal singular</u>	(§ 7.2.4.4)
<u>'here'-deixis personal plural</u>	(§ 7.2.4.5)
<u>'here'-deixis non-personal</u>	(§ 7.2.4.6)
<u>'there'-deixis personal singular</u>	(§ 7.2.4.7)
<u>'there'-deixis personal plural</u>	(§ 7.2.4.8)
<u>'there'-deixis non-personal</u>	(§ 7.2.4.9)

7.2.4.1. Relative personal singular. — The stem is /*aka-*/ and occurs in the following forms:

Nominative:

ak-ka /*aka*/ ; *ak-ka-ya*²¹

Substantive (here: indefinite):

ak-ka-ri /*akar* < *aka* + *r*/

Superessive:

ak-ka-ri-ug-gi /*akaruki* < *aka* + *r* + *uki*/

- DB 23:²² *me-ni* ^v*hal-tam-ti-ip* ^v*ú-ik-ki-mar ip-ši-ip* ^v*mar-ti-ya*
hu-pír-ri ak-ka ir-šá-ir-ra ap-pi-ni ti-ri-iš-ti ir
mar-ri-iš-šá ir hal-pi-iš
- OP *pasāva hacā*[*ma atarsa Ūv*] *jiyā avam Martiyam agarbāya*
hyašām maθišta aha [*utāšim av*] *ājana*
- Bab. *ár-ki iš-šab-tu-u?* *a-na* ^m*Mar-ti-iá a-ga-šu-u šá ina*
muḫ-ḫi-šú-nu GAL-ú ina ra-ma-ni-šú-nu id-du-ku-šú
- XP a1:²³ *dna-ap ir-šá-ir-ra d*^u*-ra-maš-da ak-ka d*^{mu-ru-un hi}
be-iš-da ak-ka d^{ki-ik hu-ib-be be-iš-da ak-ka}
^v*ruhlg-ir-ra-ir be-iš-da ak-ka ši-ya-ti-iš be-iš-da*
^v*ruhlg-ra-na ak-ka v*^{ik-še-ir-iš-šá} ^v*sunki-ir hu-ut-taš-da*
- OP *baga vazraka Auramazdāhya imām būmim adāhya avam*
asmānam adāhya martiyam adāhya šiyātim adā martiyahyā
hya Xšayāršām xšāyaθiyam akunauš
- Bab. DINGIR GAL-ú ^d*A-ḫu-ru-ma-az-da-a?* *šá qaq-qa-ru a-ga-a?*
id-din-nu šá AN-e an-nu-ú-tu id-din-nu šá a-me-lu-ú-tú

²¹ *ak-ka-ya* occurs once (XPh38-9) in the phrase ^v*nu ak-ka-ya* which is elsewhere expressed simply ^v*nu ak-ka* (DB 56, 65). The *-ya* in this one case may possibly represent the *-ya* of OP *kāhya* which is the parallel to this phrase.

²² 'Then the Elamites away from me were afraid; that Martiya, who the great one of them they called, him they seized, him they slew.'

²³ 'A great god (is) Ahuramazda, who this earth created, who that heaven created, who man created, who happiness created for (lit., of) man, who made Xerxes king (lit., who Xerxes king made).'

*id-din-nu šá dum-qí a-na a-me-lu-ú-tú id-din-nu šá
a-na m^hi-ši-?a-ar-ši LUGAL ib-nu-ú*

- DB 13:²⁴ *hu-be-[in-tuk-ki-um-me^v] taš-šu-íp ir-še-ik-ki hal-pi-iš
[a]-nu^v ir-tur-na-um-pi ap-pa^v in-ni^v pír-ti-ya
ak-ka^v ku-raš^v šá-ak-ri a-ak^v ak-ka-ri ás-ki
^vkam-ma-ad-da^v ma-ku-iš tu-ba-ka in-ni li-ul-ma-ak*
OP *avahyarādiy kāram avājanīyā mātyamām xšnāsātiy tya
adam naiy Bardiya amiy hya Kūrauš puça kašciy naiy
adaršnauš cišciy θastanaiy pariya Gaumātam tyam magum*
- DB 63:²⁵ *ap-pan-la-ik-ki-um-me ak-ka-ri-ug-gi in-ni hu-ud-da*

7.2.4.2. Relative personal plural.

Nominative:

(^v)ak-ka-be /akap < aka + p/

Genitive:

ak-ka-be-na /akapna < aka + p + na/

- DB 25:²⁶ *mi-te-iš^v taš-šu-íp^v ma-da-be ak-ka-be^v ú-ni-na in-ni
ti-ri-man-pi hu-pi-be hal-pi-iš*
OP *paraitā avam kāram tyam Mādam jatā hya manā naiy
gaubataiy*
- DB 13:²⁷ *^vtaš-šu-íp ir-še-ik-ki hal-pi-iš^v ak-ka-be šá-áš-šá
^vpír-ti-ya-ir tur-na-iš-ti*
OP *kāram vasiy avājanīyā hya paranam Bardiya adānā*
- XPh12:²⁸ *sa-u-mi-in^d du-ra-maš-da-na hi^h da-a-ya-ma ak-ka-be-na
^vú^v sunki [X Y]-ni-gi-ut me-šá-me-ra-ka ha-iš-ša
^hba-ir-sá*
OP *vašnā Auramazdāha imā dahyāva tyaišām adam xšāyaθiya
āhām apataram hacā Pārsā*
Bab. *ina GIŠ.MI šá^d A-ḫu-ru-ma-az-da-a? KUR.KUR.MEŠ an-ni-
e-ti šá a-na-ku LUGAL-šú-nu e-lat KURPa-ar-su*

7.2.4.3. Relative non-personal. — The stem of this form is /apa-/. The only form occurring is *ap-pa* /apa/. But three derived forms, *ap-pu-ka*, *ap-pu-ka-da*, and *ap-pi-da* also occur.

²⁴‘For this reason, the troops greatly he slew lest me they know, that I (am) not Bardiya who (is) Cyrus’ son and *anyone* anything concerning (?) Gaumata the Magian did not dare.’

²⁵‘Wrong-doing upon someone/anyone I did not do.’

²⁶‘Go forth! the Median troops (lit., troops Medians) *who* mine are not called, them slay!’

²⁷‘The troops greatly he slew *who* before Bardiya (obj.) knew.’

²⁸‘By the favor of Ahuramazda, these (are) the lands of which I was (?) king far off (?) from Persia.’

- DB 26:²⁹ *ša-u-mi-in^d u-ra-maš-da-na^v taš-šu-íp ap-pa^v ú-ni-na^v taš-šu-íp ap-pa^v be-ti-íp-na ir-še-ik-ki hal-pi-iš*
 OP *vašnā Auramazdāha kāra hya manā ava m k āram tyam hamiçiyam aja*
- DB 65:³⁰ *nu ak-ka me-iš-ši-in^h tup-pi hi ši-ya-in-ti ap-pa^v ú tal-li-ra hi in-na-ak-ka-nu-ma^h pāt-ti-kar-ra-um a-nu sa-ri-in-ti*
 OP *tuvam kā hya aparam imām dipim vaināhy tyām adam niyapai [ša] m [i] maivā patikarā mātya vikanāhy*

The remaining derived forms listed with *ap-pa* are relative derived forms and have been discussed under the ‘remotive’ /-k/ § 5.6, and under the ‘generalizing’ /-ta/ § 6.10.2.

7.2.4.4. ‘Here’-deixis personal singular. — The stem is /i-/ and is represented by the following forms:

Accusative:

hi /i < i + Ø/

Others:

i-da-ka

hi-da-ka

Postpos. possessive:

-i (*hi-še*, *taš-šu-īb-be* (?))

ir-ma

ir /ir < i - r/

in /in < i - n/

The following contexts are illustrative:

- DB 26:³¹ *hi-ši-la hi ti-ri-ya*
 OP *avaθā [šaiy] aθaham*
- DB 26:³² *me-ni^h har-be-ra hi-še ha-mi^v ú GIŠ^{ru} ru-ir-ma ir be-la*
 OP *pasāvašim Arbairāyā uzmayāpati [y] akunavam*
- Bab. *ár-ki ina URU Ar-ba-?i-il ina za-ki-pi áš-ku-un-šú*

The form *ir-ma*, which appears to contain the locative /-ma/ suffixed to the accusative /-r/, is a problematic form. Whether this analysis of the suffixes involved is correct or not remains questionable, as does the exact meaning of the form. It seems likely that it is part of the ‘here’-deixis singular paradigm. It can be illustrated by the following context:

²⁹‘By the favor of Ahuramazda, the troops which of me (subj.) the troops which of the rebels (obj.) greatly slew.’

³⁰‘You who later this inscription will see, what I wrote, this image, i.e. *patikarā* (OP gloss), do not destroy.’

³¹‘Then (to) him I said.’

³²‘Then (in) Arbela, its name, there I on a stake him impaled.’

- DB 26:³³ *v*be-ti-*i*p pír-ru *ir*-šá-*ir*-ra-ib-ba *v*da-tur-š*i*-iš *ir*-ma
 š*i*-in-nu-*i*p šá-pár-rak-um-me hu-ut-ti-nu-um-ú-ba
 OP pasāva [hamiç]iya hagmatā paraitā patiš Dādaršim
 hamaramam cartanaiy
 Bab. a-na [tar-ši] ^mDa-da-ar-šú a-na e-pi-šú ta-ḥa-za

All of the other occurrences of this form (DB 27, 28, 29, 30, [41], [42]) are in repetitions of this same phrase. It remains unclear whether the form *ir*-ma should be considered connected to the preceding noun, in which case the pronoun stem /i-/ would not be part of the analysis, or whether it is a form separate from the noun which precedes it and should be translated '(as for) NN, against him.'

The element -da-ka in the forms *i*-da-ka and *hi*-da-ka in the meaning 'with' occurs in RAE only in these forms. It corresponds to OP *hadā* and Bab. *itti*, but unlike these forms and in a reversal of relationship it contains the pronominal element /i-/.

- DB 25:³⁴ *me*-ni *v*mi-tar-na *v*tas-su-*i*p *i*-da-ka ^hma-da-be-ik-ki
 sa-ak
 OP pasāva hau Vidarna hadā kārā ašiyava
 Bab. [...] ^mÚ-mi-da-ar-na-a? it-ti ú-qu it-ta-lak
 XPca3:³⁵ *v*ú ^du-ra-maš-da *v*ú-um nu-iš-gi-iš-ni ^dna-ap-pi-be
i-da-ka ku-ud-da ap-ḥa hu-ud-da-ra ku-ud-da ap-ḥa
*v*ad-da-da *v*da-ri-ya-ma-u-iš ^vsumki hu-ut-taš-da hu-be-
 te ^du-ra-maš-da nu-iš-gi-iš-ni ^dna-ap-pi-be *i*-da-ka
 OP mām Auramazdā pātuv hadā bagaiḥiš utā tyamaiy kartam
 utā tyamaiy piça Dārayavahauš XŠhyā kartam avašciy
 Auramazdā pātuv hadā bagaiḥiš
 Bab. a-na-ku ^dA-ḥu-ur-ma-az-da-a? li-iš-ṣur-an-ni it-ti
 DINGIR.MEŠ ga-ab-bi ù šá a-na-ku e-ḥu-uš-šu ù šá
^mDa-a-ri-ia-a-muš LUGAL AD-ú-a at-tu-ú-a i-ḥu-uš-šu ù
 a-ga-šu-ú ^dA-ḥu-ur-ma-az-da-a? li-iš-ṣur it-ti
 DINGIR.MEŠ ga-ab-bi

The pronominal element indicating possession suffixed in *hi*-še (§ 3.2.1) is perhaps influenced by the pronominal element suffixed in the Bab. equivalent *šumšu*. This is rendered in OP by *nāma* which is considered to be an Aramaism in the OP version.³⁶

7.2.4.5. 'Here'-deixis personal plural. — The stem is /api-/ and occurs in the following forms:

³³'The rebels assembled (lit., were *pír*-ru great; the translation 'assembled' is taken from the OP); (as for) Dādaršiš, against him they went in order to make battle.'

³⁴'Then Vidarna, the troops with him, to the Medians went.'

³⁵'May my Ahuramazda me protect, (and) the gods with him; both what I did and what father Darius the king did, all that may Ahuramazda protect, (and) the gods with him.'

³⁶Kent, *op. cit.*, § 312.

Nominative:

ap-pi

Accusative:

ap-in /*apin* < *api* + *n*/
*ap-pi-in**ap-ir* /*apir* < *api* + *r*/
*ap-pi-ir**(^v)ap* /*ap* < *ap(i)* + \emptyset /

Genitive:

ap-pi-ni /*apini* < *api* + *ni*/

- DB 68:³⁷ *ap-pi* ^v*ruh*^{lg} ^v*u* *da-hu-ip* . . . *a-ak ha-me-ir* ^v*ruh*^{lg}
ap-pi ^v*u* *da-ú-man-li-ip*
 OP *imaiy martiyā tyaiy adakaiy avadā [ā] hatā . . .*
adakai [y] imaiy martiyā hamataxšatā anušiyā manā
- DB 21:³⁸ *ap-pi* ^v*da-a-ya*-[*u*]-*iš* ^v*u*-*ir be-ip-ti-ip*
 OP [*imā dahyāva*] *tya hacāma hamiçiyā abava*
 Bab. *an-na-a-tú KUR.KUR šá ik-ki-ra-?i-in-ni*
- DB 24:³⁹ ^v*tas-su-ib-be hi-ši-la ap ti-ri-iš-šá*
 OP *kārahya avaθā aθaha*
- DN a3:⁴⁰ *ap-pa* ^v*u*-*ik-ka-mar ap tur-ri-ka hu-be hu-ut-tuk*
 OP *tyašam hacāma aθahya ava [a] kunava*
 Bab. *šá la-IGI-ia at-tu-u-a ig-gab-ba-áš-šú-nu ana*
ap-pit-tú ip-pu-uš-šu-u?
- DB 52:⁴¹ *ša-u-mi-in* ^d*u-ra-maš-da-na* ^v*u* *ap-pi-in hal-pi-ya*
 OP *vasn [ā Aura] mazdāha adamšim ajanam*
- DB 52:⁴² *hu-pír-ri* ^v*ma-da-be ap-in be-ip-taš*
 OP *hauv Mādam [hamiçiyam] akunauš*
 Bab. *KUR Ma-da-a-a šu-u up-tar-ri-iš*
- DB 11:⁴³ *hu-pír-ri* ^v*taš-šu-íp* ^v*ap-ir ti-tuk-ka*
 OP *hauv kārahya avaθā [a] durujiya*

³⁷‘These men (to) me *da-hu-ip* . . . and thereupon these men (to) me *da-ú-man-li-ip*.’³⁸‘These lands (against) me revolted.’³⁹‘His army then to them he said.’⁴⁰‘What by me (to) them was said that was done.’⁴¹‘By the favor of Ahuramazda, them I slew.’⁴²‘He made the Medians rebellious (lit., he-that one [subj.] the Medians-them [obj.] rebelled/made rebel).’⁴³‘He lied to the troops (lit., he-that one to the troops-them [obj.] he lied).’

- DB 16:⁴⁴ *v*taš-šu-îb-be hi-si-la ap-pi-ir ti-tuk-ka
 OP *kāram avaθā adurujiya*
 Bab. *ana ú-qu i-par-ra-aš*
- DB 23:⁴⁵ *v*mar-ti-ya hu-pír-ri ak-ka ir-šá-ir-ra ap-pi-ni
 ti-ri-iš-ti ir mar-ri-iš-šá ir hal-pi-iš
 OP *avam Martiyam agarbāya hyašam maθišta āha [utāšim av]ājana*
 Bab. *ár-ki iš-sab-tu-u? a-na^m Mar-ti-iá a-ga-šu-u šá ina muḥ-ḥi šú-nu GAL-ú ina ra-ma-ni-šú-nu id-du-ku-šú*
- DB 6:⁴⁶ *ša-u-mi-in^d u-ra-maš-da-na^v ú^v sunki-me* ap-pi-ni
 hu-ud-da
 OP *vašnā Auramazdāha [a]damšām xšāyaθiya āham*
- 7.2.4.6. ‘Here’-deixis non-personal. – The stem form is /i-/ and occurs in the following forms:⁴⁷
- hi* *hi-uk-ku-ra*
hi-ik-ka *hi-uk-ku-ra-ir-ra*
hi-uk-ku *hi-ma*
hi-uk-ku-ma
hi-ma-uk-ku
- DB 7:⁴⁸ *v*da-a-ya-u-iš *hi* ap-pa *v*ú-ni-na ti-ri-iš-ti
 OP *imā dahyāva tyā manā pati[yāiša]*
 Bab. *a-ga-ni-e-tú KUR.KUR šá ana-ku i-še-im-ma-?i-in-ni*
- DB 9:⁴⁹ *d*u-ra-maš-da *hi* *v*sunki-me *v*ú du-nu-iš
 OP *Auramazdāma[iy] ima xšačam frābara*
 Bab. *d^uri-mi-iz-da-a? LUGAL-tu-a id-dan-nu*
- DB 39:⁵⁰ *hi* *v*ú *h*ba-ak-ši-iš hu-ud-da
 OP *ima tya manā kartam Bāxtriyā*
- DE 1:⁵¹ *d*na-ap *d*ir-šá-ir-ra *d*u-ra-maš-da ak-ka *hi* *h*mu-ru-un
 be-iš-da
 OP *baga vazraka Auramazdā hya imām būmim adā*
 Bab. *DINGIR GAL-ú^d A-ḥu-ru-ma-az-da šá qa-q-ru a-ga-a id-din-nu*

⁴⁴‘Then he lied to his troops (lit., his troops then to them he lied).’

⁴⁵‘That Martiya who the great one of them is called him they seized him they slew.’

⁴⁶‘By the favor of Ahuramazda, I kingship of them do/exercise.’

⁴⁷ All the forms listed here except *hi* have been discussed under the appropriate case headings.

⁴⁸‘These lands (lit., lands these) which mine are called.’

⁴⁹‘Ahuramazda this kingship to me granted.’

⁵⁰‘This I in Bactria did.’

⁵¹‘A great god (is) Ahuramazda who this earth created.’

The coincidence in form between *hi* both as ‘here’-deixis personal singular and as ‘here’-deixis non-personal (with number undifferentiated) was one of the factors which masked the analysis of these pronominal forms. The recognition of this function of *hi* as ‘here’-deixis non-personal makes the parallelism between the three categories of third person pronouns (relative, ‘here’-deixis, ‘there’-deixis) complete.

7.2.4.7. ‘There’-deixis personal singular. – The stem is /*upi-*/ and occurs in the following forms:

Nominative:

(^v)*hu-pír-ri* /*upir* < *upi* + *r*/ ⁵²

Genitive:

hu-pír-ri-na /*upirna* < *upi* + *r* + *na*/

Allative:

hu-pír-ri-ik-ki

hu-pír-ri-ik-ka /*upiriki* < *upi* + *r* + *iki*/

- DB 31:⁵³ *ha-mi* ^v*pír-ru-mar-ti-iš* *hu-pír-ri* *ši-in-nu-ik*
 OP *avadā hauv Fravartiš . . . āiš*
 Bab. *^mPa-ar-ú-mar-ti-iš a-ga-šu-u*
- DB 64:⁵⁴ *^vruh^{lg}-ir-ra ti-tuk-ra* *hu-pír-ri* *a-nu in kán-ni-in-ti*
 OP *marti[ya hya] draujana ahātiy . . . avaiy mā dauštā*
 [biy]ā
 Bab. *LÚ šá ú-par-ra-šu . . . la ta- [. . .]*
- XV 3:⁵⁵ *ku-ud-da hi* ^h*iš-da-na* *hu-pír-ri* *še-ra-iš gi-iš-ša-*
ma-na
 OP *utā ima stānam hauv niyaštāya katanaiy*
 Bab. *ù a-ga-a šá-du-ú tē-e-mu [iš] -ta-kan a-na e-piš IGI-šú*
- DB 19:⁵⁶ *ša-u-mi-in* ^d*u-ra-[maš] -da-na* ^v*taš-šu-íp ap-pa*
^v*nu-ti-ut-be-ul* *hu-pír-ri-na* *ha-mi [hal-pi] -ya*
 OP [vašnā Aura] *mazdāhā karam tyam Naditabairahyā adam*
ajanam vasiy
 Bab. *ina GIŠ.MI šá ^dÚ-ri-mi-iz-da ú-qu ^mNi-din-tú-^dEN [. . .]*

7.2.4.8. ‘There’-deixis personal plural. – The stem form is /*upi-*/ just as in the singular and it occurs in the following forms:

⁵²Perhaps, the ‘substantive’ /-*r*/; cf. the plural /*upi+p*/ in next paragraph for /*r*/-*p*/ singular vs. plural.

⁵³‘There that Fravartiš came (lit., Fravartiš – that one).’

⁵⁴‘A man, a liar, (as for) him do not him befriend.’

⁵⁵‘And this column he ordered to carve (?).’

⁵⁶‘By the favor of Ahuramazda, the troops which of that Nidintu-Bēl (lit., which Nidintu-Bēl that one-of) there I slew.’

hu-pi-be /*upip* < *upi* + *p*/

hu-pi-be-na /*upipna* < *upi* + *p* + *na*/

DB 25:⁵⁷ *mi-te-iš* ^v*taš-šu-íp* ^v*ma-da-be* *ak-ka-be* ^v*ú-ni-na in-ni*
ti-ri-man-pi hu-pi-be hal-pi-iš

OP *paraitā avam kāram tyam Mādam jatā hya manā naiy*
gaubataiy

DB 36:⁵⁸ *sa-ap* ^v*taš-šu-íp* *hu-pi-be* ^v*mi-iš-da-áš-ba-ik-ki-ir*
pa-ri-íp me-ni ^v*mi-is-da-ás-ba* ^v*taš-šu-íp* *hu-pi-be*
i-da-ka sa-ak

OP *yaθā hāv kāra parārāsa abiy Vištāspam pasāva Vištāspa*
āyasatā avam kāram ašiyava

DB 59:⁵⁹ *va-ka-be* ^v*sunki-íp* *ir-pi-íp-pi* *ku-iš šā-be-íp*
hu-pi-be-na *hi-nu-ib-ba-ak in-ni hu-ud-da-ak sa-ap*
^v*ú* [^h*be-ul-ki-ma ša-u-mi-in*^d] *u-ra-maš-da-na hu-ud-da*

OP *tyaiy paruva xšūyaθ [iyā y] ātā āha avaišām avā naiy*
astiy kartam yaθā manā va [šnā] Auramazdāha hamahyāyā
θarda kartam

7.2.4.9. ‘There’-deixis non-personal. — The stem is /*upi*-/ as in the personal ‘there’-deixis forms, and occurs in the following forms:

hu-be

hu-ib-be

hu-uh-be

hu-be-ma

hu-be-ma-mar

hu-be-da

hu-be-te

The writing *hu-uh-be* in this case to express what occurs also as *hu-be* and *hu-ib-be* may be analogous to the spellings *ú-na-in* and *ú-na-ha-in* and *ir-da-ha-ši* (§ 3.7) where graphic *h* is not involved either etymologically or morphologically. The following contexts are pertinent:

DB 14:⁶⁰ *v*^{sunki-me ap-pa} ^vNUMUN^{lg} [^v*nu*]-*ka-mi-ik-[ki]-mar*
ku-ut-ka-la-ir-rak-ki hu-be ^v*ú tin-gi-ya*

OP *xšaçam tya hacā amāxam taumāyā parābartam āha ava*
adam patipadam akunavam

⁵⁷‘Go forth! the troops the Medians who mine (are) not called them slay!

⁵⁸‘After those troops (lit., troops they) reached Hystaspes, then Hystaspes, those troops with him, went.’

⁵⁹‘While (those) who kings formerly were (?), of them so long it was not done as I [in one year by the favor] of Ahuramazda did.’

⁶⁰‘The kingship which from our family had been taken away (?) that I brought back.’

- DE 1:⁶¹ *d^{na}-ap d^{ir}-šá-ir-ra d^u-ra-maš-da ak-ka hi h^{mu}-ru-un
be-iš-da ak-ka d^{ki}-ik-ka hu-be be-iš-da*
 OP *baga vazraka Auramazdā hya imām būmim adā hya avam
asmānam adā*
 Bab. DINGIR GAL -ú d^A-hu-ru-ma-az-da šá qaq-qa-ru a-ga-a
id-din-nu šá AN-e an-nu-tu id-din-nu

For the equivalence of *hu-ib-be* and *hu-be* we may note the following context which parallels DE 1 just quoted.

- XP a1: *d^{na}-ap ir-šá-ir-ra d^u-ra-maš-da ak-ka h^{mu}-ru-un hi
be-iš-da d^{ki}-ik hu-ib-be be-iš-da*

The form *hu-uh-be* is exemplified in the following:

- DB 56:⁶² *hi ap-pa h^{tup}-pi hi-ma tal-li-ik hu-uh-be u-ri-iš
a-nu ti-ut-ki-um-me EL-[man]-ti*
 OP *tya manā kartam varnavatam Ūvām mātya [drau]jīyāhy*
 DB 66:⁶³ *a-ak ku-ud da ap-pa hu-ut-tan-ti hu-uh-be d^u-ra-maš-da
ha-iš-ša-iš-ni*
 OP *utā tyā kunavāhy avataiy Auramazdā ucāram kunautuv*

7.3. Synoptic tables of pronouns. — The various pronominal stems may now be classified according to the following tables (the nominatives are quoted as representative). Since the first and second person forms cannot have ‘non-personal’ forms, they will be listed separately.

		Sing.	Plur.
	1st	/u/	/nuku/
	2d	/nu/	...
Third person and relative			
		Personal	Non-personal
‘here’-d.	Sing.	{ /i/ }	/i/
	Plur.	{ /api/ }	
‘there’-d.	Sing.	{ /upir/ }	/upi/
	Plur.	{ /upip/ }	
relative	Sing.	{ /aka/ }	/apa/
	Plur.	{ /akap/ }	

⁶¹ ‘A great god (is) Ahuramazda who this earth created who that heaven created.’

⁶² ‘This which in this inscription was written that believe! you shall not a lie think (it)!’

⁶³ ‘And also what you will do, that may Ahuramazda make great.’

8

INDECLINABLES

8.0. General. — The third formal division of RAE grammar represents a semantically elusive group of forms. Perhaps these forms, which do not participate in nominal or verbal flexion, will be the last category of RAE that can ever be satisfactorily understood in detail. These indeclinables or relational particles are generally translated by means of conjunctions and adverbs. The following lists contain all the indeclinables thus far found.

8.1. Copulas.

8.1.1. *a-ak* *a-ak* ‘and;’ occurs very frequently both as the introduction of a phrase and in a series of nouns and phrases. In one case, DB 42, it was erroneously written between the nominal subject and the nominal object: *^vtaš-šū-īp ap-pa ^vú-ni-na a-ak ^vtaš-šū-īp ap-pa ^vmi-iš-[da-ad]-da-na hal-pi-iš ir-[še-ik-ki]* ‘the troops which mine (subj.) the troops which Vahyazdāta’s (obj.) slew greatly.’

This form corresponds in general to OP *utā* and to Bab. *u, ù, -ma*. It occurs thus far only in texts ascribed to Darius.

8.1.2. *ku-ud-da*, *ku-ud-da* ‘and’; occurs not as frequently as *a-ak*. It seems to be a stronger copula than *a-ak*, though the exact difference between the two is difficult to determine. *a-ak* is used to introduce the formulaic phrase *a-ak NN sunki na-an-ri*, but *ku-ud-da* does not. *ku-ud-da* also corresponds to OP *utā* and to Bab. *u, ù, -ma*.

8.1.3. *a-ak ku-ud-da*, *a-ak ku-ud-da* ‘and also;’ corresponds to OP *utā*. The order is never reversed.

8.2. Negatives.

8.2.1. *in-ni*. This form is spelled once *in-na* (DB 13). It is used with both nouns and verbs, and indicates declarative negation. The OP equivalent is *naiy*.

8.2.2. *a-nu*. Twice in the text A2Sa it is spelled *an-nu*, and it is only used with second person future verb forms in a prohibitive sense corresponding to OP *mā*.

8.3. Temporal forms.

8.3.1. *am*, *am* ‘now.’ This form occurs only once, DB 60, and corresponds to OP *nūram*.

8.3.2. *ha-me-ir*, *ha-me-ir* ‘then’ occurs only in DB 23, 25, 68 and corresponds to OP *adakaiy*.

8.3.3. sa-ap. This form occurs both alone and in combination with other particles. When alone, it generally is equivalent to OP *yaθā*; but twice it corresponds to OP *yāvā* (DB 65, 66) and once (XPh42) it has no OP equivalent. The Bab. version generally has no corresponding form for *sa-ap*, but the following three equivalents have been noted: *al-la ša* (DB 16), *ár-ki šá* (DB 36), *ki* (DNa4).

8.3.3.1. me-ni sa-ap. (Cf. § 5.4.13 below, *me-ni* = OP *pasāva*.) This combination occurs once, DB 10, where the OP has *pasāva yaθā* and the Bab. *ár-ki šá*.

8.3.3.2. sa-ap ap-pa. — DB 57 is the only occurrence of this combination; OP has *yaθā*, and Bab. is destroyed. The *ap-pa* in these combinations may somehow be related to the non-personal relative *ap-pa* but the relationship is unclear.

8.3.3.3. sa-ap ap-pa-an-ka. *sa-ap ap-pa-an-ka* occurs in still more complex combinations as follows:

(a) *sa-ap ap-pa-an-ka ap-pu-ka* (DB 15). It is interesting to note that the context in which this combination of particles occurs is illustrative of the fact that the various versions of these texts are not always literal translations, but sometimes loose paraphrases.

DB 15: *hi ap-pa* ^v[*ú-ik-ki-mar*] *hu-ud-da-ak sa-ap ap-pa-an-ka*
ap-pu-ka ^v*sunki-me mar-ri-ya*

‘this (is) what by me was done, when before the kingship I took.’

OP *ima tya adam akunavam pasāva yaθā xšāyaθiya abavam*

‘this is what I did, after that I became king.’

(b) The OP expression *yaθā paruvamciy avaθā* ‘as before, so’ is used three times in DB 14. The RAE counterparts are, in order: *hi-ši-la sa-ap ap-pa-an-ka ap-pu-ka-da*, *sa-ap ap-pa-an-ka ap-pu-ka-da hi-ši-la*, and [*hi-ši-la sa*]-*ap ap-pu-ka-da*. (For *ap-pu-ka-da* = OP *paruvamciy*, cf. § 5.6 end). Thus, both *sa-ap* alone and *sa-ap ap-pa-an-ka* equal OP *yaθā*. (For *hi-ši-la* = OP *avaθā*, cf. § 8.3.7 below).

8.3.3.4. sa-ap ap-pa-na-ka. *sa-ap ap-pa-na-ka* occurs only in DB 63, DS i, DS j and equals OP *yaθā*. This identity of the OP rendering suggests that both spellings *ap-pa-an-ka* and *ap-pa-na-ka* stand for /*apanka*/ and that *an-ka* and *na-ka* should be attached to the preceding *ap-pa*. However, *an-ka* occurs alone in one passage (DB 60) *a-ak an-ka li-ul-mín hi in-ni tar-ti-in-ti* = OP *yadiy imām hadugām naiy [a]pa[gau]da[yāh]y*. This would certainly suggest that *an-ka* is a separate element; however, the uniqueness of this example and the occurrence of *na-ka* where certainly *an-ka* is expected seem to be indicative of a close nexus of *an-ka* with the preceding particle. Furthermore, the attachment of *an-ka* to the *ap-pa* which precedes it helps remove

this use of *ap-pa* for the time being from confusion with the relative pronoun to which it may be related.

This formulation of the relationship of these elements, it must be emphasized, is only tentative.

8.3.4. *ap-pa-an-ka. ap-pa-an-ka* (DB 8) = OP *yaθā*.

8.3.5. *ši-la. ši-la* 'as' (?) DB 66, in the expression *sa-ap in-nu-ip-pād-da ši-la ku-uk-da-in-da* 'so long-at-all as you will preserve (it)' (=OP *utātaiy yāvā taumā [ahatiy]* 'as long as unto thee there is strength).'

8.3.6. *ši-la-an-ka. ši-la-an-ka* (DNa4) = OP *yadipatiy*, Bab. *ki-i*.

8.3.7. *hi-ši-la. hi-ši-la* (passim). This form occurs only in Darius texts. Once, DB 11, it corresponds to OP *yadiy* 'if;' elsewhere, OP has *avaθā* 'then, as follows.'

8.3.7.1. *hi-ši-la sa-ap. hi-ši-la sa-ap* (DPf2). The OP version shows no equivalent.

8.3.7.2. *hi-ši-la sa-ap ap-pa-an-ka. hi-ši-la sa-ap ap-pa-an-ka* (DB 14). Cf. above, § 5.4.3.3 b.

8.3.8. *ku-iš. ku-iš* 'until, while, up to.' In general, this form is equivalent to OP *yātā* and has a temporal meaning. Bab. shows *a-di muḫ, a-di-i muḫ-ḫi, a-di muḫ-ḫi, ina muḫ-ḫi*. In the Darius Hamadan text, a spatial meaning is intended, 'up to, as far as,' corresponding to OP *yātā ā*.

8.3.9. *me-iš-ši-in. me-iš-ši-in* 'later, afterwards' (DB 55, 56, 58, [64], 65, 69) corresponds to OP *aparam* in every case. Only in DB 64 does the Bab. version have an equivalent, *ār-ki-iā*.

8.3.10. *me-šā-me-ra-ka. me-šā-me-ra-ka* (DNa3; XPh12) = OP *apataram*, Bab. *e-lat* 'in addition to.' XPh12 *me-šā-me-ra-ka ha-iš-sa* = OP *apataram hacā* with the RAE version showing the OP word *hacā*.

8.3.11. *me-šā-me-ra-ka-da. me-šā-me-ra-ka-da* (cf. *ma-ad-da* § 8.3.13). This form shows the 'generalizing' /-ta/ particle, and is probably a derived form to *me-šā-me-ra-ka*.

8.3.12. *maš-šā-an-ka. maš-šā-an-ka* occurs only once (XPh39) in the following context:

XPh39: ¹	<i>ʷnu ak-ka-ya maš-šā-an-ka EL-man-da šā-da ha-nu ka-tuk-da</i>
OP	<i>tuva kā hya apara yadimaniyāiy šiyāta ahaniy jīva</i>
Bab.	<i>at-ta man-nu šā ār-ki-i ki-i ta-qa-bu-ú um-ma dum-qí ina ba-la-ṭu-ia lu-mu-ur</i>

8.3.13. *ma-ad-da. ma-ad-da* occurs only in XPb14 in correlation with *me-šā-me-ra-ka-da*. The context is as follows:

¹'You who hereafter thus will think, "Blessed am I (when) living."'

XPb14:² *q̄p-pa* ^{vú} *hu-ud-da-ra* ^h*ma-ad-da* *ku-ud-da ap-pa*
^h*me-šá-me-ra-ka-da* *hu-ud-da-ra hu-be mar-ri-da*
sa-u-mi-in ^d*u-ra-maš-da-na hu-ud-da*
 OP *tya manā kartam idā utā tyamaiy apataram kartam ava*
visam vašnā Auramazdāha akumavam

The Bab. version does not express this phrase. The parallelism between OP *idā* . . . *apataram* and RAE ^h*ma-ad-da* . . . ^h*me-šá-me-ra-ka-da* is obvious. The use of the horizontal place determinatives specifies the local or spatial meaning of these *hapax legomena* which should mean something like 'here-close-by . . . there-far-off.' The relationship between the forms *me-šá-me-ra-ka*, *me-šá-me-ra-ka-da* and of these with *me-iš-ši-in* and *maš-šá-an-ka* seems certain. The latter two, however, have a temporal connotation as opposed to the spatial reference of the former pair.

One additional form related to this group but partially restored is ^h*me-šá-ka-rak(?)*-ka.³ It occurs in the difficult text A2Sa and corresponds to OP *abyapara* 'later, afterwards.'

8.3.14. *me-ni*. *me-ni* 'then' (passim). *me-ni sa-ap* (DB 10), OP *pasāva yaθā*, Bab. *ār-ki šá*. In general, *me-ni* or *a-ak me-ni* corresponds to OP *pasāva* and to Bab. *arki*. The forms *sa-ap* . . . *me-ni* correspond to OP *yaθā* . . . *pasāva* (passim). In one case (DB 17), *me-ni* has no OP equivalent: *me-ni* ^{vú} *ir hal-pi* 'then I him slew' = OP *adamšim avājanam*, Bab. *u ana-ku ad-du-uk-šú*.

8.3.15. *ha-mi*. *ha-mi* = OP *avadā* 'there.' This form is included here because of its correspondence to the OP form but it cannot in reality be admitted as an indeclinable since it occurs in the case form *ha-mi-mar* 'from there' and must be considered a 'nominal' form. *ha-mi* may, however, also be related to *ha-me-ir* = OP *adakaiy*, to which must also be compared *hu-pi-me-ir* (DNa4 bis). The latter occurs in the expression *hu-pi-me-ir tur-na-in-ti* (= OP *adataiy azdā*, Bab. *inaUD-mu-šu-ma im-nin-da-ak-ka*). *hu-pi-me-ir* seems to be related to the 'there'-deixis pronominal stem /*upi*-, and the element *-me-ir* of both *hu-pi-me-ir* and *ha-me-ir* would then appear to be the same. Likewise, the *-mi* of *ha-mi* may perhaps be considered equivalent to the /*-mi*/ of *-me-ir* /*-mir*/ so that the element *-me-ir* /*-mir*/ could be analyzed as /*-mi-r*/ with *ha-me-ir* a derived form of some sort to *ha-mi*. What the exact connotation of these particular suffix elements actually is remains a problem, even though *ha-mi* and *ha-me-ir* seem to mean clearly 'then, thereupon.'

8.3.16. *šá-áš-šá*, *šá-áš-šá-da*, *šá-áš-šá* (DB 13) = OP *paranam*;

² 'What I did here and what there I did that all by the favor of Ahuramazda I did.'

³ Weissbach, *Die Keilinschriften der Achämeniden*, p. 122; the restoration by F. Bork, "Elamische Studien," *Mitteilungen der Altorientalischen Gesellschaft*, VII, No. 3 (1933), 4 f. to *me-ša-m-mir(?)*-ka [sic] with the meaning 'zu der Zeit (des)' is not helpful. The meaning suggested is difficult to associate with the remaining forms which seem to mean 'later, hereafter,' and the like.

šá-iš-šá (DB 70), no equivalent. šá-áš-šá-da (DB 3 bis; DBa3 bis)
= OP *hacā paruviyata*, Bab. *ul-tu AD-tú* (DB 3 only).

8.3.17. *tu-ba-ka*, *tu-ba-ka* ‘concerning’ (?), only in DB 13.

DB 13:⁴ *a-ak^v ak-ka-ri áš-ki^v kam-ma-ad-da^v ma-ku-iš tu-ba-ka*
in-ni li-ul-ma-ak ku-iš^v ú ši-in-nu gi-ut
OP *kašciy naiy adaršnauš cišciy θastanaiy pariya Gaumātam*
tyam magum yātā adam arasam
Bab. *man-ma ul i-šal-lim-ma ina muḫ-ḫi [...]*

8.3.18. *am-mín-nu*. *am-mín-nu* (DB 12, 70). The meaning of this form is unknown, there being no equivalents in either OP or Bab.

8.3.19. *ka-ra-da-la-ri*. *ka-ra-da-la-ri* (DB 3 bis; DBa3 bis). This form occurs together with šá-áš-šá-da in each of its occurrences, but its analysis and meaning are unknown.

8.4. Auxiliary particles. — There occur also some forms here termed ‘auxiliary particles’ which are used in a verb modifying manner. They occur both immediately preceding and separated from the verb forms with which they are used. Their exact meanings are difficult to establish, and their seeming lack of flexion is the reason for their inclusion at this point. These forms are: *te-ib-ba*, *te-iḫ-ba*, *ti-ib-be*; *li-ip-pu*; *li-lu*.

DB 25:⁵ *me-ni^v ú^v taš-šu-íp^v ma-da-be-ik-ki ti-ib-be da-ah*
OP *pasāva adam kāram frāiša [yam]*
Bab. *ár-ki ana-ku ú-qu al-ta-par*

The form *ti-ib-be* also occurs discontinuously to the verb with which it is connected:

DB 29:⁶ *hu-pír-ri^v ú^v ti-ib-be^v har-mi-nu-ya-íp-ik-ki da-ah*
OP *avam adam frūisayam Arminam*

For the use of *li-lu* and *li-ip-pu*, cf. § 5.10.7.2.

The classification of these forms as ‘auxiliary particles’ is tentative.

⁴‘And someone something concerning (?) Gaumata the Magian did not dare (?) until I came.’

⁵‘Then I the troops to the Medians sent forth (?).’

⁶‘Him I forth (?) to the Armenians sent.’

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Abbreviations:

- JAOS Journal of the American Oriental Society
JCS Journal of Cuneiform Studies
JNES Journal of Near Eastern Studies
OLZ Orientalistische Literaturzeitung
RA Revue d'Assyriologie
WZKM Wiener Zeitschrift für die Kunde des Morgenlandes
ZA Zeitschrift für Assyriologie
ZDMG Zeitschrift der Deutschen Morgenländischen Gesellschaft

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