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SIMPLE THEMATIC IMPERFECTIVES IN ANATOLIAN AND INDO-EUROPEAN

Yale University

PH.D.

1985

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**SIMPLE THEMATIC IMPERFECTIVES IN ANATOLIAN AND
INDO-EUROPEAN**

A Dissertation

Presented to the Faculty of the Graduate School

of

Yale University

in Candidacy for the Degree of

Doctor of Philosophy

by

Alexander Lehrman

May 1985

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ABSTRACT

SIMPLE THEMATIC IMPERFECTIVES IN ANATOLIAN AND INDO-EUROPEAN

Alexander Lehrman

Yale University

1985

This dissertation investigates the possibly thematic verb stems of the Anatolian branch of Indo-European. The aim of the investigation is to determine whether Anatolian had a simple thematic class of verb stems comparable with the class of simple thematic imperfectives of Indo-European.

The central two chapters contain attestations of all possibly thematic verb stems of Anatolian, accompanied by discussion of their morphology and derivation. Forms have been collected from Hittite texts identified by their ductus as Old and Middle (Chapter II) and from texts in Palaic, Cuneiform and Hieroglyphic Luwian, Lycian A and Lydian (Chapter III).

Conclusions of the investigation are presented in Chapter IV. The investigation has shown that Anatolian has no simple thematic stems cognate with those of (extra-Anatolian) Indo-European, while it has cognates of Indo-

European *-ye-stems (primary, deverbative and denominative), *-ské-stems (deverbative) and *-éye-stems (transitive deverbatives). The only two Indo-European simple verb stems the roots of which have unambiguous Anatolian cognate counterparts, namely *(x')érs- 'flow' (Ved. árs-a-ti : Hom. érr-e-i 'goes away') : Hittite /ars/- (/arsṭi/ 'flows') and *xwés- 'dwell' (Ved. vás-a-ti : Goth. wis-i-p 'is') : Hitt. /hwes/- (/hwesti/ 'lives'), build their finite forms in Anatolian without any suffix (i.e. belong to the root, not simple thematic, class of imperfectives).

The absence of simple thematic verb stems in Anatolian as opposed to their presence in extra-Anatolian Indo-European, is interpreted to indicate that the class is an innovation shared by all extra-Anatolian Indo-European languages against Anatolian. In accordance with the classic principle of shared innovations as the criterion in subgrouping, this inference is taken as an argument in favor of the so-called Indo-Hittite hypothesis.

ACKNOWLEDGMENTS

My most profound gratitude goes to my teacher and advisor, Professor Warren C. Cowgill, for generously making available to me the immense resources of his knowledge, for the piercing clarity of his thought and for the inspiration of his unfailing good sense; for reading the numerous drafts of the various parts of my opus so patiently and carefully, and returning them promptly with ample and insightful comments. Without him, this dissertation would not be what it is.

I would also like to thank Professor Gary Beckman for his expert philological and bibliographical advice and numerous helpful comments and suggestions on an earlier draft of the crucial Chapter II; and, in general, for his good will.

I am deeply grateful to Professor Vitalij Sheveroshkin for his guidance, caring and encouragement over many years and two continents.

My heartfelt thanks go to Ulla Kasten, Museum Editor of Yale's Babylonian Collection, for her generous help and friendship.

Special thanks are due to my former fellow students Janet Gertz and Leon Serafim, for all our discussions and for

caring; to the Administaro Estraro de la Novjorka Oficejo de
Universala Esperanto-Asocio where I worked at the time, for
granting me a leave of absence in March 1984, which enabled
me to complete a first draft of the text.

And most of all, I want to thank ("spaseibŭ!") my
Polabian sister, Dr. Nasus Trema, for inspiration; this
work would be left unfinished,

"ma giàolgeva il mio disio e 'l velle,
sì come rota ch'igualmente è mossa,
l'amor che move il sol e l'altre stelle".

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Chapter I

INTRODUCTION

The aim of this dissertation is to determine whether Anatolian possessed a cognate counterpart of the morpholexical class of simple thematic presents, the very numerous verb class of the non-Anatolian Indo-European branches (to which I will further refer as I(ndo)-E(uropean) P(roper), to borrow the term from Cowgill 1979 : 25). This class is characterized by the addition of the vowel *-e- alternating with *-o- to the accented root in the e-grade (cf. e.g. Ved. ájati : ájanti, Hom. ágai : ágousi, Lat. agít : agunt, etc., from PIEP *xeg'-e-ti : *xeg'-o-nti). The simple thematic class belongs to the set of morpholexical verb classes of Indo-European, the stem-forming suffixes of which end in the so-called "thematic" vowel *-e- : *-o-, such as the suffixes *-yé-, *-sk'é-, and *-éye-. The suffixes which do not end in this vowel are called athematic (cf. suffixes such as *-néw- : *-nu-, *-s-, zero).

Opinions on this question are divided. W. Cowgill does not find in Anatolian any forms that clearly qualify as continuing simple thematic presents, while leaving the matter very open (see e.g. Cowgill 1979 : 33, footnote 21).

C. Watkins believes that active simple thematic mi-conjugation forms are not found in Hittite, while there are simple thematic mediopassive and hhi-conjugation forms (e.g. Watkins 1969 : 69). Other scholars, however, believe they have found inherited active simple thematic verb forms in Hittite; such is the view of Benveniste 1962 : 38 f. on Hitt. nehutazzi 'takes away' and úwatezzi 'brings hither', which he etymologizes with Lith. vedù 'I lead'. This view of E. Benveniste is virtually identical with that of Pedersen 1938 : 131, q.v. K. Hoffmann interprets Hitt. lukkizzi 'sets alight' as a continuation of PIE *lók-e-ti (Hoffmann 1968). N. Oettinger, building on K. Hoffmann's ideas, finds in Hittite an entire simple thematic class of verbs, both active and mediopassive, which in his view continues not just the simple thematic formation of the type described above, but also a second one which is typified by the Sanskrit 6th (tudāti) class (Oettinger 1979 : 258 passim; this latter view is discussed in detail in Chapter IV of this dissertation). In view of this division of opinions among scholars, it seemed to me useful to take a fresh look at the problem.

Before one can compare IEP with Anatolian, the pertinent data of each Anatolian language have to be sorted out and adequately described. Possible cognates would then be matched, compared, and Proto-Anatolian forms reconstructed where possible. Then one can proceed to match

possible Anatolian cognates against their IEP counterparts and draw reconstructive inferences. Such is the standard procedure leading to reconstruction of parent forms. When dealing with Anatolian languages, however, numerous difficulties arise, due to scant attestation and insufficient knowledge of most of the Anatolian languages.

Among these, Hittite is by far the most copiously attested and best understood. The rather recent attention to philological detail (as against comparative attempts which had begun before there were sufficient data to describe the language) has resulted in the periodization of Hittite texts into O(ld) H(ittite) (17th - 16th century B. C., with some words and proper names attested from the 18th century), M(iddle) H(ittite) (15th century B. C.) and L(ate) H(ittite) (14th - 13th century B. C.). The Hittite corpus consists of thousands of texts dealing with a variety of topics.

In contrast, Palaic, a northern Anatolian language, the texts in which date from the 17th and 16th century B. C., is attested and understood very poorly: only a dozen brief texts of ritual content have survived. There is very little agreement as to the interpretation of forms crucial for the present dissertation (see Chapter III in detail).

C(uneiform) L(uwian) was current in south central Anatolia. Its attestations come from the LH period, and most of them are set within Hittite contexts. They include

texts of predominantly ritual and mythological nature, as well as isolated words in Hittite texts, often marked by the special sign known as Glossenkeil ("gloss wedge"). About 1000 Cuneiform Luwian words are known, many of them semantically opaque. Hittite, Palaic and Cuneiform Luwian used a variant of the Sumero-Akkadian cuneiform syllabary.

H(ieroglyphic) L(uwian) (previously inaccurately called "Hieroglyphic Hittite") is attested in approximately 300 inscriptions incised in stone, found in south central Anatolia and northern Syria, as well as a few letters on lead strips; most of these texts date from the 10th to the 8th century B. C. There are also some older inscriptions, primarily on seals, the contents of which are very poorly understood. The script seems to be indigenous and, although some of the signs are elaborately pictorial in appearance, it is actually logosyllabic. HL is understood a great deal better today than it was just ten years ago, largely due to efforts of J. D. Hawkins and A. Morpurgo Davies, yet numerous difficulties, posed by problems of interpretation, remain.

Lyc(ian) is attested in two forms, A and B. The latter, known from two texts only, is sometimes referred to as Milyan. The former is a little better understood. Lycian texts date from the 6th through the 4th century B. C.. The texts, written in an epichoric alphabet, come from south-western Anatolia. Most of them are tomb inscriptions,

rather brief and monotonous in content (as is to be expected from the genre), and the few longer texts that have survived (such as Friedrich 1932 No. 44 or the Xanthos trilingual, Neumann 1979 N 320) are still less than well understood.

The last three languages mentioned, namely CL, HL and Lyc., are closely related and constitute the Luwian subbranch of the Anatolian branch (see e.g. Oettinger 1978).

Lyd(ian), the third first millennium language, is attested from approximately 100 texts found in western Anatolia, which are written in an epichoric alphabet and, like Lycian, are mostly grave inscriptions. Lydian texts are dated from the 7th to the 4th century B. C.

Other (possibly) Anatolian languages such as Carian, are so poorly known as to be virtually useless for the purpose of this study.

Subgrouping within the Anatolian branch, with the exception of the Luwian subbranch mentioned above, remains problematic due to insufficient knowledge of the individual languages (see Oettinger 1978 for an attempt to work out a schema of the intra-Anatolian subgrouping). In view of the above, it is not surprising (however regrettable) that the language primarily used in this study is Hittite, with its wealth of data and well-traceable internal history. Data of the other Anatolian languages were used insofar as they were available and only where convincing interpretations had been or could be provided (usually, however, through comparison with Hittite).

In turn, the bulk of the Hittite data used in the dissertation comes from the Old and Middle Hittite periods, due to the fact that the texts which come from these periods, especially the former, exhibit an older state of the language, as against the Late period by which the language had clearly undergone a number of developments resulting in demonstrable innovations. These are discussed, case by case, in Chapter II and *passim*.

In each of the periods subsequent to Old Hittite, copies of earlier texts were made by Hittite scribes and students, for the various obvious reasons that spring to mind. Thus, copies of texts dating from the Old period were made during the Middle and the Late periods, and texts originally written during the Middle period were copied in the Late period. I employ the asterisk following the capitals showing the date of a text or a form to indicate the number of periods by which the copy is removed from the original. Thus, "OH*" stands for "Middle Hittite copy of an Old Hittite text" (since the Middle period is once removed from the Old); "OH**", "Late Hittite copy of a Middle Hittite text"; a Late Hittite copy of a Middle Hittite original will be indicated by "MH*" (since the Late period is once removed from the Middle). In certain cases, datings "late OH", "early LH", and the like are also found.

A discussion of the criteria used in my analysis of the Hittite data is in order. The choice of data is determined

by the purpose of the study as stated in the first paragraph of the Introduction. Simple thematic presents (or, more precisely, imperfectives) of PIEP represent a morpholexical class formally characterized by the suffix *-e- in morphophonemic alternation with *-o- as the class exponent of the imperfective noeme of PIEP combined with endings (exponents of the noemes of voice, tense, number and person) such as active preterite singular 3rd person *-t, middle *-to, active present *-t-i, middle *-to-r, and their paradigms. The choice of a particular exponent of the imperfective noeme depends on the verb root. Thus, the root *xag'- 'lead'/'drive' must be followed by the imperfective morpheme *-e-, whereas the root *x'es- 'be' must be followed by the imperfective morpheme *-o-, the root *yewg- 'harness' must combine with the imperfective morpheme *-né- infixes after the syllabic peak of the root (in addition to some other morphophonemic rules which also apply), etc. The relations which exist between consecutive morphemes of words are not merely those of linear order, but rather those of dependency. Thus, in PIEP, the choice of a morpholexical exponent of the imperfective noeme depends on (= is determined by) the choice of the root morpheme, and the choice of a morpholexical exponent of the noemes of person, number and voice depends on (= is determined by) the choice of the suffix (i.e. the exponent of the imperfective noeme).

More generally, in PIEP, the choice of a morpheme following the root depends on the choice of the preceding morpheme. To determine whether a morpholexical class, found in language A, has a cognate in (the related) language B, and then to reconstruct this class for the parent language of A and B, one has to demonstrate not only that particular elements which make up the class in A correspond, by regular phonetic correspondences, to cognate elements in B (e.g. Ved. *aj-* corresponds to Hom. *ag-*, etc.; Ved. *-a-* corresponds to Hom. *-e-*, etc.), but that the dependencies which hold between these consecutive elements in A hold between them in B as well (for instance, Ved. *aj-* determines the choice of the imperfective morpheme *-a-* [not e.g. *-ná-* or *-yá-*]; likewise, Hom. *ág-* determines the choice of *-e-* [not *-nu-* or **-ie-*, etc.]). It is the matching of relations and dependencies among elements, not just elements themselves, which, on the level of morphology, leads to reconstructions of whole words of the protolanguage, rather than isolated bits and pieces; the reconstruction of relations among morphemes results in setting up morphological classes, such as "simple thematic", **-ye-*, **-ne-* infixing, **-new-*, etc. imperfectives, "perfects", aorists and the like (obviously, the same methodological requirements apply to nouns, etc.). Differences among cognate languages in the distribution of elements and the historical character of these differences (namely, loss,

creation and retention), so important for reconstruction and subgrouping, can be adequately evaluated only if the study focuses on such relations. (These, in fact, have been the principles underlying most of the effective and stimulating work in the field.) Therefore, in determining whether the morphological class of simple thematic imperfectives has a cognate counterpart in Anatolian, it is important not only to find in the latter, by applying regular phonetic correspondences, a verb stem-forming suffix which corresponds to the PIEP *-e- : *-e-, but, if and once it is found, also to demonstrate that the structural functions of this suffix in Anatolian (i. e. its dependencies) correspond to those established for PIEP.

To put it somewhat differently, one must establish that, in Anatolian, either one or more cognates of roots which determine the choice of this imperfective morpheme in PIEP are found and determine the choice of the cognate suffix (strong case); or one must establish that the elements which determine the choice of the cognate suffix conform to structural constraints which define the shape of PIEP roots participating in this construction (weak case). While the strong case is obviously preferable, the weak case is also acceptable, assuming that lexical morphemes are more likely to be lost or created than grammatical ones (which assumption merits more investigation than it has been accorded so far). If, however, these methodological

principles are not adhered to, then talking about finding or not finding a particular morpholexical class of the parent language in a daughter language (which is how the aim of this dissertation is formulated), in my view, makes little sense.

As a consequence, the outlined principles help delimit the scope of the study. Thus, the entire hhi-conjugation (characterized by a special set of endings, distinct from both the active and the mediopassive ending sets, and a special set of roots and suffixes in the characteristic shape, which determine the selection of these endings) is automatically excluded from consideration because there is no useful sense in which any of the classes belonging to this morpholexical type can be said to be genetically related to thematic (simple or any other) imperfectives of Indo-European, by virtue of the obvious absence of similarity of the elements and their dependencies in the former to those in the latter (Risch 1975 : 250 ff. and Cowgill 1975 and 1979 on the nature of the genetic relationship of the PIEP perfect and the Hittite hhi-conjugation.¹)

The aim of this dissertation as stated above is subordinate to the more complex task of explaining the origin of the PIEP simple thematic class, which, I hope, the present attempt will help fulfill.

¹ The view that the Hittite hhi-conjugation continues Proto-Indo-European *-eye-causatives (Eichner 1975 : 97 f., Oettinger 1979 : 304 ff.) seems to me extremely dubious.

Since the most coherent evidence comes from Hittite, in what follows I will briefly describe the procedures used in collecting and interpreting Hittite data. The search for the cognates of Proto-Indo-European simple thematic presents in Hittite must begin where these conceivably can be found, namely, among the vocalic stems of the *mi*-conjugation. Assuming that the cuneiform writing system of Hittite is plausibly interpreted and that phonetic correspondences of Hittite and IEP are established in sufficient detail, one may proceed to identify and classify members of the vocalic stem group. Stems are obtained by subtracting endings from finite verb forms. The obtained entity is then identified by its final vowel which is likely to correspond to the PIEP thematic vowel (this rules out Hittite *-nu*-stems < IEP **-néw-* : **-nu-*), and the immediately preceding segment (or segments, as in the case of the easily recognizable suffix *+š-ki(-e)+* : *+š-ka+ / +š-ga+ < *-sk'e- : *-sk'o-*). Verbs having identical stems identified by this procedure are then grouped together.

Chapter II contains a description of the possibly thematic vocalic stems of Hittite based on the procedures outlined above, with paradigms consisting of attested forms, and discussion of attestations. The same procedure is repeated, *mutatis mutandis*, for the other Anatolian languages in Chapter III. All the forms of Hittite and other Anatolian languages are taken from published texts.

Datings of Hittite forms in my dissertation are based on those of the Chicago Hittite Dictionary and were made available to me courtesy of Professor Gary Beckman (Yale). Chapter IV contains a discussion of the simple thematic imperfective class of PIEP, its structure and relations to other formations, and presents conclusions of the study.

Chapter II

VOCALIC (POSSIBLY THEMATIC) VERB STEMS OF HITTITE

2.1 THE HITTITE WRITING SYSTEM AND ITS TRANSLITERATION

It seems useful to preface the description of the Hittite vocalic verb stems with a brief account of the Hittite writing system and its transliteration as used in this dissertation, as well as some observations on Hittite morphophonemics and references to sound correspondences between Hittite and Indo-European, insofar as they are clear to me and seem relevant to the discussion.

1. Hittite uses a variety of the Akkadian cuneiform, which the Akkadians borrowed from the Sumerians (who may or may not be its inventors). In this logosyllabic system, many words are written, wholly or in part, with logograms. Hittite has two kinds of logograms: Sumerian and Akkadian. Sumerian logograms are transliterated with capitals, e.g. LUGAL 'king', SAL 'woman', KUR 'country'. Some Sumerian logograms consist of more than one sign; in transliteration, signs in such composite logograms are joined by points, e.g. ANŠU.KUR.RA 'horse' (literally "donkey of the mountains"), SAL.LUGAL 'queen' (lit. "woman king"). Akkadian logograms are transliterated with

underscored capitals; signs within one word are joined by hyphens, e.g. A-BU-IA 'my father', IS-BAT 'he/she seized'. Syllabic signs used to represent the phonetics of Hittite words proper are also joined by hyphens but transliterated with lowercase letters.

2. The same phonetic value may be expressed by more than one sign (homophony). In such cases, signs receive numerical indices (subscribed to the right of the transliteration) which, at least in principle, reflect the frequency with which a given sign is used in this value, except that the most frequently used sign (frequency 1) is not marked and signs with frequency 2 and 3 are marked with the acute and grave accent respectively; instead of the subscript 2 and 3. E. g.: u (= u₁), ú (= u₂), ù (= u₃), L^ú (= LU₂) 'man', NA₄ 'stone', BA.UG₆ '(he/she) died', k^{án} (= kan₂), etc. The indexing of cuneiform signs in the transliteration of Hittite depends on the tradition of transliteration established for the Sumer-Akkadian cuneiform. For this reason, although e.g. kán is the only sign with this value used in Hittite (kan is never used), it is nonetheless transliterated with the acute, as shown above.

3. The Roman letters used to transliterate phonetic (as against logographic) spellings of Hittite words are as follows: p, t/d, k/g/q, z, š, h, m, n, l, r, w, i, u, e, a.

4. Rather than introduce normalized transcription (such as used in HW¹, HW² and HE²), convenient for marking morph boundaries and other analytic devices, but inadequate for rendering cuneiform writings unambiguously, I use non-normalized transliteration and punctuate it, when necessary, with special signs such as the plus (+), which indicates morph boundary, and the equal sign (=), which signifies any (even arbitrary) segmentation. E.g. ú+i+z-zí 'comes', where ú-i-z-zí is the attested writing, while the plusses show morphological boundaries between the preverb ú+, the root +i+ and the ending +z-zí; "=h-h= in ta-e-eh-há" is an example of the use of the second sign.

5. The signs which render the phonetics of Hittite words represent the following four types of syllables: (1) V, (2) CV, (3) VC, (4) CVC (where V = vowel, C = consonant). There are five signs of type (1), viz. i, u, ú, e, a. The contrast of u and ú is the only case where an accent mark is of relevance to Hittite. (As we have seen, accent marks in transliteration have nothing to do with the Hittite accent.) The latter (ú), at least in pre-LH texts, represents the vowel which is the ablaut alternant (zero grade) of an u-diphthong, e.g. a-uš-zí 'sees' : ú-me-ni 'we see', ú-wa-an-zí 'they see', where the vowel in the zero grade is written with ú, against e.g. u-uh-hi 'I see', u-uh-hu-u 'I saw', where the vowel monophthongized from a-u= before =h-h= is spelled with u (cf. a-uš-ta 'has seen', where a-u=

remains, and the parallel pattern =a-a-i : =e-e= in da-a-i 'puts, places' : te-a-eh-há 'I place'). Signs of shapes other than V do not give any evidence for the contrast expressed by u vs. ú.

6. Many signs of types (2) and (3) are ambiguous with regard to the contrast between the sounds represented, respectively, by i and e. Type (2) signs where V = e (contrasting with those with the identical consonants where V = i) are: te, zâ, šâ, há, me, ne, type (3): en, al, aš, aš₁₄. The only CeC sign is meš (contrasting with miš). This means that the vowel of ní, ki, gi,² li, ri, vi, in, it, ik, iz, im and ir (and of all the CiC signs except miš) can be either [i] or [e]. Correspondingly, the vowel [i] is unambiguous only in i, miš, ti, zi, ši, hi, mi, ni, iš, in, il (and also possibly di, since te could always be used to represent dental stop + a, see below).

In Old Hittite originals (and also, less consistently, in later copies as well as some post-OH originals), the use of Ce and eC signs (meš being rather rare) is quite consistent; some of them, notably ne (9 or 10 strokes), are rather cumbersome, and the great pains of writing them would not have been taken by the often parsimonious scribes, had there not been a good phonetic reason for it.

² For my arguments against K. Riemschneider's conclusion that the sign gi was pronounced only as [ge] (Riemschneider 1973) see Lehrman 1983 (forthcoming).

The ambiguous signs pi, in, etc., can be followed and/or preceded by e-signs (pi-e=, (=)e-in=, and the like). In some of these cases, comparative evidence (both internal and external) points to unambiguous e-readings, e.g. a-in-zi [eptsi] 'seizes' (: an-na-an-zi [appantsi] 'they seize', cf. a-aš-zi [estsi] 'is' : a-ša-an-zi [asantsi] 'they are', etc.), ak-ku-uš-ki-e-ši [akkuskesi] 'thou drinkest' (: ak-ku-us-kan-zi [akkuskantsi] 'they drink', cf. PIEP *-sk'e-si : *-sk'onti). In some cases, however, it is not clear whether Ci-e= is to be interpreted as [Ce] or as [Cye] or [Cie] or [Ciye]; e.g. na-ak-ki-e-aš (pl. nom. comm. of i-stem adjective na-ak-ki(-i=) 'heavy/difficult') could be read as [nakkəs] or [nakkyes], [nakkies] or [nakkiyes]. For this reason, the practice of transcribing the ambiguous pi, in, etc., as pi̇, iṅ, etc. when they are followed (preceded) by (=)e(=), adopted in some publications (e.g. StBoT 25), is not followed here.

7. As recent studies show (Hart 1980, Kimball 1981), plane writings (i.e. writings such as V_1-V_1C , $CV_1-V_1-V_1C$, CV_1-V_1 , e.g. a-aš-zi 'is', tar-ma-a-an-zi 'they peg down', pa-ra-a 'forth') indicate the place of the accent (and possibly a concomitant secondary lengthening). If, however, the word has no instances of plane writing in it, it does not mean that it is accentless; cf. ak-ku-uš-ki-e-ši 'drinkest' OH StBoT 25 No. 110 Vs.II 16 with plane vs. ak-ku-uš-ki-ši id. without plane just a few lines before in the

same text, viz. Vs.II 9. It seems that marking the accented syllable is not obligatory (at least word-internally, as here) and may involve considerations other than phonetic accuracy, about which, at the moment, it seems unproductive to speculate. In post-OR, there are numerous instances of the opposite, namely words with more than one plane writing in them, such as i-da-a-la-u-a-eš-ša-an-zi 'they go bad' KBo VI 6 I 15, or ta-a-pa-u-a-eš-zi 'it becomes small' KBo V 4 Rs.21. While it is possible that such spellings represent actual accents, e.g. secondary and primary, it is also possible that they reflect a purely orthographic convention in which the derived word keeps the spelling of the base (in the above examples, i-da-a-lu- and ta-a-pu- respectively), thus indicating not only its own accent but also that of the base word.

8. Sign-initial stops in CV and CVC signs are transliterated as in Akkadian, namely as p or b, t or d, k or g or q. However, in Hittite (as in Hurrian, see Friedrich 1969 : 11), these signs do not serve to distinguish voiceless and voiced stops. The choice between p t k on the one hand and b d g (g in qa only) on the other seems to be determined by scribal preference or custom. The available CV signs with initial stops are the following: pa ba; ta da; ka ga qa; ti; ni; ti di; ki gi; pu; tu du; ku. The sign "ni" is actually bi in the Akkadian cuneiform, but the transcription ni is firmly rooted in Hittitology and so used here.

CVC signs with the said contrasts are kal : gal, tim : din, tir : dir, kur : gur.

Signs with voiced and voiceless initial stop may alternate in different forms of the same word, e.g. da-a-i 'puts/places' (never *ta-a-i) : ti-an-zi 'they place' (never *di-an-zi or the like), or occasionally even in the same form, e.g. da-a-i-iz-zi 'steals' OH KBo VI 2 III 23 : ta-a-i-iz-zi id. KBo VI 2 I 39.

Cuneiform does not distinguish voiceless, voiced and emphatic stops in sign-final position. (C)VC signs (where C is a stop) are transliterated with the voiceless p, t, k, unless the following sign, if any, begins with a "voiced" stop or g. E.g.: am-mu-uk 'me' (direct object), am-mu-ug-ga 'and me', am-mu-ug-ga id.; all written with the same sign uk/g/g.

9. The Indo-European contrast of voiced and voiceless stops is matched in Hittite by the contrast of single and double consonants.³ The contrast is manifest word-internally between vowels.⁴ In other positions it is neutralized, at least in writing. E.g.: Hitt. a-da-an-zi 'they eat' : Skt. adānti, Hom. ádousi(n), Lat. adunt, Lith. áda, etc., vs. Hitt. *i-ta(-ri) middle sg. 3 ending : Skt. -te (< Indo-Iranian *-ta-i) [primary], -ta [secondary], Gk. -to

³ See Sturtevant 1932 for the first published formulation of this correspondence (known as "Sturtevant's rule").

⁴ Also postvocalic before ɣ (written in Hittite as =V-Tu-V' = vs. =VI-Tu-V' =, where T is a stop and V' a vowel other than y).

[secondary], Lat. -tur (< *-tor) [primary], etc. Hitt. ne-e-pí-iš 'sky' : Skt. nábhā-, Gk. néphos 'cloud', OCS nabŕ (sg-gen. nabasa) 'sky', etc. vs. (Late) Hitt. šur-up- pa-ri-ia⁵ 'to sleep' : Skt. avāpna-, Gk. húpnos, Lith. šāpnas 'sleep', OCS spati 'to sleep'. Hitt. lu-uk-ki-iz- zi 'sets alight' : Skt. rocáyati 'illuminates, makes bright', Gk. leukós 'white', Lat. lūc- 'light', etc.⁵

In my transcription, both morphophonemic (enclosed in slant lines) and phonetic (enclosed in square brackets), Hittite stops are rendered by Roman letters for the etymologically corresponding voiced or voiceless stops of Indo-European, so that Hittite "double" stops are transcribed by letters for voiceless stops and Hittite "single" stops, by letters for voiced stops. This practice

⁵ Here is a fuller list of examples which support Sturtevant's rule (for brevity's sake, I use normalized transcription): -pp- : *p: appa, appan 'back' : Ved. āpa 'away', Hom. apō id. appanzi 'they grab' : Lat. apiō, etc.; šuppariya- 'sleep' : Ved. avāpna-, etc.; wappiya- 'roar' : Avest. uŕiiaiti 'screams', OCS ropiŕietu id. (the Hittite etymology is mine). -tt- : *t: -ttu act. imper. sg. 3 : Ved. -tu, etc.; -tta(-) midd. sg. 3 : Ved. -ta, Hom. -to, etc.; -zzi act. prs. sg. 3 : Ved. -ti, etc.; -ttan(i) act. pl. 2 : Ved. -ta, Hom. -te, etc.; -atti- deverb. nominal suffix : Ved. -āt-, etc.; -ttara- suffix nominis agentis (in akuttara- c. 'waterer', see HW² : 54a): Ved. -tr, etc.; katta 'down', kattara- 'lower' : Hom. katā. -tta 'thee' : Ved. ta, Lat. ta, etc.; -t- : *g(h): adanzi 'they eat' : Ved. adānti id., etc.; pāda- 'place' : Ved. padā- 'step, place', etc.; wātar 'water' : Ved. udān- id., Hom. hūdōr, OCS voda, etc.; nāta- 'reed' : Ved. padā- id.. -kk- : *k/k': lukkizzi 'sets alight' : Ved. rocate, etc.; šakkar/zakkar 'excrement' : Gk. skōr id.; Russ. sor 'litter', šakk- 'know' : Lat. sciō. tagga- 'put together' : Ved. taka- id., 'fashion', etc.; -k- : *g(h)/g'(h): yuga- 'yoke' : Ved. yugā-, Lat. iugum id., etc.; tēkan 'earth' : Hom. khthōn id., etc.; daluki- 'long' : Ved. dīrgha- id., etc.

is merely a mnemonic device, not an interpretation of the phonetic nature of either the Hittite or the Indo-European stops. E.g.: a-da-an-zi /adanʒi/ = [adantsi] 'they eat'. When, for the want of a clear Indo-European connection and/or appropriate phonetic and orthographic conditions in Hittite, or for some other reason, I cannot make a commitment to either of the two ways of transcribing the Hittite stops, I use the relevant "voiceless" capital letter. E.g. tar-ši-ik-ki-ši 'thou sayest' = /Tarskesi/ [Tarske/isi] (the proposed etymologies of this word include both Lith. tāria 'says' and IE *dher- 'hold' [Ved. dhar-, etc.], which cannot both be correct). Resonants and spirants are rendered as double when written "double", single when "single", e.g. ak-kal-lu = /aKallu/ 'let me

There are also a number of uncertain cases (such as happin-* [as seen in happin-ahh- 'make rich', happin-aš- 'become rich', happin-att- 'richness', etc.], etymologized by some as cognate with Lat. ops [Laroche RHA 11, 41 ff.] and by others as cognate with Gk. áphenos 'wealth' [Benveniste 1962 : 13]. Apparent counterexamples include: deverbative noun suffix -atar : -ann- (compared with IE *-tr̥ : *-tn-, esp. Old Persian infinitives in -tanaiy [Benveniste 1962a : 103 - 107], midd. pl. 2 ending -tiuna(-) (compared with Skt. -dhva(m), etc.), agent noun suffix -(i)talla- (compared with Slav. *-teljč-), which seem to have -ti- after the suffix -ska- : -ska- but -t- elsewhere (based on the evidence collected by Van Brock RHA 20 : 79-87 and 166); a few verbs such as aki 'dies' : akir 'they died' : akkanzi 'they die' : akkis '(he/she) died', with the unexplained alternation of -ti- and -t- (where T is a stop symbol in transcription). While the case with -(i)talla- and the stop alternations in verb paradigms are still opaque and await special study (which falls outside the scope of this dissertation), the "double" stop of -tiuna(-) can be explained e.g. by analogy with other 2 pl. endings (which begin with -tt-), and -atar : -ann- is not strictly comparable with *-tr̥ : *-tn- because it begins with a vowel which has no

die', wa-aš-še-iz-zi = /wasseti/ [wassetsi] '(he/she) clothes'.

10. Before i, the sound written with =t-t= (t= word-initially and post-consonantly) appears as =z-z= (z= word-initially and post-consonantly). E.g. lu-uk-ki-iz-zi : rocávati, wa-aš-še-iz-zi : yāsávati id., postconsonantly e.g. a-aš-zi 'is' : Ved. ásti, Hom. estí, Lat. est, Lith. ásti id. z = [ts], e.g. ap-na-an-za = [apants], comm. sg. nom. in =s of the =ant-participle to the root a- in⁺/ap-p⁺ 'take'.⁶

In my (morpho)phonemic transcription, I differentiate between the [ts] of e.g. ap-na-an-za where it results from the stem-final =t⁺ combining with the ending +s and the [ts] of e.g. a-aš-zi, which is the allophone of /t/ before [i].

counterpart in the IE suffix and cannot be easily explained as belonging or having once belonged to the verb stem. Some items, formerly regarded as counterexamples to Sturtevant's rule, have found convincing (in my view) explanations; namely makki- 'great' (:Hom. mága, etc.), uffar : uddan- 'word' (:Skt. yadⁱ 'speak'), tittiva-/tittanu- 'install' (cf. Hitt. dāi 'places' : Skt. dhā 'place', etc.), all share the erstwhile presence of a laryngeal after the stop (IE *meg'x-, *wedX- : *udX- and *di-dhx'-- respectively), which appears in Hittite as the "doubling" of the stop. In any case, the number and certainty of the Hittite -- IE parallels where the rule "works" are far greater than the number of counterexamples. This makes it necessary that we accept the correspondence and, using it as a guideline, try to explain the exceptions. The example of makki-, etc., should be encouraging.

⁶ When =t-t= does occur before i, it is possible to explain as due to some interfering factor such as analogy (e.g. =t-t= in sg. loc. kar-di-mi-at-ti instead of *kar-di-mi-az-zi [cf. acc. kar-tim-mi-la-at-ta-an, nom. kar-tim-mi-la-az --/at+s/ 'anger'] is due to paradigmatic leveling). In the hhi-conj. prs. sg. 2 ending +t-ti, =i is analogic

While the former would be shown as /t(+)/ (where "+" is a morpheme boundary), the latter is written with t with the cedilla, viz. t (cf. the Rumanian orthography), to remind the reader that, on the phonetic level, affrication takes place. E.g. wa-aš-še-iz-zi = /wasetʃi/ = [wassetʃi]. The cedilla is used in the same function in the (morpho)phonemic transcription of cases such as e-iz-du 'he shall eat', phonetically [etstu], morphophonemically /eq⁺tu/ 'I eat', a-da-an-zi 'they eat' : IE *x^hed-, which show that the root stop may be written as /d/ along the lines of section 9).

11. Other writing-related questions are dealt with as they arise.

2.2 A NOTE ON CHRONOLOGY

The forms on which my analysis is based are attested in OH((*)) and MH(*) texts.

If two or more diverging forms with the same function are attested (e.g. ú-e-mi-iz-zi OH and ú-e-mi-la-zi NH, OH**), I regard the forms which are found in the older texts as those of greater morphological antiquity as well. For example, since forms such as ú-e-mi-la-zi are first attested in MH and OH** texts, it is ú-e-mi-iz-zi that I regard as morphologically older. It must be kept in mind, however, that other factors (such as dialect variation) could be

to the corresponding mi-conj. forms (the expected form of the ending being **t-te to begin with). =t-t before i also could conceivably appear in loanwords.

responsible for some of alternative forms; but, in view of our present insufficient knowledge of Hittite dialectology, chronology remains the only falsifiable criterion employed in this chapter.

2.3 HITTITE (POSSIBLY THEMATIC) VOCALIC VERB STEMS

A preliminary analysis of Hittite vocalic verb stems in accordance with the principles outlined in Chapter I results in establishing the following classes.⁷

I. $+i-(a-)i/a^+ : +i-(ia-)a^+/+ia(=a)^+$

This class consists of verbs the stems of which end in $=(a-)i^+$ alternating with $=(a-)a^+$ preceded either by a Ci sign (especially significant where the corresponding Ca sign is available) or by the sign i. Examples: act. prs. sg. 3 $i-(a-)iz=zi$: pl. 3 $ia-an-zi/i-ia-an-zi$ 'make' (class marks: $i-(a-)i/a^+$ alternating with $(i-)ia-a^+$), act. prs. sg. 3 $\acute{u}-a-$

⁷ An explanation of my use of the colon and the virgule for indicating morphophonemic alternants of a stem is in order. The colon is used to separate the alternating shapes of the stem suffix corresponding to IE $*=e- : *=o-$, regardless of their distribution within the attested Hittite paradigms. For example, given a paradigm with the stem shapes (a). $+[yes\acute{i}]$ (act. prs. sg. 2), (b). $+[yawen]$ (act. prt. pl. 1) and (c). $+[yentsi]$ (act. prs. pl. 3), forms (a) and (c) belong on the left of the colon, while (b) belongs on the right side; the fact that the form $+ [yentsi]$ is likely to be a replacement of $+ [yantsi]$ (which occurs in other items belonging to this class and is expected in comparative terms), as well as the manner in which this replacement occurred, is irrelevant to this device. The virgule stands for the disjunction or of the "natural" language, e.g. $"=a/i"$ reads $"=a$ or $=i"$. It is not to be confused with the slant lines enclosing (morpho)phonemic transcription.

mi-iz-zi : pl. 3 ú-e-mi-(ia-)an-zi 'find' (class marks: =mi-i⁺ alternating with =mi-(ia-)a⁺, note the use of mi and not ma), act. prs. sg. 3 ta-(a-)i-iz-zi 'steals' : deverbative noun ta-ia-zi-il⁺ 'theft/thievery' (class marks: +i-i⁺ alternating with +ia⁺).

II. =u-(u-)a/i⁺ : =u-(u-)wa-a⁺

This class consists of verbs the stems of which end in =a/i⁺ preceded by cu-(u-) alternating with =a-a⁺ preceded by cu-(u-)w=. Examples: act. prs. sg. 2 ka-an-pu-u-e-ši 'thou reckonst', pl. 3 ka-pu-u-an-zi : participle ka-pu-wa-an-g⁺.

III. =ú-(a-)i⁺/=ú-a⁺ : =ú-wa-a⁺

This class consists of verbs the stems of which end in =(a-)i⁺ or =a⁺ preceded by =ú-, alternating with =a-a⁺ preceded by =ú-w=. E.g.: act. prs. sg. 3 ú-a-iz-zi/ú-iz-zi, pl. 3 ú-an-zi : pl. 3 ú-wa-an-zi 'come'.

IV. =a-(a-)a⁺/=a-(a-)i⁺ : =a-(a-)a⁺

Verbs belonging to this class have stems ending in =a/i⁺ alternating with =a⁺ preceded by =a-(a-)=, e.g. act. prs. sg. 1 tar-ma-a-mi / 3 tar-ma-a-iz-zi : pl. 3 tar-ma-an-zi 'peg down', act. prs. sg. 3 a-ru-wa-(a-)iz-zi / pl. 3 a-ru-wa-an-zi : pl. 3 a-ru-wa-an-zi 'bow down'.

V. +š-ki-(a-)i⁺/+š-ki-a⁺ : +š-ka⁺/+šga-(a=)⁺

Verb stems belonging to this class end in =i-(e-)i+ alternating with =a-a+ preceded by +š-k=/+š-g= (e.g. act. prs. pl. 1 ak-ku-uš-ki-e-wa-ni : pl. 3 ak-ku-uš-kán-zi 'drink', midd. prs. sg. 1 na-iš-ga-ha-ai 'I used to go') or other syllabographic attempts to represent the cluster /sk/ when preceded by a consonant, e.g. act. prt. sg. 2 zi-ik-ki-gš (/dskes/ or the like)⁸ 'hast placed', act. imper. pl. 3 šī-pa-an-za-kán-du MH (/spandskantu/)⁹ 'they shall libate', act. prs. sg. 2 tar-šī-ik-ki-šī (/tarskesi/) 'thou sayest'.

VI. =k-ki-i+ : =k-ka+/=g-ga-a+

The stem belonging to this class ends in =i-i+ alternating with =a+, etc., preceded by =k-k=, e.g. act. prs. sg. 3 lu-uk-ki-iz-zi : pl. 3 lu-uk-kán-zi 'set alight', midd. prs. sg. 3 lu-uk-kat-ta / lu-ug-ga-at-ta 'is light'.¹⁰

⁸ It is, however, possible that the stem zi-ik-ki-(a-)+ was pronounced as [tsiké]⁺ and represents real metathesis from the expected /diské/+. The non-/ske/-paradigm of the verb 'place' belongs to the hhi-conjugation. The Hittite root is /di/+: act. prs. sg. 1 te-e-eh-hé (morphophonemically /daihhe/, 3. da-a-i (morphophonemically /dali/, pl. 3 ti-(ia-)an-zi (morphophonemically /dianti/).

⁹ The morphophonemic interpretation of šī-pa-an-za-kán-du MH is based on other Hittite spellings of this root and on its possible cognates in Indo-European languages. For /sp=, cf. Hittite spellings such as iš-pa-an-ti 'libates' (passim). šī-p= is a later attempt (the reasons for which are not clear, e.g. Oettinger 1979 : 416 f.) to render what is normally written in OH as iš-p= (iš-T= is the usual Hittite spelling of the initial /sT/= and, in any case, etymological *sT [where T is a stop], see e.g. Kronasser 1966 : 48): Indo-European cognates of the root, e.g. Gk. spéndō 'I libate', provide evidence for the etymological *sp= and for the /d/ of the morphophonemic transcription.

VII. =l-li-i+ : =l-la-a+

Stems belonging to this class end in =i-i+ alternating with =a+, etc., preceded by =l-l=, e.g. act. prs. sg. 3 hu-ul-li-iz-zi : hu-ul-la-az-zi, pl. 3 hu-ul-la-an-zi 'combat'.

VIII. =ni-(i=)+ : =na-a+

This class consists of stems ending in =i-(i=)+ alternating with =a-a+ preceded by =n=, e.g. act. prt. sg. 3 zi-in-ni-it : prs. pl. 3 zi-in-na-an-zi 'finish'.

IX. =ne-a+ : =na-a+

The verb stem belonging to this class ends in =a-a+ alternating with =a-a+ preceded by =n=, e.g. act. prs. sg. 2 ar-ša-ne-a-ši : participle ar-ša-na-an-d+ 'be jealous'.

X. =ri-i+ : =ra-a+

Stems belonging to this class end in =i-i+ alternating with =a-a+ preceded by =r=, e.g. act. prs. sg. 3 pa-ap-ri-iz-zi : participle pa-ap-ra-an-t+ 'be unclean'.

XI. =še-i+ : =ša-a+

¹⁰ Technically, classes V and VI could be treated as one class since the prevocalic segments in stems of both end in the same phoneme /k/ written =k-k=/=g-g= postvocally, =k/g= after š. However, for the purposes of this dissertation, it is convenient to keep them apart, as class V contains stems ending in the suffix -/ske/- (IE *-sk'e-) : -/ska/- (IE *-sk'o-), whereas class VI contains a root ending in /k/ followed by -/e/-:-/a/-.

Stems belonging to this class end in =a-i+ alternating with =a-a+ preceded by =ā=, e.g. act. prs. sg. 3 wa-aā-āa-iz-zi : pl. 3 wa-aā-āa-an-zi 'clothe'.

XII. =ta-i+ : =ta/da-a+

This class consists of stems ending in =a-i+ alternating with =a-a+ preceded by =t=/=d= (d= only in the sign da), e.g. act. prs. sg. 3 nī-(a-)hu-ta-iz-zi : pl. 3 nī-(a-)hu-da-an-zi 'take/lead away'.

Derivational relations of stems in each class to other lexical items (such as nouns and other verbs) are particularly important for the purposes of this dissertation. The following is a detailed survey of derivation of the stems belonging to the 12 provisional classes listed above (cf. a different classification in Oettinger 1979). Some of these verbs were found to derive from nouns or other stems actually attested in Hittite or inferred as possibly having existed there. Such verbs, in conformity with the current nomenclature, are referred to as secondary. Verb stems which appear not to be derived from nouns or other verbs are called primary. Verb stems which cannot be assigned to either of the two derivational categories due to insufficient information are treated separately.

2.3.1 Class I

2.3.1.1 Primary Stems

1. a-ni-e-(i=) : a-ni-ia-(a=) 'act, perform, work
(the soil)'

act. prs. sg. 1 a-ni-ia-mi MH XXXII 115 I 3
MH* KBo XI 12 I 2

3 a-ni-iz-zi OH StBoT 25 No.59 I 5

a-ni-e-iz-zi OH XXIX 30 II 21

a-ni-ia-zi OH** KBo VI 26 I 13
MH XXIX 7 Vs.39

a-ni-ia-az-zi MH XXIX 7 Vs.41

pl. 3 a-ni-ia-an-zi OH** XXIX 31 4
MH* KBo II 3 I 43

imp. sg. 2 a-ni-ia- MH* XIII 2 III 40

pl. a-ni-ia-at-te-e[n MH KBo XVI 25 I 25'

prt. sg. 1 a-ni-e-[nu-un OH StBoT 18 Rs.48

pl. a-ni-ia-u-en MH XXIX 8 IV 39

(The hapax pl. 3 a-ni-ia-ir OH** KBo XII III 10' is either a
scribal error for a-ni-i-a!-ir [~~la~~ ~~la~~ ~~i-a~~] or a
transfer to class IV q.v. below.)

midd.prs. sg. 3 a-ni-ia-at-ta MH KBo XXI 103 Rs.20'

-/ske/-forms:

act. prs. sg. 3 an-ni-iš-ki-iz-zi OH KBo VI 2 I 18

pl. an-ni-iš-kán-zi OH KBo XIX 1 II 21'

sg. 3 an-ni-eš-ki-iz-zi OH* KBo VI 3 I 27

pl. an-ni-eš-kán-zi OH** KBo XII 49 III 7

verbal noun a-ni-at-še-it 'his performance' OH KBo VII 14
Vs.29 (Zukraši)

a-ni-ia-at-ta pl.nom.acc.neut. OH** XXXI 64 IV 8

The spellings a-ni-iz-zi and a-ni-e-iz-zi are morphologically older than a-ni-ia-zi and a-ni-ia-az-zi, as the chronology seems to indicate.

2. a-ri-ia(-a)+ 'to ascertain through an oracle'

act. pres. sg. 1 a-ri-ia-mi MH* XIII 20 I 23

3 a-ri-ia-zi MH* XXX 36 I 4

pl. 1 a-ri-ia-u-e-ni MH KBo XVI 47 Vs.17'

3 a-ri-ia-an-zi OH KBo XVII 23 Rs.7

-/ske/-forms:

prt. sg. 1 a-ri-iš-ki-e-nu-un MH XIV 13+ I 53

3 a-ri-iš-ki-it MH XIV 13+ I 51, etc.

mid. pres. sg. 3 a-ri-eš-kat-ta OH** XLIII 60 I 25

3. ha-ri-a+ : ha-ri-ia-a+ 'to bury'

act. pres. sg. 1 ha-ri-e-mi OH StBoT 25 No.3 Rs.III 9
No.5 Vs.II 2

pl. 3 ha-ri-ia-an-zi MH MIO 1 (Rost) III 19

prt. sg. 1 ha-ri-e-nu-un OH StBoT 25 No.4 Rs.III 12

Spellings such as ha-ri-e-mi and ha-ri-e-nu-un are ambiguous (either [har(i)ye]- or [hare]-, since there is no sign *re), but MH ha-ri-ia-an-zi makes the former reading preferable, and helps identify the stem as belonging to class I.¹¹

It is possible that the verb ha(-ah)-ha-ri-ia+ 'to rake' is a reduplicated derivative of ha-ri-a+ : ha-ri-ia+ 'to bury'. Its earliest attestation in my collection is MH*:

act. imper. sg. 3 ha-ah-ha-ri-ia-ad-du MH* XXIV 11 III 9

The rest are LH (for these, see Kronasser 1966 : 491). The other possibility is that this verb is a denominative of the noun GĪŠ hah(ha)ra- 'rake' (HW¹). However, I would expect rather a class IV verb to perform this function, namely *ha-ah-(ha-)ra-(a-)i+ or the like (see the section on class IV below): the verbal noun hahratar* (EZEN hahraannaš HW¹ in Pre-LH¹² XIII 4 I 44) could be derived from just such a stem (cf. ku-uš-du-wa-a-ta 'slander, abuse' OH*, a verbal noun to ku-uš-du-wa-a-i+ 'to slander, abuse, revile [see below]'). The stem ha-ah-ha-ri-ia-a+, if denominative, looks like it is based on an r-stem noun, cf. e.g. ha-ap-na-ri-e+ 'to turn over (to)' based on ha-ap-na(r) 'exchange, trade', see below).

¹¹ J. Tischler's (1977 : 172 f.) derivation from hari- 'valley' does not seem convincing for semantic reasons (although not unthinkable).

¹² The dating is Professor Gary Beckman's (personal communication).

The stem har-aš⁺ (mi-conj.) 'to plough' or the like¹³
 (e.g. har-aš-zi OH** VBoT 58 I 30, phonetically [hars]-;
 cf. har-ši-iš-kán-zi XXIV 7 I 21) is possibly based on the
 same root as ha-ri-a⁺. It is further possible that the stem
har-ra-a⁺ 'to crush', midd. 'to perish, go to ruin' is also
 based on the root [har]-; its attestations do not permit me
 to determine whether it belongs to the mi- or the hhi-
 conjugation (the LH attestation har-ra-i XXV 23 IV 52 is far
 from probative due to a wealth of transfers from one type
 into the other.¹⁴ If it is a mi-verb, it could belong to
 either class IV or class X:

mid. prs. sg. 3 har-ra-at-ta-ri MH XXIII 77 Vs.38

har-ra-at-ta MH* XII 63 + Vs.32

participle har-ra-an MH* XIII 7 IV 3

-/ske/-forms of the nu-u⁺ deverbative:

mid. prs. sg. 3 har-ra-(nu-)uš-ki-it-ta MH* StBoT 22

Eld 1 II 28

act. prs. pl. 3 har-ra-nu-uš-kán-zi ibid. 23

¹³ In Harry Hoffner's view (1974), harš- "denotes the simple breaking up of the hard ground..." (p.43). Professor Hoffner prefers "to see in harš- an allusion to the action performed on land which had not previously been subjected to cultivation in anticipation of its being plowed" (ibid.).

¹⁴ Even in the oldest stages of Hittite the two conjugational types were distinguishable only in the singular (in the imperative, only in sg. 3). Thus, there were ample opportunities for analogic remodeling in either direction.

But since the basic information is inconclusive, the relation of ha-ra-a⁺ to the stems described above remains problematic.¹⁵

4. i-i⁺/i-a-(i=)⁺ : (i=)ia-(a=)⁺ act. 'make/do'

act. pres. sg. 1 i-e-mi OH StBoT 25 No.3 Rs.III 21

i-ia-mi OH StBoT 25 No.4 Vs.II 15'
OH** KBo III 7 I 22
MH XXXIII 24 I 42'
MH* VBoT 24 I 3

2 i-e-ši OH** XLIII 25 2', 3'

i-ia-ši OH** KBo III 28 Vs.15
MH XIV 1 Vs.33

i-iz-zi OH KBo VI 2 II 50
OH** KBo III 28 Vs.II 6

i-e-iz-zi OH XXIX 29 Vs.10
OH** KBo VI 26 I 29
MH KBo XII 62 Rs.(?)8'
MH* VBoT 58a I 5

i-e-zi OH** KBo III 27 Vs.5
MH KBo XXI 47 Vs.(?)II 7'
MH*XXXI 42 III 6

ia-az-zi OH XXXVI 108 Vs.

i-ia-az-zi OH** KBo VI 4 IV 14
MH KBo XV 32 I 2

i-ia-zi OH** KBo III 1 II 50
MH XXIX 8 I 51
MH* VBoT 58b IV 39

¹⁵ Verbal noun ha-ra-a-tar 'scandal, offense' (legal term) attested in OH** KBo VI 26 III 29 (also spelled ha-ra-tar in that text, KBo VI 26 III 43, 45, 46 and elsewhere), XXIX 34, 16, etc., is apparently formed from a different root, as seems to be indicated by the writing (ha-ra-a⁺ with =r-r= vs. ha-ra⁺ with =r=). See Tischler 1977 : 169 for a discussion of the stem "harra-" with lit.

- pl. 1 i-la-u-e-ni OH** KBo III 7 II 19
MH XVII 10 I 29
MH* VBoT 24 I 36
- 2 i-la-at-te-ni OH** I 16 III 23
MH XXIII 77, 5 (1]-)
- 3 i-la-an-zi OH StBoT 25 No.72 Vs.II 6
OH* XXXIII 59 III 4 (-z[1)
OH** KBo III 7 I 8
MH XVII 10 III 18
MH* XLI 1 Vs.I 11'
- i-en-zi OH* KBo VI 3 II 17
MH XXIII 72 Rs.25 (-en-)
MH* VBoT 24 I 8
- i-e-en-zi OH** KBo III 40a Vs.18
- act. prt. sg. 1 i-la-nu-un OH** KBo III 1 I 39
MH XXXVI 75 II Rs.6
OH*/MH XXX 10 Rs.11, etc.
- 3 i-e-it OH StBoT 18 Vs.9
OH** XXXVI 105 Rs.13, etc.
MH XXIII 12 III 5
MH* KBo XIV 86 I 17 (-i[t)
- i-la-at OH** KBo III 38 Vs.8
MH XXIII 72, 15
MH* XXIII 11 III 6
- pl. 1 i-la-u-en MH KBo VIII 35 II 8
- i-la-u-e-en MH* XIII 8 Vs.1
- 2 i-la-at-te-en OH** KBo III 41 + XXXI 4 Vs.7
- 3 i-e-ir OH XXXVI 108 Vs.2
OH** XXIX 1 II 52, etc.
MH XXIV 11 III 13
MH* XXIV 10 III 6
- imper. sg. 2 i-la OH** XXIX 1 II 44
MH XVII 10 I 30
- 3 i-e-id-du MH KBo XVII 61 Rs. 5'
- pl. i-la-an-du MH* XIII 2 II 33, etc.
- i-en-du MH* StBoT 22 Eid 1 II 49 (2x)
- participle i-la-an OH** KBo III 28 II 22 (neut.sg.)

i-la-an-za MH* XXIX 7 Rs.26 (comm.nom.sg.)

i-an-za MH? KBo XVII 65 Rs.37, etc.

infinitive i-la-u-an-zi- OH** KBo X 23 Vs.II 10

Stem-final -ia(-a)⁺ in the forms of 3rd person sg. prs. and prt. is first attested in post-OH texts; on the other hand, i-a⁺ is found along with -ia(-a)⁺ where only the latter is expected, in agreement with the relevant PIE forms (such as prs. sg. 1, prs. and imper. pl. 3).

5. midd. 'go, be on one's way'¹⁶

In Hittite terms, 4. and 5. are formally complementary: the former ('make/do') is activum tantum and the latter, medium tantum (with the possible exception of ia-an-zi discussed in footnote 16). For this reason, it makes sense to regard them, at least synchronically, as the active and the middle of the same stem. Below is a representative sample of attestations of 5 (for a fuller list, see Neu StBoT 5 : 62 ff.):

mid. prs. sg. 2 i-la-at-ta-ri OH** XXXI 127 I 59

3 i-e-it-ta OH StBoT 25 No.43 Vs.I 10'

i-la-at-ta OH** KBo X 23 IV 7'
MH XXXVI 75 II 5

¹⁶ Act. prs. pl. 3 ia-an-zi OH KBo XXII 2 (=StBoT 17 A) Vs.7 makes much better sense in its context if it is taken to mean '(they) go': DUMU.NITA MEŠ a[-ap-p]a URU Ne-e-ša ia-an-zi 'the sons go b[ack] to the city of Nēša'. See the same interpretation in Oettinger 1979 : 349 footnote 183. See also Chapter 4.

- i-ia-at-ta-ri MH XXIII 77, 34
- pl. 2 i-ia-ad-du-ma MH XXIII 72 Rs.55
- 3 i-e-en-ta OH KBo XXII 1, 14'
- i-ia-an-ta-ri MH KBo XVI 47 Vs.6'
- i-ia-an-ta MH KBo XVII 105 III 13
- i-ia-an-da-a(?) -r[i] MH Maṣat 75/43
- prt. pl. 3 i-ia-an-ta-at MH XXXIII 36 III 8'
- imper. sg. 2 i-ia-ah-hu-ut OH KBo VIII 42 Vs.16
MH* IBoT III 141 IV 18
- 3 i-ia-at-ta-ru MH XXIII 72 Rs.19
- i-ia-ta-ru MH* StBoT 22 Eid 1 III 45
- pl. 2 i-ia-ad-du-ma-at MH XV 34 I 42

The oldest attestations show stem final =a-i+ (prs. sg. 3) and =a-a+ (pl.) in contrast with the ubiquitous =ia-a+ of the OH** and MH attestations.

6. pi-(i-(a))i+ : pi-a-ia-(a)i+ 'send away'

7. u-i-a-i+/u-i-a-i+ : u-(i)-ia-(a)i+ 'send hither'¹⁷

act. prs. sg. 1 pi-e-i-mi OH** XXIX 1 I 51¹⁸

pi-i-ia-mi MH XXIII 77, 65

2 pi-i-e-ši MH XIV 1 Vs.32

¹⁷ Note the use of u in MH u-i-a-iz-zi XXXI 103 Vs.32 and MH* u-i-a-i XXXIII 8 II 22 compared with u in other attestations of this verb.

¹⁸ The expected writing, suggested by other attestations, is *pi-i-a-mi, cf. pi-i-a-iz-zi OH, pi-i-e-i OH**, etc., in the paradigm. The attested form pi-e-i-mi is apparently a scribal error.

- 3 p^í-i-e-iz-zi OH XXXVI 106 Vs.5'
 ú-i-e-iz-zi MH XXIII 72 Rs.22
 u-i-e-iz-zi MH XXXI 103 Vs.32
 p^í-e-iz-zi MH KBo XVI 24 II 3'
 p^í-e-ia-zi MH* XIII 9 III 5
 ú-i-ia-iz-zi MH XV 34 IV 19
- prt. sg. 1 ú-ia-nu-un OH** XXIX 1 I 34
- 3 p^í-i-e-it OH** KBo III 1 II 8
 MH* VBoT 58b I 21
 ú-i-e-it MH XXXIII 5 II 4
 u-i-e-it MH* XXXIII 8 II 21
- pl. 3 p^í-i-e-ir OH StBoT 25 No.68 Vs.1 12'
 OH** KBo III 34 II 4
 MH XXII 12 II 18
 MH* XXIII 11 III 7
 ú-i-e-ir OH** KBo III 40a Vs.10
- participle p^í-e-ia-an-za MH IBoT I 36 I 12
- infinitive ú-i-ia-u-an-zi MH* VBoT 24 IV 27
- /ske/-forms:
- act. prs. sg. 1 ú-i-la-iš-ki-mi MH* VBoT 24 IV 14
 pl. 2 ú-iš-ki-it-te-ni MH XXIII 77, 68
- mid. prs. sg. 3 ú-e-eš-ki-it-ta MH XXIII 68+ Rs.3
 pl. ú-iš-kán-da-ri MH IBoT I 36 I 74
- supine ú-e-eš-ki-u-wa-an OH**? KBo III 16 Rs.5

Descriptively, p^í-(i-(a-))i+ and ú-i-e-i+ look like compounds of the stem i-e-i+ with the preverbs p^í(-e)+ and ú-(u=)+ respectively (cf. ú-(a-)i+ : ú-wa-a+ 'come' [class

III] and pa-i+ : pa-(a-)a+ 'go (away)' [class IV]).¹⁹ So Hrozný 1917 : 153: "Dieses Paradigma [des Verbuns "jawwar" scilicet i-a-i+ -- A.L.] wird ergänzt durch einige Formen des ähnlich konjugierten Verbuns *u jawwar "Senden", das sich aus Präposition u ...und dem, bzw. einem Verbum jawwar zusammengesetzt". See Chapter IV.

8. i-mi-e+ : i-mi-ia-a+/(i-)im-mi-ia-a+ 'mix'

act. prs. pl. 3 i-im-mi-ia-an-zi MH XV 34 III 30
im-mi-ia-an-zi MH* StBoT 22 Eld 1 Vs.I 38
 prt. sg. 1 i-mi-e-nu-un OH** KBo III 46 Vs.13
 mid. prs. sg. 3 i-mi-ia-at-ta-ri MH XXXII 135 I 8
im-mi-ia-ad-da-ri MH XXIX 8 II 21
 participle i-mi-ia-an-te-eš MH XXVI 46,106
i-mi-ia-an-za ibid. 103
i-im-mi-ia-an-ti-it MH XV 34 I 15
im-mi-ia-an-ta ibid. II 42

9. ka/ga-ri-(i-)e-i+ : ka-ri-ia-a+/ga-ri-ia-a+ cover²⁰

¹⁹ u occurs elsewhere in MH(*) compounds with the preverb /u/- where ü would normally be written, e.g. kat-ta-an ar-ha u-a-lz-zi "darunter wegkommt" MH* XXXI 42 II 11. Such cases are very rare.

²⁰ The meaning of karīa- (midd.), viz. 'give in, gratify' (HW¹ : 106: prt. sg. 1 karīahhahat KUB XIX 49 I 47) is sufficiently different from that of ka/ga-ri-(i-)e-i+, etc. (act.) to suggest treating them as two distinct words.

act. prs. pl. 3 ka-ri-ia-an-zi MH* XXXIII 67 I 9
 prt. sg. 3 ka-ri-i-e-it MH XVII 10 I 34
 ga-ri-e-it MH* XXXVI 44 I? 13
 participle ka-ri-ia-an OH**? KBo III 21 II 20
 ka-ri-ia-an-te-eš MH MIO 1 (Rost) I 26'
 KBo XV 33 II 32'
 ga-ri-ia-an MH* VIII 83, 2'

On the possible connection of this verb with ka-ru-(ú-)uā-
šī-ia-(a=)† and the nature of this connection, see below.

10. ki-i† : ki-(ia-)a† 'lie (down), be placed' (medium
tantum)

mid. prs. sg. 3 ki-it-ta OH StBoT 25 No.4 Rs.IV 29
 OH* XXXIII 5 III 2, etc.
 OH** KBo III 41†, 2
 MH XVII 10 II 12, etc.

ki-id-da-ri MH* XXX 15† Vs.6, etc.

pl. 3 ki-an-ta OH* XXXII 135 IV 3

ki-ia-an-ta-ri OH** XII 8 III 17

prt. sg. 3 ki-it-ta-ti MH* IX 28 IV 6

ki-it-ta-at OH** KBo X 45 I 30
 MH KBo XV 33 II 15
 MH* VII 41 I 37

pl. 3 ki-i-ia-an-ta-ti MH* IX 28 IV 18

imper. sg. 3 ki]-it-ta-ru OH StBoT 25 No.9 Vs.?I? 7'

pl. 2 ki-id-du-ma-ti MH KBo V 12 IV 7

For more attestations, see StBoT 5 : 86 f.

11. la-(a-)az-zi-a+/SIG₅ (-zi-ia)-a+ 'set; recover'²¹

mid. prs. sg. 3 la-a-az-zi-at-ta OH KBo VI 2 I 18'

la-az-zi-ia-at-ta- ibid.

SIG₅-at-ta-ri OH* KBo VI 3 I 27

SIG₅-zi-ia-ta MH* XXXIII 22 I 5'

act. prs. sg. 1 SIG₅-zi-ia-mi MH* XXXIII 24 I 44', etc.

mid. prt. sg. 1 la-az-zi-ah-ha-at OH* or MH XXX 10 Vs.17

SIG₅-ah-ha-at ibid.

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For a fuller list of attestations, see StBoT 5 : 106 f. and

HD : 50b f.

12. mar-ri-(a-)i+ : mar-ra-a+ 'dwindle, dissolve;

be crushed, pulverized'²²

mid. prs. sg. 3 mar-ri-it-ta OH StBoT 25 No.42 Vs.II 7
OH StBoT 25 No.43 Vs.I 6' (-t[a])
MH* StBoT 22 Eld 1 Vs.I 50

prt. sg. 3 mar-ra-at-ta-at MH* XXXIV 91 Vs.5'

imper.?sg. 3 mar-ri-e-it-ta-<ru> MH* StBoT 22 Eld 1 Vs.II 3

²¹ The hapax legomenon la-az-zi-iš (c.sg.nom.) 'good, pleasant' OH XXXI 143a III 2, listed in HD : 50a, makes it possible that the stem is denominative.

²² The form mar-ri-it-ti OH* XLIII 60 III 8 (not mentioned in Oettinger 1979) occurs in a context too poorly preserved to be sure that it is a form of the verb under examination; for this reason, it cannot be useful in this discussion.

Oettinger (1979 : 279 f.) classifies this verb as "einfach thematisch", which in terms of my provisional classification is equivalent to class X. However, mar-ri-(a-)i+ (which is morphologically older than mar-ra-a+ in the singular) shows the shape of the stem final which is characteristic of class I, not class X (cf. class X midd.prs. sg. 3 šar-ra-at-t[a] OH XXXVI 108 Vs.87, šar-ra-at-ta OH** I 16 II 50, pl. 2 šar-ra-at-tu-ma OH** KBo III 27 Vs.25, etc.).²³

13. mu-(um-)mi-(i-)e-i+ 'fall (in a certain way)'

act. prs. sg. 3 mu-mi-e-iz-zi MH* VBoT 58a I 8, 9

mu-um-mi-e-i[z-zi] MH* XXXIV 19 I 9'

mid. prs. sg. 3 mu-um-mi-i-e-it-ta MH* XIII 2 II 16

-/ske/-form(?):

mu-um-mi-[iš-ki-]it-ta MH XXXI 88 II 4

The stem is apparently based on the same root as ma-uš+ (midd.) 'fall' (see attestations in StBoT 5 : 114 f.).

14. ní-eš-ši-(i-(a-))i+ : ní-eš-ši/še-in(-a=)+ 'throw'

²³ Cf. Oettinger 1979 : 280: "Die Schreibungen mar-ri-it-ta (ix mar-ri-e-it-ta) geben nach S432 [marreta] wieder und zeigen, dass hier --im Gegensatz zu allen anderen Medien der einfach them. Klasse-- bereits früh teilweise der Themavokal a (statt a < o) eingeführt worden war. ...dieses Phänomen [findet sich] sonst nur bei den ske-Verben..., wo es mit Sicherheit auf Einfluss des dominanten Aktivs beruht..." Oettinger's interpretation of mar-ri-it-ta as secondary is contradicted by the data, where forms such as mar-ra-at-ta-at MH* are younger [MH* and LH] than mar-ri-it-ta OH, etc.

15. (ú-)uš-ši/še-lt : (ú-)uš-ši-(la-)lt 'pull up'
(a curtain)

- act. prs. sg. 1 pí-eš-ši-la-mi OH StBoT 25 No.4 Rs.IV 18
pí-eš-ši-e-mi OH StBoT 25 No.3 Rs.IV 22
3 pí-eš-ši-iz-zi OH KBo VI 2 IV 14
OH* KBo VI 3 IV 9
MH* KBo XIII 58 II 9'
pí-eš-ši-l-e-iz-zi OH StBoT 25 No.43
Vs.I 16'
OH* XXXIII 68 II 10
pí-eš-ši-la-az-zi OH** KBo VI 5 I 21
MH MIO 1 (Rost) I 41'
MH* StBoT 22 Eld 1
Vs.I 48
pí-eš-ši-la-zi OH* KBo VI 3 III 80
pí-eš-ši-az-zi MH VIII 38 II 16
pí-eš-še-la-az-zi OH** KBo VI 4 I 41, etc.
pí-eš-še-la-zi MH* KBo II 3 I 19
act. prs. pl. 1 pí-eš-ši-la-u-e-ni OH StBoT 25 No.139 Vs.6'
3 pí-eš-ši-an-zi MH IBoT I 36 IV 27
ú-uš-ši-an-zi OH StBoT 25 No.17 I 2
pí-eš-ši-la-an-zi MH KBo XVII 105 II 42'
uš-ši-la-an-zi OH** KBo X 23 I 5
imper. sg. 3 pí-eš-še-ad-du MH XLIII 23 Vs.4
pl. pí-eš-še-la-an-du OH** XXIX 1 III 11
pí-eš-ši-la-an-du MH* XL 57 I 11
act. prt. sg. 1 pí-eš-ši-la-nu-un MH XXXVI 75 III 15
3 pí-eš-ši-lt OH KBo VI 2 I 15
OH* KBo VI 3 I 23
pí-eš-ši-l-e-lt MH* VBoT 58b IV 2
pí-eš-ši-at OH** KBo III 27 Vs.28, etc.

- pl. 2 pí-eš-ši-ia-ten MH KBo XVII 105 II 33'
 pí-eš-ši-ia-te-en LMH KBo XV 10 II 10
 uš-ši-ia-at-ten OH** XXIX 1 I 45 (imper.)
 pí-eš-ši-it-te-en LMH KBo XV 10 II 10
 uš-ši-it-ten OH** XXIX 1 I 45
 3 pí-eš-še-ir OH** KBo XII 3 IV 5'

-/ske/-forms:

- act. pres. sg. 3 p]í-eš-ši-lš-ki-lz-zi MH MIO 1 (Rost)
 III 37
 pl. 3 pí-lš-ši-iš-ká[n-zi OH StBoT 25 No.54
 Rs.III 8

The two verbs are apparently compounds of one stem, +š-ši-i+
 : +š-ši-ia+, with the preverbs pí-a+ and ú-u+. This stem
 appears without preverbs in the meaning 'throw, shoot',
 'press'; midd. 'rush forth, gush':

mi-conj. forms:

- act. pres. sg. 3 ší-i-ia-lz-zi OH** XXIX 1 IV 15
 ší-i-e-lz-zi MH XXIX 8 II 9, etc.
 MH* IX 28 II 22
 prt. ší-i-e-it MH* VBoT 58b IV 1
 ší-i-e-[it MH XXXIII 10 Vs.5
 imper. sg. 2 ší-ia-a MH XXXIII 5 II 6
 mid. pres. sg. 3 ší-e-it-ta MH* XXXIII 23 I 13

hhi-conj. forms:

- pres. sg. 3 ša-a-i MH* KBo II I 29'
 LH XIV 7 IV 8
 prt. ší-iš-ta OH** KBo III 34 23

Imperative pl. 3 šī-i-ia-an-du MH* IX 28 II 22, participle šī-ia-an MH XXXI 87 II 12 and midd. prs. sg. 3 šī-ia-at-ta-ri MH XXIII 77, 13 are neutral with regard to conjugation type. It is difficult to know with certainty which type of the two is morphologically older. If the hhi-type is older, then the change of conjugation type when compounding the stem with preverbs has to be explained, especially since this would be an additional case to support the pattern implicit in the view held by some that the compounds ni-(a-)hu-te-(i=)+, etc. "hinschaffen" and ū-wa-te-(i=)+, etc. "herschaffen" (as well as some other allegedly related compound stems, see my class XII below), both mi-conj., are based on the hhi-conj. verb da-a-i (prs. sg. 3) : ti-(i=)+ 'to place' (: PIEP *dhex'-). Since, however, the evidence to support such conjugation type change is weak and the view is fraught with morphological problems,²⁴ it would be safer to think that the verb in question, namely šī-(i-)q+, etc., originally belonged to the mi-conjugation (at least in the meaning 'throw, shoot').²⁵

²⁴ A discussion of this question is found in Chapter IV (q-v.)

²⁵ It is conceivable (although I could not find any evidence either pro or contra) that the meaning 'press', very different from the other meanings of this stem, was originally expressed by the hhi-conjugation forms such as šā-a-i, and that the two words were later confounded via the forms they had in common (such as prs. sg. 3 and the participle).

The forms šl-i-ia-iz-zi OH** and šl-ia-iz-zi OH** II 3 II 53 are replacements of šl-i-e-iz-zi and šl-a-iz-zi respectively, paralleled by a number of replacements of the same type (with the sign ia used instead of the earlier g):

a-ni-ia-ir OH** KBo XII 3 III 10'

šal-li-ia-it-ta MH* StBoT 22 Eid 1 Vs.I 50

(cf. šal-li-it-ta-ru ibid. II 2; discussed below)

šl-i-ia-iz-zi MH XV 34 IV 19 (discussed above)

i-ia-iz-zi MH* KBo II 3 II 7

i-ia/g?-iz-zi ibid. 30 (see above for other forms)

ka[s-tim-mi-]ia-it-ta MH IBoT I 36 I 49

(discussed below)

šl-a-mi-ia-iz-zi MH* KBo XIII 58 Rs.III 4'

(discussed below)

These forms are clearly new, as all of them come from MH texts and LH copies of MH and OH texts. The model for the innovation is easy to find among the stem forms which class I and class IV have in common (such as prs. pl. 3),²⁶ and is stated in the section dealing with class IV.

Prs. sg. 3 ša-a-i MH*, LH, is likely to be a backformation to pl. 3 *šl-(i-(ia-))an-zi, =ša-an-du, participle šl-ia-a-an, modeled on a verb such as pa-(a-)i+ : pi(-i=)+ (hhi-conj.) 'give', viz. pa-a-i : pi-(ia-)an-zi =

²⁶ There is no need to explain the form a-ni-ia-ir by Luvian influence, as does Oettinger (1979 : 384 fn.255).

X : *šl-(la-)an-zi, where X = ša-a-i. Prt. sg. 2 šl-iš-ta can be explained along the same lines, namely as parallel to pl-iš-ta/pl-eš-ta (prt. sg. 3 and [unattested] 2 of na-(a-)i⁺ 'give', see attestations in Kronasser 1966 : 542).

16. šu-ú-ni-(a-)i⁺ : šu-ú-ni-la-a⁺ 'to sow, plunge, throw in'

act. prs. sg. 3 šu-ú-ni-iz-zi OH** KBo VI 26 I 34
KBo III 38 Vs.29
(=StBoT 17 B)

šu-ú-ni-e-iz-zi MH KBo XVII 105 Vs.II 3'

pl. 3 šu-ú-ni-la-an-zi MH* VBoT 24 III 7

prt. sg. 3 šu-ú-ni-it OH** KBo VI 26 I 39

šu-ú-ni-e-it ibid. 44

In the post-OH period, when morpholexical constraints on the two major conjugation types (as well as spelling practices) slacken, the stem šu-ú-ni-(a-)i⁺ (ni-conj.) 'to sow', etc. (note the plene writing with ú and the "single" n) falls together with the stem šu-un-na-(a=)⁺ (hhi-conj.) 'to fill',²⁷ e.g. šu-un-ni-id-du LH Tunnawi IV 13 'he shall fill' : šu-un-ni-la-an-zi LH VI 45 IV 29 'they throw in', pointed out by Oettinger (1979 : 159). In a LH copy of the Zalpa story, viz. KBo III 38 = StBoT 17 B, both verbs occur: šu-un-na-ab-hi (hhi-conj. prs. sg. 1) vs. šu-ú-ni-iz-zi

²⁷ (šu-un-na-ab-hi OH** StBoT 17 B Rs.17', šu-un-na-i OH KBo VI 2 IV 50', šu-un-na-aš OH StBoT 17 A [= KBo XXII 2] Vs.2, etc.; note the spelling of the verb meaning 'to fill', namely: non-plene and the "double" =n-n=).

(see the paradigm). H. Otten's glossing of both as "füllen" (StBoT 17 pp.41, 76 [Glossar] and 9 ["er füllt"]) is, in my view, incorrect. Although the context of šū-ú-ni-iz-zi is too poorly preserved here for us to be sure what the verb meant in that lost context, its spelling, stem and conjugational type are so distinct from those of the verb 'to fill' as to make it necessary to regard the form šū-ú-ni-iz-zi as that of a different verb (cf. other forms of this verb in the paradigm above).

17. šū-wa-i-i : šū-wa-la 'to look, look after'

act. prs. sg. 3 šū-wa-i-iz-zi OH KBo VI 2 I 2, etc.
OH* KBo VI 3 I 38

šū-wa-a-i-iz-zi ibid. 36

šū-wa-a-iz-zi OH* KBo VI 3 I 9, etc.
OH** KBo VI 6 I 38, etc.

šū-wa-iz-zi OH* KBo VI 3 I 3

šū-wa-iz-zi OH** KBo VI 5 I 13, etc.

šū-wa-e-iz-zi OH* KBo VI 3 I 18

šū-wa-e-iz-zi OH** KBo VI 14 I 14

šū-wa-a-i-e-iz-zi OH* KBo VI 3 I 34
OH** KBo VI 4 I 34

šū-wa-la-az-zi OH** XXIX 28, 9

šū-wa-la-zi OH** KBo VI 5 IV 15

šū-ú-wa-iz-zi OH* KBo VI 3 II 52

šū-ú-wa-a-iz-zi OH** XIII 13 Vs.7

act. prt. sg. 1 šu-wa-ia-u-un- OH** XXIX 1 II 12⁸

3 šu-wa-i-it OH** XVII 6 I 24

imper. sg. 2 šu-ú-wa-ia OH** XXIX 1 I 52

3 šu-wa-a-id-du MH* XXIV 11 III 10

The oldest writing of the stem is š-u-wa-i-i+ which is consistently written this way in the OH text of the laws (also in OH** XVII 6 I 24: a-pa-a-ša GIŠ lu-ú-ut-[ta-an-za] ar-ha šu-wa-i-i 'and he looked out the window')'.²⁹ A variety of different spellings appear already in the early OH** copy of the laws (see samples above). The most widespread spelling is š-u-wa-a-i+ (with its variant š-u-wa-i+) which looks like a transfer to class IV (q.v.). However, the treatment of this stem (and others like it, e.g. ta-a-i-i+ 'to steal', q.v. below) as belonging to class I is justified not only by the writing of its stem final, which sets it apart from class IV verbs, but also by some of the forms (such as imper. sg. 2 in =ia and prs. sg. 3 in =ia-(a-z-)zi) which follow the path of development shown by class I verbs, never by those belonging to class IV.

18. ta-(a-)i-i+ (: ta/da-(a-)(i-)ia+), etc. 'to steal'

act. prs. sg. 3 ta-a-i-iz-zi OH KBo VI 2 I 39 et passim

²⁸ Apparently, scribal error for š-u-wa-ia-nu!-un. There are at least six other scribal errors in this column.

²⁹ For an impasse-breaking discussion of the meaning of š-u-wa-i-i+, see Starke 1977 : 36 f.

OH* KBo VI 3 III 35, etc.

ta-i-iz-zi OH KBo VI 2 IV 51

da-a-i-iz-zi OH KBo VI 2 III 23

da-a-i-iz-zi OH* KBo VI 3 I 48

da-a-e-iz-zi OH XXIX 25, 6

t]a-e-i-iz-zi OH** KBo VI 12 I 2, etc.

da-a-i-e-iz-z[i OH** XIII 13 Vs.4

ta-i-e-iz-zi OH** KBo VI 10 I 21, etc.

da-i-e-iz-zi OH* KBo VI 3 IV 30

ta-a-iz-zi OH* KBo VI 3 IV 50

ta-a-i-la-zi OH** KBo VI 8, 2

da-a-i-la-zi OH* KBo VI 3 III 39

da-a-la-az-zi MH XXIII 72 Rs.56

ta-la-a-az-zi OH* KBo VI 3 III 26

prt. sg. 3 da-la-at MH* XIII 9 II 11

deverbative ta-la-zi-l+a-aš (gen.sg.) 'theft'
OH* KBo VI 3 IV 39

da-la-zi-la-aš ibid. III 69

The development of this stem can be summed up as follows:

OH originals: 1. ta/da-(a-)i-i⁺

2. ta/da-(a-)e-i⁺

Post-OH: 1. ta-a-i⁺ (OH*)

2. ta/da-(a-)i-e-i⁺ (OH**)

3. ta/da-a-i-la⁺ (OH**)

4. da-(a-)la-a⁺ (MH(*))

5. ta-la-a-a⁺ (OH*)

Post-OH stems 3 - 5 are due to the spread of the a-shape stem final, characteristic of class I in its later attestations; stem 1 is a transfer to class IV (q.v.). Stem 5 could be an error (hapax!) emendable to a more conventional ta-a-ia-a⁺ which would then look more like the MH(*) stem 4. As in many other cases, the OH* copy KBo VI 3 contains a variety of spellings which reflect both the OH original and the later developments.

19. tal-li-i-e-i⁺ 'to invoke' ('placate'?)

imper. sg. 3 tal-li-i-e-id-[du MH XVII 10 II 14

prt. sg. 3 tal-li-ia-at MH* X 72 II 5

participle tal-li-an MH* XV 32 I 47

-/ske/form:

act. prs. sg. 1 tal-li-eš-ki-mi MH* VII 5 I 23

20. ti-i((e=)l=)⁺ : ti-(l-)ia(-a=)⁺ 'to stand (up);
place oneself'

act. prs. sg. 1 ti-ia-mi MH XIV 1 Rs.25
Mst. 75/43 arkayüz 15

3 ti-i-e-iz-zi OH XXIX 30 II 19, et passim
OH** KBo XXV 42, 2'
MH IBoT I 36 IV 18

ti-i-e-zi OH** KBo X 23 I 21
MH KBo XXI 85 I 40'

ti-e-iz-zi OH StBoT 25 No.30 Vs.II 16'
MH KBo XXI 85 I 40'

ti-i-iz-zi OH StBoT 25 No.12 Vs.I 5',

No.47 Rs.III 8'

OH** KBo X 23 II 24

ti-iz-zi OH** KBo VI 26 IV 24 (end of line, cf.

ti-i-iz-zi ibid. 19)

ti-ia-zi OH** KBo X 26 I 5, 12, et passim
 MH KBo XXI 85 I 30'
 MH* KBo XX 63 I 13

ti-ia-az-zi MH IBoT I 36 önyüz II 14,
 43, III 34, etc.

ti-i-e-az-zi MH XXIX 8 I 53 (cf.

ti-i-e-iz-zi ibid. 7)

pl. 1 ti-i-ia-u-e-ni MH* XL 15 II 6

2 ti-ia-at-te-ni MH KBo XIX 58 8', 15'

3 ti-i-en-zi OH StBoT 25 No.19 Vs.48
 (=z[1]) OH** KBo XXV 47 Rs.IV 13'

ti-i-in-zi OH StBoT 25 No.54 Vs.II 15'

ti-i-la-[an-zi OH** KBo XIV 66 II 3

ti-an-zi OH** XXIX 34 11

prt. sg. 1 ti-ia-nu-un OH** KBo X 2 II 51

3 ti-i-e-i[t OH KBo VIII 42 Rs.? 8
 (=it) MH KBo XX 59 18', 21'
 ti-ia-at OH** KBo X 2 II 53

ti-i-e-ir OH** KBo III 1 I 37

imper. sg. 2 ti-i-la OH** XXIX 1 I 11, II 23, etc.

-/ske/-forms:

act. prs. sg. 1 ti-iš-ši-ki-mi OH** KBo III 34 III 4

pl. 3 ti-iš-ša-kán-zi MH IBoT I 36 IV 30

etc.

There are apparently two more attestations of act. prt. pl. 3 ti-i-a-ir in ar-ga ti-i-a-ir OH** XXXVI 54, 1 and ar-ga ti-[i-]a-ir OH** KBo III 7 I 10, both 'stepped out to battle' or the like (see on this Hoffner 1978 : 247, Puhvel 1979 : 57 f. and Puhvel 1982 : 179; thus no *argati-a- 'contend, battle', as e.g. in HW¹).

In non-historical terms, this verb looks like a mi-conjugation stem based on the same root as the hhi-conjugation stem da-a-i : ti-(i=)⁺, etc. 'to place/put'. The forms where the stem-shape and desinential distinctions between the two conjugations are neutralized, such as prs. pl. 3 and the participle, are almost identical, cf. e.g. ti-i-an-zi (to ti-i-a-i⁺) vs. ti-an-zi OH StBoT 25 No.31 Vs.II 6' and elsewhere, ti-an-zi OH (**) and MH(*), ti-ia-an-zi OH** (to da-a-i). The participle to the former is expected to look like ti-(i-)ia-(a-)an-t⁺, i.e. practically identical to the participle of da-a-i (hhi-conj.), and for semantic reasons it is impossible to distinguish between the two. The only possible disambiguating spelling, viz.. *ti-i-ia-an-t⁺, is not attested in my collection of pre-LH texts.

21. û-e-mi-(a-)i⁺ : û-e-mi-(ia-)a⁺ 'find'

act. prs. sg. 1 û-e-mi-ia-mi MH KBo VIII 35 IV 2'

3 û-e-mi-iz-zi OH KBo VI 2 III 38
OH** KBo III 34 I 12
MH XXXIII 5 Vs.? II 16

û-e-mi-e-iz-zi OH* KBo VI 3 III 37

MH XXIII 77 60

û-e-mi-la-az-zi OH* KBo VI 3 II 57
MH Mst. 75/10 Gn. 5

û-e-mi-la-zi OH* KBo VI 3 I 64
OH** KBo VI 4 IV 5

û-e-mi-az-zi MH* XIII 7 I 19 (hapax).

û-e-mi-la-iz-zi MH* KBo XIII 58 Rs. III 4'
(hapax)

pl. 1 û-e-mi-la-u-e-ni MH* XIII 7 I 5

3 û-e-mi-an-zi MH IBoT I 36 III 16

û-e-mi-la-an-zi MH XXXVI 127 Rs. ? 10
MH* VBoT 24 II 21

prt. sg. 1 û-e-mi-la-nu-un MH XXXIII 2 I 13
°nu[-un MH* IBoT III 141 I 10'

3 û-e-mi-it OH** KBo III 7 I 20
MH XIV 1 Rs. 62
MH* IBoT III 141 I 9'

û-e-mi-e-it MH XXXIII 26 Vs. 3

û-e-mi-i-e-it! MH* XXXIII 24 I

û-e-mi-la-at MH XVII 10 I 27

pl. 1 û-e-mi-la-u-en OH StBoT 17 A Vs. 14
MH* XXIII 21 Vs. 32

2 û-e-mi-la-[at-ten] MH* VBoT 58b I 23

3 û-e-mi-ir OH** KBo III 34 II 24
MH* XXXIII 41 II 12

infinitive û-e-mi-la-u-wa-an-zi OH**?
KBo III 21 II 13

-/ske/-forms:

act. prs. sg. 3 û-e-mi-lš-ki-iz-zi MH XXVI 17 II 4

prt. sg. 3 û-e-mi-lš-ki-it MH* StBoT 22 Eid 1 Vs. I 19'

The oldest spellings are ambiguous: =mi-iz= may stand for =[mits]= as well as =[myets]= or =[miyets]=. The early OH** text (KBo VI 3) has a tendency to make spellings more precise by using scriptio plena, cf. ú-e-mi-e-iz-zi where the sign iz is disambiguated through the use of the sign a. Alternative spellings (which, in the case of the early OH** text of the laws KBo VI 3, reflect a more contemporary pronunciation, perhaps the scribe's own [or a different dialect]) such as ú-e-mi-ia-az-zi show the spread of the vowel [a] at the expense of [e] in the stem final, which is typical of this class. The form ú-e-mi-ia-iz-zi is a transfer to class IV (the proportion would be e.g. [urkiyantsi] : [urkiyaltsi] = [wemiyantsi] : X, where X = [wemiyaltsi]; NB the semantic closeness of the two stems: ur-ki-ia-i+ OH (class IV, q.v.) 'to track down, trace' and ú-e-mi-i+, etc. 'find').

22. wa-ap-pí-ia+ 'to roar, bay'

act. pres. sg. 3 wa-ap-pí-ia-zi MH* XIII 8 Vs.7
KBo XII 96 I 12

Other attestations, none of them dated so far, see in
Kronasser 1966 : 490.

Other verbs that possibly belong to the primary subclass of class I are as follows:

23. ar-pí-ia-a⁺t-ta-ri OH** KBo III 21 II 23 (the only [possibly originally] pre-LH attestation). Its meaning, or even conjugational type, is unknown.

24. a-aš-šī-ia-a⁺ '(be in) love'. The only attested forms of this stem are non-finite, namely the participle and two kinds of verbal noun, e.g. dat.-loc.sg. a-aš-šī-ia-an-ti OH** KBo III 21 III 20, 21, 24, XLI 29 Vs.III ?, nom. pl. a-aš-šī-ia-an-ta-aš MH XV 34 II 31, comm.nom.sg. a-aš-šī-ia-an-za MH* VBoT 120(+)II 17. The verbal nouns are a-aš-šī-ia-u-wa-ar n. '(divine) love/favor' and a-aš-šī-ia-tar n. 'love' (see attestations in HW² : 403; all are LH). The available evidence is insufficient even to determine whether the verb belongs to the mi- or the hhi-conjugation. The most tantalizing thing about this stem, for my purposes, is its relation to the u-stem noun a-aš-šū n. 'good, weal' which is plainly based on the same root, and the factitive stem a-aš-ša-nu⁺ 'to care for, take care of' (cf. the -/ske/-stem a-aš-šī-ia-nu-uš-ga-u-a-ni MH* XXXI 42 II 23, a morphologically younger factitive to a-aš-šī-ia⁺).

25. ha-li-a⁺ : ha-a-li-a⁺ 'to bend, kneel'.

Attestations of this stem are not sufficient to determine what conjugation type it belongs to (see StBoT 5 : 34 f.). Most of them are of the medial a-type (e.g. prs. sg. 3 ha-a-li-ia OH(**?) XX 46 III 12 'kneels'). The OH** attestations in my collection are: ha-a-li-an-ti⁺e-aš (comm. nom. pl. participle) XXIX 1 II 4 and ha-li-an-zi (act. prs. pl. 3)

KBo VI 26 IV 14 (HG 584, II.Tafel). The sense of the latter, and therefore its membership in the paradigm, is problematic; it occurs in a legal passage dealing with death penalty and clemency: (13)... ták-ku te-iz-zi 2-pát ak-kán-du (14) ta hu-ur-ki-in ha-li-en-zi 'if he says, "let the two [of them] die", then they h. h.'. The translation "das Rad in Bewegung setzen" does not make any sense to me in this context; "they (may) ask for mercy" makes better sense, but is entirely ad hoc.³⁰ (It is possible, of course, that "setting the wheel in motion" is an idiom, the legal meaning of which is anybody's guess; the tenuousness of the meaning posited for the verb, however, makes it even less probable.) Third person singular forms such as VIII 62 I 4 ha-li-la-zi LH could be later backformations to g-middles. The completion ha-li-a[-zi] proposed by E. Neu (StBoT 5 : 35 footnote 6) for IX 11 + I 6 (not dated) is not necessary.³¹ The reduplicated stem of ha-li-ih-la-i, apparently based on the same root as the stem under consideration, belongs to the hhi-conjugation (e.g. ha-li-ih-la-at-ti 'thou kneelest (before...)' OH** KBo III 34 II 21, sg. 3 ha-li-ih-la-i MH XIV 1 Rs.10). Later attestations of the unreduplicated stem (all hhi-conj.) can be found in Kronasser 1966 : 545; see *ibid.* attestations of ha-li-ih-la-i with references). If, however, mi-conjugation forms of ha-li-a+ are old, then the

³⁰ On both, see StBoT 5 : 34 footnote 6 with references.

³¹ ha-li-iz-zi 1547/u, 3 adduced by Neu (StBoT 5 : 34) is apparently still unpublished and so out of my reach.

relation of this stem to the middle ha-a-li-la may have a bearing on C. Watkins's hypothesis of the origin of the thematic inflexion (Watkins 1969 : 104 ff.). C. Watkins (and following him Oettinger 1979 : 517) implies, in accordance with his view "dass sich die Erneuerung einer ursprünglichen 3.Sg. Medialendung *-e/o durch Anfügung von scheinbar aktivem -i(i) und eine daher stimmende thematische Konjugation des Aktives auch im Hethitischen aufzeigen lässt (Watkins 1969 : 101), that "haliyazi" is built secondarily on the middle a-form "haliya(ri)": Die Bedeutung des Verbums weist vielleicht eher auf mediale Flexion als die ursprüngliche hin" (Watkins 1969 : 102). This would imply that the function of this new active is the same as that of the remodeled middle. It seems, however, that ha-a-li-la and ha-li-iz-zi : ha-li-en-zi contrast in transitivity: the former is intransitive whereas the latter is transitive, see the passage quoted above, where hu-ur-ki-in is the direct object of ha-li-en-zi; cf. ha-li-ih-la-i (hhi-conj.) which is also transitive.³² The conclusion to be drawn from this is, then, that ha-a-li-la and ha-li-iz-zi (if old) are different formations in function and, if both are of the same relative age, there is no need to claim that the latter is a remodeling of the former.

³² KBo III 34 II 20f. mar-ša-an-za-wa zi-ik LUGAL -un-wa-az me-ik-ki ha-li-ih-la-at-ti "Thou art fraudulent", quoth he, "thou twistest the king for thyself a great deal".

2.3.1.2 Secondary Stems (a): Deverbatives

26. ar-ši-(i-)e-(i=)+ : ar-ši-ia-a+ 'flow, pour
(intr.)'

act. prs. sg. 3 ar-ši-e-iz-zi MH XXIX 7 Rs.51

ar-ši-e-iz-zi MH XVII 10 III 26

ar-ši-i-e-iz-zi MH* XXXIII 54, 10

a]r-ši-ia-zi MH* XXXIII 49 II 3

pl. 3 ar-ši-ia-an-zi MH* IBoT III 141 IV 5

mid.imper.sg. 3 ar-ši-ia-at-ta-ru OH* KBo VII 28 Re:

16³³. In addition to this stem (class I), a root stem,

namely ar-aš+ : ar-š+ (mi-conj.) 'flow, run, hurry' also

occurs in texts dating from the same period (see now StBoT

29 : 62). A sample of attestations is as follows:

act. prs. sg. 1 ar-aš-mi OH* or MH XXXV 75 + III 19

3 ar-aš-zi MH XV 34 III 24

a-ar-aš-zi MH* XLI 8 IV 37

a-ar-zi MH(*) XLIII 58 II 15

MH* KBo X 45 IV 39, etc.

pl. 3 ar-ša-an-zi MH XV 34 III 13

imper. act. 3 ar-aš-du MH KBo XVII 105 II 34

participle ar-ša-an-t+e-aš OH** XXXIII 41 II 9

³³ E. Neu (StBoT 5 : 16) incorrectly, in my view, translates this form as "soll gedeihen". The OH* text (KBo VII 28) runs as follows: (Vs.15) nu ma-a-ú šī-lā-du nu A-NA DINGIR MEŠ NINDA.KUR₄.RA HI.A GEŠTIN lā-na-an-du-uz-z[i- la (16) ar-ši-ia-at-ta-ru "and (the land) shall grow (and) be tranquil, and loaves [and] wine libation vessels shall be overflowing for/to the gods" (rather than Neu's "...und den Göttern soll Brot- und Weinopfer gedeihen").

-/ske/-forms:

act. prs. sg. 3 ar-šl-ik-ki-it OH** KBo VI 13 I 8

If there is a semantic distinction between the two stems (+i-(i-)a-i+ : +i-ia-a+ and root), it is not easy to determine from their contexts (but see the summary to this chapter).

27. ha-az-zi-(a-)i+ : ha-az-zi-a+ 'strike, play
(a musical
instrument)'

act. prs. sg. 3 ha-az-zi-iz-zi OH** KBo III 34 II 33, 34

ha-az-zi-zi OH** KBo XII 3 Rs.IV 12'
OH** KBo III 60 Vs.II 14

pl. 3 ha-az-zi-an-zi OH StBoT 25 No.33 Vs.(I) 19'
OH* XLIII 60 IV 15'

prt. sg. 3 ha-az-zi-e-it OH** XXXVI 100 Vs.15

ha-zi-it OH** KBo III 36 Vs.8

imper. sg. 3 ha-az-zi-e-i[t-tu] OH StBoT 18 Rs.51

participle ha-az-zi-an OH KBo XXII 1, 23'

-/ske/-forms:

act. prs. pl. 3 ha-az-zi-iš-k[ān-zi] OH StBoT 25
No.35 Vs.II 5

ha-az-zi-iš-kān-zi OH** StBoT 25 No.32:
Bo 2599 + Vs.II 5'

ha-az-zi-iš-kān-zi OH** KBo X 23
Vs.IIIy + 15

ha-az-zi-iš-kān-zi MH KBo XV 33 II 11';
III 6

This stem is apparently derived from the root stem ha-at-t⁺ / ha-ad-d⁺ (med. tant.) 'hit, chop' (e.g. midd. prs. sg. 1 ha-ad-da-ah-ha-ri OH XVII 28 I 6, 3 ha-at-ta-ri OH KBo XI 14 III 9, pl. 3 ha-at-ta-an-ta OH StBoT 25 No.29 Vs.7II 6', etc.;³⁴ =z-z= is the allophone of /t/ [written as =t-t=, =d-d= in other environments] before /i/ and its prevocalic allophone [y]). The difference between the two stems seems to be that of Aktionsart: ha-at-t⁺ is instantaneous (cf. Russ. udariti 'strike (once)'), whereas ha-az-zi-(a-)i⁺ (mi-conj.) is iterative (cf. Russ. udarjati 'strike (repeatedly)'). The function of the suffix +i-(a-)i⁺ : +i-a⁺ here, then, is that of an atelicizer.

28. hu-it-ti-(i=)⁺ (a-midd.); hu-it-ti-ia-(a=)⁺ (mi-conj.) 'pull, draw'

The oldest form of this verb has the midd. sg. 3 ending +a⁺: midd.prt. sg. 3 hu-it-ti-ia-ti OH StBoT 18 Rs.54

(cf. prt. sg. 3 hu-it-ti-it-ti [possibly a mistake for an expected *hu-it-ti-ia-ti] in the OH** StBoT 18 Rs.72 = XXVI 71 Vs.I 15'). Participle hu-it-ti-an OH KBo VIII 42 Vs.714' [and hu-it-ti-ia-an-t⁺a-as (comm. nom. pl.) MH XV 34 IV 12] is, of course, neutral with regard to voice and conjugation.

³⁴ Other attestations see in StBoT 5 : 51 f. Neu's setting up the stem as "hatta-" is not well justified, as prs. sg. 3 ha-at-ta-ri should be segmented as ha-at-t⁺a⁺ri, not as ha-at-ta⁺ri, +a⁺ being midd. sg. 3 ending and +ri, midd. "primary" marker. Prs. sg. 1 ha-ad-da-ah-ha-ri, then, either has an anaptyctic vowel or is graphic for [hathhari].

Later texts have active mi-conj. forms to this stem, such as

act. prs. sg. 1 hu-u-it-ti-la-mi MH* VBoT 24 III 13, IV 10

3 hu-it-ti-la-z[1 MH XV 34 Vs.III 56

prt. sg. 1 hu-it-ti-la-nu-un MH KBo XXI 41 Vs.65

(Act.prs. pl. 3 hu-it-ti-an-zi OH** XXIX 1 III 27, MH KBo XV 33 II 14', hu-it-ti-la-an-zi MH XV 34 Vs.I 3 et passim, as well as imper. pl. 2 hu-it-ti-la-at-tan MH Mst. 75/13 öy.14, are not distinctive with regard to conjugation type. If hu-it-ti-la-at MH XXXIII 3, 5 and XVII 10 IV 14 is middle prt. sg. 3, its conjugation type cannot be determined; if it is active, then it belongs to the mi-conjugation.)

Later yet, middle tia-forms appear, e.g. prt. sg. 3 hu-it-ti-la-at-ta-at LH Hatt. III 14. These could be either backformations to actives³⁵ or remodelings of the a-middles (e.g. MH hu-it-ti-la-at expanded to LH hu-it-ti-la-at-ta-at).

If the absence of mi-conjugation forms in the available OH texts be taken to mean that the OH language did not have such forms (it must be kept in mind that this absence may be accidental), then one would have to look for their source. This is likely to have been a certain form (or forms) common

³⁵ Oettinger 1979 : 517 proposes just the opposite order of the development, viz.: "Später wird...ein passivisches Medium mit Prät. Sg. 3 hu-it-ti-la-at-ta-at 'wurde gezogen' (Hatt.III 14) gebildet, das ein Aktiv huittia-mi nach sich zog." At least in my collection, tia-middles to this stem do not occur in pre-LH texts (Hatt. being LH).

to both voices, such as the prt. sg. 3 in +ia-a+t; this form³⁶ would have been the same as in act. mi-conj., in form and in function (prt. sg. 3), only after =/ia/-forms replaced the inherited -/ye/-forms in sg. 2, 3 and pl. 2 stem finals of class I. The replacement ("spread" of the a-vowel throughout the paradigm) is a post-OH phenomenon.

Alongside the suffixed a-forms, OH* has one root middle, namely prs. sg. 2 hu-a-iz-ta OH* XVII 10 IV 1, 2³⁷ (= /hweɪ̯tə/ = [hwetsta], cf. a-iz-tu [etstu] = /eq̥tu/).

The lack of assibilation in =t-t= before the i of the suffix is remarkable (see 2.1.9 above); it is possible to explain by positing that the suffixation took place after the assibilation rule had ceased to operate.

It is difficult to discern a functional difference between the two formations (root and suffixed), but a difference in Aktionsart, similar to that between ha-at-t⁺ and ha-az-zi-(a-)⁺, is at least possible.

29. kar-ni-(i-(a-))⁺ : kar-(an-)ni-a⁺ 'raise;
perform (a service)'

³⁶ Watkins's explanation of the rise of act. mi-forms of "haliya-" (Eine 3.Sg. des Präteritums haliyat... die Friedrich, HWb. und Kronasser 484 als aktiv ansehen... könnte ebensogut medial sein..." Watkins 1969 : 102), which does not apply to ha-li-a⁺ (see above in the relevant lemma), seems appropriate in the case of hu-it-ti-ia(-a-)⁺. It must be kept in mind, however, that the development is of a post-OH date.

³⁷ LH adds prs. sg. 1 hu-it-tah-ha-ri KBo XI 11 I 4 and prt. hu-it-tah-ha-at ibid. 8, both root. For other LH attestations, as well as discussions of the two stems, see StBoT 5 : 56 f.; StBoT 18 : 94 - 96.

act. prs. sg. 3 kar-pf-iz-zi OH KBo VI 2 II 42, 46
kar-pf-iz[-zi OH* KBo VI 3 II 69
kar-pf-i-iz-zi OH KBo VI 2 II 39, 48, 49
OH** KBo VI 9, 5
kar-pf-i-e-iz-zi OH* KBo VI 3 II 66
kar-pf-i-e-iz-zi OH** KBo VI 4 IV 27, 34
pl. 3 kar-pf-an-zi OH StBoT 25 No.128 l.col.3'
OH** KBo VI 4 IV 25
KBo VI 6 I 9, 11; et al.
kar-ap-pf-an-zi OH StBoT 25 No.72 Vs.II 3
prt. pl. 3 kar-pf-i-e-i[r OH** KBo VI 6 I 23

In addition to these class I forms, OH(**) texts have root
mi-forms:

act. prs. sg. 3 kar-ap-zi OH StBoT 25 No.34 Rs.5'
(little context)
kar-ap-zi OH* KBo VI 3 II 60
OH** KBo VI 4 IV 22, 24
(parallel to OH KBo VI 2 II 39
kar-pf-i-iz-zi)

Oettinger (1979 : 345) claims, without much argumentation,
that "kar-pf^{mi} ist jüngere Umbildung!". Apparently, his view
is prompted by the fact that most of the attestations of the
root stem are found in OH** copies of the laws, with +f-i-i+
forms found in the parallel OH text. The nature of the
data, however, calls for greater caution. There is at least
one clearly OH attestation of the root stem (q.v. above)
[incidentally, not mentioned in Oettinger 1979]. Since both

stems occur in OH, there is no necessity to regard kar-ap- (ai-conj.) as an innovation. But even assuming that it is an innovation, I fail to see how it arose. Root stems and those belonging to class I have no forms in common, which could serve as starting points for the remodeling pointed out by Oettinger.

In view of the above, I regard the two stems as contemporaneous. It is possible that the difference between them was that of Aktionsart (cf. e.g. stem 2 and possibly stem 3 in this section), the root stem being telic (instantaneous) and the class I stem, atelic (iterative). The idiom recurring in the laws (OH), viz. lu-uz-zi kar-ní-i-iz-zi 'performs the corvée (or the like)' (KBo VI 2 II 39) / lu-uz-zi na-at-ta kar-ní-i-iz-zi (ibid. 40) calls for the class I stem (cf. Russ. proizvodit' raboty 'to (be) perform(ing) the work' vs. (?) proizvesti raboty 'to finish performing the work'; in the latter phrase, the verb zakončit' 'finish/complete' would be preferably used). The later texts use the telic form instead of the atelic one, which is either a mistake or a sign of noemic change.

30. kar-aš-šl-i-(a-)l+ / kar-aš-še-l+ 'cut (off)'

act. prs. sg. 3 kar-aš-šl-i-i-iz-zi OH KBo VI 2 I 8

kar-aš-šl-i-e-iz-zi OH* KBo VI 3 I 15

kar-aš-še-iz-zi OH** KBo VI 13 I 3

These forms occur in very similar contexts: KBo VI 3 I 14 - 15 is a rather faithful copy of KBo VI 2 I 7 - 8, while the phrase where the OH** attestation occurs is almost the same.³⁸

Alongside these forms, root stem forms also occur and are indeed more frequent; e.g.:

act. prs. sg. 1 kar-aš-mi OH** XXIX 1 I 36

3 kar-aš-zi OH KBo VI 2 IV 22

pl. 3 kar-ša-an-zi- OH** KBo III 46 Rs.7'

prt. sg. 1 kar-šu-un OH* or MH XXX 10 Vs.15'

3 kar-aš-ta OH* XVII 10 II 6

imper. sg. 2 kar-aš OH** XXIX 1 I 37

pl. kar-aš-te-en MH XVII 10 III 5

infinitive kar-šu-u-wa-an-zi OH** XXIX 1 III 15³⁹

³⁸ KBo VI 2 I (7) ták-ku LÚ.ULÚ LU-aš LÚ-aš na-aš-ma SAL-za ta-ki-i-ia URU-ri a-ki ku-e-la-aš ar-hi a-ki (8) 1 ME gi-pí-eš-šar A.ŠĀ kar-aš-ši-i-iz-zi na-an-za da-a-i; KBo VI 3 I (14) ták-ku LÚ.ULÚ LU-aš LÚ-aš na-aš-ma SAL-za ta-ki-ia URU-ri a-ki ku-e-la-aš ar-hi (15) a-ki 1 ME gi-pí-eš-šar A.ŠĀ kar-aš-ši-i-e-iz-zi na-an-za da-a-i "If a human, man or woman, dies in a foreign city, (the person) in whose boundary he/she dies, cuts off one hundred ells of (his) field and he (=the representative of the dead person) takes it". KBo VI 13 I (OH**) (2)... EN A.ŠĀ LAN 1 gi-pí-eš-šar (3) kar-aš-še-iz-zi ta-az da-a-i 'the owner of the field cuts 1 ell off the field, and he takes it (he ≠ the owner). The latter attestation qualifies this stem to be considered as belonging to class XI, but in accordance with the principles mentioned in the "Note on Chronology" in the introductory section to this chapter, kar-aš-ši-i-iz-zi takes precedence as the older form.

³⁹ Other attestations see e.g. in Oettinger 1979 : 200. Oettinger lists root-stem forms together with the suffixed (the OH attestation). In Oettinger's

Functional differences between the two (clearly contemporaneous) stems, if any, cannot be discerned on the evidence of their contexts. In at least some of the contexts, the stems are interchangeable, e.g.: OH** KBo VI 13 I (2)...EN A.ŠĀ LAM 1 gi-pí-eš-šar (3) kar-aš-še-iz-zi ta-az da-a-i // OH** KBo VI 26 I (47)...EN A.ŠĀ A.ŠĀ 1 gi-pí-eš-šar kar-aš-zi (48) ta-az da-a-i 'the owner of the field cuts off one all of the field and he takes it' ('he' ≠ 'the owner').

31. ma-al-ki-ia-at 'spin, (un)ravel'

act. prs. pl. 3 ma-al-ki-ia-an-zi OH** XXIX 1 II 8

prt. sg. 3 ma-al-ki-ia-at MH* XVII 27 II 29

See other attestations (all LH) in HD : 131. The stem is apparently based on the root stem malk- attested in

act.prs.sg.3 ma-la-ak-zi 'unravels' KUB VII 1 (dated in HD : 131 as "pre-NH/NS" = OH**/MH*) II 14.

32. pár-ki-ia-at 'raise, lift'

act. prs. pl. 3 pá-r-ki-ia-an-zi MH KBo XX 33 III 10
MH(*) IBoT III 148 III 13

prt. sg. 3 or
ald. prt. sg. 3 pá-r-ki-ia-at OH* XXXIII 68 II 1

ald. prt. pl. 3 pá-r-ki-ia-an-ta-at MH*? KBo XI 10 III 11

(unsubstantiated) view, "karšia-^{mi}" is analogic to "karšia-^{mi}" (q.v. loc.cit.).

(Other attestations and the literature see in StBoT 5 :

138.)

In addition to this stem, a root-stem form (imper.midd.sg.3) is found in the same text where the OH* attestation of the class I stem occurs: (1f.) nu ša-an-ku-uš a-li-il ma-ah-ha-an pār-ki-la-at tu-el-la šA^D U ZI-KA a-li-il pār-ak-ta-ru. Since, however, the sense of the sentence is not clear,⁴⁰ little can be said of the possible functional difference between the two stems.

33. pār-ši-(la-)a⁺ 'to break (bread)'

mid. pres. sg. 3 pār-ši-la OH StBoT 25 No.25 Vs.I 52"
 XXIX 30 III 10, 12, etc.
 OH** KBo X 28 Vs.II 12
 Bo 2599+II 2', etc.
 MH XV 34 I 28 et passim;
 KBo XXI 85 IV 9' et passim
 MH* KBo XX 63 I 15

⁴⁰ The opacity is due to the hapax ša-an-ku-uš and problems with a-li-il (n.). The translation "bunt(?)" for š. in HW¹ : 182b, used by Neu (StBoT 5 : 138), is a mere conjecture, cf. HW² : 59a for a more cautious treatment š. left untranslated). On a-li-il, see now HW² : 58b f.. This noun is likely to be the name of a plant (or a product thereof) used for ritual mediation purposes; cf. "(D) alila-¹ (Kultgegenstand einer Gottheit; daher auch mit Gottesdet. geschrieben; hurr.?)" (HW² : 59a). Cf. also "alila-² c.", which, according to Kammenhuber, is "eher zu alili- c. (Orakelvogel) als zu alil- n." (loc.cit.). The text (LH ritual KUB XII 62 Vs.11 ff.) makes the interpretation of the noun as 'alil plant' just as likely, if not more likely, than that proposed by Kammenhuber: a-li-li wa-ar-šu-wa-an-zi pa-a-i-mi... (13f.) a-li-la-aš-za wa-ar-šu-wa-an-zi ū-ul me-im-ma-i 'I go to the alil (or 'to the alil plant') to reap (it)... (13f.) the alil plant does not refuse to be reaped' (cf. Kammenhuber's translation: "Ich gehe zum a. um es zu pflücken od. es zu beruhigen.a. weigert sich nicht zum Pflücken od. sich zu beruhigen.").

KBo XIX 161 I 2' et passim

- pl. 3 pá-r-š-i-ia-an-da OH StBoT 25 No.88, 7', etc.
 pá-r-š-i-an-da[(- OH StBoT 25 No.53 r.col.5'
 pá-r-š-i-an-ta[(- OH StBoT 25 No.54 Vs.II 21'
 mid. or
 act. prt. sg. 3 pá-r-š-i-at LMH KBo XV 10 III 63'
 pá-r-š-i-ia-at ibid. 68'
 act. prs. pl. 3 pá-r-š-i-an-zi MH KBo XXI 85 I 48'
 pá-r-š-i-ia-an-zi ibid., 46',
 50', IV 29'
 MH* VBoT 24 II 22
 prt. sg. 1 pá-r-š-i-ia-nu-un LMH KBo XV 10 II 33, 40
 participle pá-r-š-i-ia-an-t+a-an MH KBo XXI 85 IV 10'

As the listing of attestations shows, active forms begin to appear in post-OH texts. It is possible that they arose analogically, starting from the ambiguous form pár-š-i-(ia-)at (ambiguous in post-OH, cf. the comments on hu-it-ti-ia-at above).

A few tta-middles are also found. Those in my collection, q.v. below, are all from the same MH* text:

- mid. prs. sg. 3 pá-r-š-i-it-ta-ri MH* StBoT 22 Eid 1 Vs.II 10
 (=KBo VI 34)
 imper. sg. 3 pá-r-š-i-it-ta-ru ibid. 16
 pá-r-š-i-ia-ad-da-ru MH* StBoT 22 Eid 1 Vs.I 38

These younger middle forms can be explained as backformations to active forms.

Alongside the class I forms, contemporaneous root-stem forms are also attested, e.g.:

mid. prs. sg. 1 pá-r-aš-ha OH StBoT 25 No.3 Rs.III 14

pá[r-a]š-ha-ri ibid. IV 10

pl. 3 pá-r-ša-an-da OH StBoT 25 No.26 Rs.?IV 10

1 pá-r-šu-wa-ni OH StBoT 25 No.4 Rs.III 47⁴¹

prt. pl. 3 pá-r-še-ir OH** KBo III 46 Rs.38

Conjugation type of the active forms (mi- or hhi-) cannot be determined due to the want of forms unambiguous in this regard.

In both stems, functional differences between active and middle forms, if any, cannot be determined from the context. The same can be said about the two stems: functional differences between the class I stem and the root stem, if they existed, cannot be discerned from their contexts.

34. pa-aš-ku-i-i+ 'to neglect'

act. prt. sg. 3 pa-aš-ku-i-it OH* I 18 III 70

mid. prs. sg. 3 pa-aš-ku-i-it-ta ibid. 65

See StBoT 5 for the context of the latter and Oettinger 1979 : 335 for other attestations.

⁴¹ Otten/Souček 1969 : 34, 120 and Oettinger 1979 : 518 footnote 14 have doubts about this form: ⁰wa-ni is written over erasure and there is very little context left.

The stem appears to be based on the zero suffix stem
 pa-aš-ku⁺ : pa-aš-ku-w⁺ (with /k^w/, cf. HLuw. pa-sa-hwa/i⁺
 'to neglect'⁴² with /h^w/ : Hitt. /k^w/ as in hwa/i-(i-)sa
 'who' : Hitt. ku-iš id.), attested in act. prs. sg. 2 pa-
aš-ku-š OH** XXXI 127 I 47, pl. 3 pa-aš-ku-wa-an-zi MH* XIX
 11 Vs.8, prt. sg. 3 pa-aš-ku-ut-ta OH*/MH XXX 10 Rs.2.

35. ta-ri-ia-a⁺ 'invoke, appeal'

mid. prs. sg. 3 ta-ri-ia-at-ta OH XXIVII 223 Vs.5

This is the only instance of the class I stem in my
 collection. The stem is derived from the same root as the
 root stem ta-r⁺ / da-r⁺ 'say, speak, promise' (e.g. prs. pl.
 3 ta-ra-an-zi, participle ta-ra-an-za / da-ra-an-za),
 copiously attested in Hittite texts of all periods.

The root stem is used in the telic sense 'promise'
 ('betroth'), e.g. early OH** tāk-ku DUMU.SAL LÚ -ni ta-ra-
an-za ta-ma-i-ša-an nī-t-ta-nu-uz-zi (KBo VI 3 II 5) 'if a
 woman is promised to a man, (but) another (man) makes her
 run away (with him)', in addition to its common use of
 introducing direct speech and the like (which could be
 either telic or atelic, cf. say and speak). If the root
 stem is telic, then it is at least possible (cf. e.g. ha-
ai-t⁺ vs. ha-az-zi-(a-)⁺ above) that the class I stem is
 not: 'appeal, entreat' or the like.

⁴² E.g. in Sultanhan 5 C end: nī-pa-wa/i-ta ara/i-ha pa-sa-
hwa/i-i 'or (if he) neglects (it)'.

36. ú-e-ri-i+ : ú-e-ri-ia-a+ 'call, speak'

act. prs. sg. 3 úe-ri-iz-zi LMH XVII 21 III 13

ú-e-ri-ia-az-zi MH XXIX 7 Vs.15

prt. pl. 3 ú-e-ri-ir OH** KBo III 1 I 45

This same root exists in unsuffixed form, namely the quotative particle +wa-r+ (before a vowel) / +wa (elsewhere) 'inquit', originally possibly act. prt. sg. 3 of the root stem;⁴³ e.g. ša-aš ša-ra-a URU -ia pa-it ú-uk-wa LUGAL -uš- ni-iš ki-iš-ha 'and he went up to the city: "I, he said, shall be your king"' (OH KBo XXII 2 [=S:BoT 17] Rs.14'-15'). It seems that the root stem, of which the quotative particle is the sole survivor in Hittite (but cf. Palaic ú-a-ir-ti 'says' XXXII 18 I 8', q.v. in Chapter 3), is telic ('said'). Thus, this pair of stems is yet another candidate for exhibiting the Aktionsart distinction.

Other stems that possibly belong to the deverbative subclass of class I are as follows:

37. hu-ul-hu-li-ia-a+ 'fight one another'. The only pre-LH attestation of this stem in my collection is the participle hu-ul-hu-li-ia-an-ti+e-aš OH** KBo III 40b Vs.12. Its root is the same as that of the class VII stem hu-ul-li-

⁴³ Hitt. wa-r+, etc. < *wer-t (sg. 3). As a typological parallel, cf. Russ. quotative particle dā 'quoth', formerly root aor. sg. 3 (< *dhex'-t). Cf. also Ivanov 1965 : 73 f.

it, etc. 'combat'. However, the attested form is not sufficient for determining with certainty the conjugational type (mi- or hhi-) of its stem.

38. ti-it-ti-(ia-)_a⁺ 'place, set in'. Its attestations in my collection are the following:

act. prs. pl. 3 ti-it-ti-ia-an-zi OH** KBo XII 3 IV 9'

participle ti-it-ti-an-za OH KBo XIX 1 II 18'
OH* KBo VI 3 II 37
ibid. 43
OH** KBo VI 5 IV 1
KBo XII 3 IV 9'

ti-it-ti-an[MH XXXVI 114, 22'

The stem's attestations are not sufficient for establishing whether it belongs to the mi- or the hhi-conjugation.

2.3.1.3 Secondary Stems (b): Denominatives

39. ap-pa-ta-ri-i⁺/(a-)ap-pa-at-ri(-i=)⁺ :

ap-pát-ri-a⁺ 'seize, take as deposit (on a loan)'

act. prs. sg. 3 ap-pa-ta-ri-iz-zi OH KBo VI 2 IV 4

ap-pa-at-ri-iz-zi OH* KBo VI 3 III 76

ap-pát-ri-ia-zi NH* XIII 8 Vs.10

infinitive a-ap-pa-at-ri-wa-an-zi OH** KBo VI 26 I 28

Apparently, this stem is derived from the noun appatar n. 'seizure', a derivative of a-ip⁺ : ap-p⁺ (mi-conj.) 'seize, capture'.

40. ha-liš-ši-ia⁺ / ha-li-iš-ši-ia⁺ 'to frame,
overlay'

act. prt. sg. 1 ha-liš-ši-ia-nu-un OH** StBoT 18 Rs.58(B)
=XXVI 71, 7

ha-li-iš-š[i-i[a-nu-un OH** KBo X 2 II 30

ha-li-iš-š[i-ia-an]-da-an MH XXIX 7 Rs.40

This stem is apparently a derivative of the noun ha-li-iš-š⁺
or ha-li-iš-ša⁺ 'fitting, frame' or the like (hapax, abl.
ha-li-iš-ša-az KUB V 7 Rs.23).

41. ha-ap-pa-ri-e⁺/i⁺ 'give, turn over (to)'

act. prs. sg. 3 ha-ap-pa-ri-iz-zi OH* KBo VI 3 II 36

prt. sg. 1 ha-ap-pa-ri-e-nu-un OH StBoT 18
(=KBo III 22) Vs.20

The stem is apparently derived from the noun ha-ap-pa-r⁺ n.
(nom. sg. ha-ap-pa OH** XXIX 29 Vs.10) 'exchange, transfer,
trade'.⁴⁴

42. hu-la-a-li-e⁺/hu-la-a-li-i⁺/hu-(u-)la-li-e-i⁺ :

hu-(u-)la-(a-)li-(ia-)a⁺ 'wrap up, enwrap'

act. prs. sg. 1 hu-la-a-li-e-mi OH StBoT 25 No.4 Rs.IV 23

hu-la-a-li-ia-mi OH StBoT 25 No.6 Rs.III 14'

3 hu-la-a-li-iz-zi OH XXXVII 223 Rs.3

⁴⁴ Cf. class IV stem ha-ap-(pa/pi-)ra-(a-)i⁺ : ra-a⁺ 'sell,
trade' (see the relevant section of this chapter).

- h]u-la-a-li-e-z[i OH StBoT 25 No.100 Rs.3'
 hu-la-a-li-az-zi OH** KBo III 27 Vs.27
 hu-u-la-li-e-iz-zi MH* XXIV 9 I 42, 47
 prt. sg. 1 hu-la-li-ia-nu-un MH* XXIII 11 II 23
 mid. 3 hu-u-la-li-it-ta-at- MH IBoT I 36 III 54
 participle hu-la-li-an OH StBoT 25 No.4 Rs.IV 28
 OH* XLIII 60 Vs.IV 7'
 hu-u-la-li-ia-an ME XXIX 7 Rs.30
 hu-u-la-li-ia-an-za ibid. 28
 hu-la-li-ia-an MH* XXIV 10 III 33
 -/ske/-forms:
 act. pres. sg. 3 hu-u-la-li-iš-ki-iz-zi MH KBo XVII 105 II 15'
 pl. hu-u-la-li-eš-kán-zi ibid. 16'
 imper. hu-u-la-li-iš-kán-du ibid. 24'

The verb is a denominative based on hulāli- 'roller, spindle' (q.v. HW¹ : 73).

43. hu-ur-tal-li-(a-)i+ : hu-ur-ta-li-a+ 'mix up, confound'

- act. pres. sg. 3 hu-ur-tal-li-iz-zi OH** KUB I 16 III 38
 pl. hu-ur-ta-li-an-zi OH StBoT 25 No.54 Vs.I 16
 hu-ur-ta-li-an-z[1] OH StBoT 25 No.54 Vs.I 30
 hu-ur-ta-li-an-zi OH** KBo III 27 Vs.16, 18
 prt. hu-ur-tal-li-e-ir OH** KUB I 16 III 43

The verb is apparently a derivative of the noun
hurtalli-/hurtali- c. translated in HW¹ as "Gemengsel,
 Mus(?)" (p.77a) and corrected by Otten to "Widersacher" (ZA
 NF 21 p.158 line 10; p.164 f.).⁴⁵

44. ku-u-ru-ri-a-i+ : ku-u-ru-ri-a+ 'be hostile'⁴⁶

act. prt. sg. 3 ku-u-ru-ri-e-it OH** XI 1 II 7

pl. ku-u-ru-ri-e-ir OH** XXXVI 100 Rs.4 end

participle ku-u-ru-ri-a[n-t/da OH KBo VI 2 I 53"

The verb is based on the noun kurur 'enmity; enemy' (HW¹ :
 119b, Erg.2 : 16a; e.g. ku-r[u-u]r OH StBoT 18 Vs.25).

45. ku-(uā-)āa-ni-(i-e-)i+ / ku-uā-ne-i+ :

ku-uā-āa-ni-la+ 'rent, lease, hire'

⁴⁵ It is outside the scope of this dissertation to discuss the meaning of the noun hurtal(l)i- (on which see also Kronasser 1966 : 493). As to the verb itself, it must be pointed out that in almost all the contexts where it occurs it has the noun ud-da-a-ar / ut-tar 'word(s), command' as its direct object. The contexts (all OH**), conveniently brought together by Josephson (1972 : 64), allow for interpretations of the verb ranging from 'confound, mix up' ('break unintentionally') to 'violate, oppose' ('break intentionally').

⁴⁶ Cf. discussions in Watkins 1973 : 77 and Oettinger 1979 : 339 (not "399" given in his index on p.594). Watkins's view that the denominative has the suffix -e- (see loc.cit.) is based on the forms with =ri-e-i+ which can be interpreted as /re/-. But the OH form ku-u-ru-ri-a[n-t/da (see attestations), which reading was proposed by and (in my view convincingly) defended by Starke (1977 : 55), disambiguates =ri-e-i+ as /rye/-. Cf. also the post-OH transitive stem kururijahh- HW¹ : 119a clearly based on /Kururye/-.

act. prs. sg. 3 ku-uš-ša-ni-iz-zi OH KBo VI 2 II 27; IV 10
 XXIX 30 Vs. II 9
 (=ni-i[z-zi])OH** KBo XIV 66 II 6

ku-uš-ša-ni-i-e-iz-zi OH* KBo VI 3 II 48

ku-ša-ni-iz-zi ibid. IV 3

ku-uš-ša-ni-la-zi OH** KBo VI 5 IV 7

ku-uš-ne-iz-zi OH** KBo VI 10 III 36

(=n[e-iz-zi]) ibid. 38

The verb is based on the noun kuššan- n. 'pay' (HW¹ : 120a; e.g. ku-uš-ša-ni OH** XXIX 30 II 7 / ku-uš-ni OH** KBo VI 10 III 32 [loc.sg.]). The two OH** attestations where the stem is written ku-uš-ne-i⁺ (both in the same text) may be analogic to ušne-a⁺ 'sell, trade' (see class XI below), close in meaning and similar in form. The form ku-uš-ša-ni-la-zi shows the typical post-OH leveling of the inherited morphophonemic alternation -/ye/- : -/ya/- in favor of the -/ya/- alternant.

46. lam-ni-i⁺/lam-ma-ni-i-e⁺ : lam-ni-la⁺ 'call, name'

act. prs. sg. 3 lam-ni-iz-zi MH IBoT I 36 öy. I 30

pl. 1 lam-ma-ni-i-e-u-e-ni MH KBo XVI 50 Vs. 17

prt. sg. 1 lam-ni-la-nu-un MH* XXIII 11 II 28

pl. 3 lam-ni-ir MH XXXVI 109, 6

The stem is based on the noun laman- (neuter n-stem; oblique stem lamm-; see HW¹ : 126b).

47. nār-ku-i-a-i⁺ : nār-ku-(i-)la-(a-)⁺/

pár-ku-wa-a+ 'cleanse'

act. prs. pl. 3 pár-ku-wa-an-zi MH XIII 9 III 20'
 prt. sg. pár-ku-wa-a-it MH* KBo XXI 8 II 4
 pl. pár-ku-i-e-ir OH** KBo III 34 Vs. II 25
 mid. prs. sg. 3 pár-ku-i-id-d[a] OH** KBo XXII 6, 6'
 prt. pár-ku-i-ia-ta-at MH* XXIV 8 + I 31
 verbal noun pár-ku-la-a-tar OH** KUB I 16 II 67

The stem is based on adj. parkui- 'clean, pure' (HW¹ : 161) = /ParKwi/- (or /bargwi/-, if cognate with Goth. hairht- 'clear', etc.); see Pedersen 1938 : 35 f., Kronasser 1966 : 107 for hypotheses on the historical morphology of this adjective.⁴⁷ Hitt. (OH and later) also has a /nu/-transitive to parkui-, viz. pár-ku-nu-u+ (mi-conj.) (see attestations and discussion in Kronasser 1966 : 454 f.) 'clean, wash (off); remove (brand from an animal)'.
 MH pár-ku-wa-an-zi formally belongs to class II and class IV (see page 14 above); MH* pár-ku-wa-a-it belongs to class IV (q.v.). While it is possible that class IV forms are based on an a-stem variant of the adjective, viz. */ParKwa/- or the like, it is unlikely, as this stem is ad hoc. It seems more likely that class IV forms here are due

⁴⁷ In the case of parkui-, it is not clear whether one is dealing with the sequence /k+/u/ ([kw] before vowels) or with the phoneme /k^w/: there are no writings of the type *pár-uk-nu-u+ parallel to pár-ku-nu-u+ (-/nu/-transitive to this stem) which could confirm the latter possibility (cf. tar-u[k-zi /tark^w/+/ti/ OH KBo XVII 44 + 22', etc. : IE *terk^w-, cf. Lat. torqueo : tortus, etc. [see discussion in Lehrman 1985]).

to later remodeling, such as undergone by several class II stems (q.v.). These class II forms, then, would be based directly on the adjectival stem *parku- (/ParK/+/u/- or /ParK^w/-?).

48. tu-(u-)ri-(a-)i⁺ : tu-u-ri-ia-(a=)⁺ 'yoke, harness'

act. prs. sg. 3 tu-u-ri-iz-zi OH KBo VI 2 III 60
 ibid. IV 1, 12
 XXIX 30 II 20

(tu⁰) OH* KBo X 2 III 73

tu-u-ri-e-iz-zi MH XXIII 77, 81

tu-u-ri-ia-zi OH* KBo VI 3 IV 7

pl. tu-ri-ia-an-zi OH** KBo VI 26 I 36

prt. sg. 1 tu-u-ri-[ia-nu-(un)] OH** KBo X 2 III 42

pl. 3 tu-ri-ir OH** KBo III 34 I 16

participle (?) tu-u-r[i-ia-an OH** XXXI 127 I 52

verbal noun tu-u-ri-ia-u-wa-aš OH* KBo VI 3 III 48; 51

-/ske/-form:

act. prs. sg. 3 tu-u-ri-iš-ki-iz-zi OH* KBo VI 3 III 65

The stem is apparently based on the noun tūri- which translates the sumerogram GIŠ ŠUKUR 'spear, shaft' (cf. HW¹ : 229 and Erg. 2 : 26a with lit.).⁴⁸

⁴⁸ Cf. Ved. dhūr-, nom. sg. dhūr RV VIII 33, 17b 'shaft, pole'. It is at least possible that the Hittite stem is primary (so Oettinger 1979 : 344 f.) or based on the root noun, cf. the Vedic cognate.

49. ú-e-šl-i+ : ú-e-šl/še-ia-a+ 'graze'

mid. prs. sg. 3 ú-e-še-ia-at-ta OH** XXIX 1 I 33

ú-e-šl-ia-at-ta-ri MH* XXVI 19 II 33

pl. ú-e-šl-ia-an-da-ri ibid. 18

prt. sg. ú-e-šl-it-ta-at OH** XXIX 1 I 32

E. Neu (StBoT 5 : 200) also adduces "prs. sg. 2 ú-šl-e-it-ta 113/b Vs.4 (alt)" which I personally have not seen since the text, to my knowledge, has not been published).⁴⁹

The stem is apparently based on the noun yašl- c. 'pasture' (see HW¹ : 253a with lit.).⁵⁰

There are also a number of stems which possibly belong to the denominative subclass of class I, but cannot be so classified with certainty because some forms, important for class assignment, are missing. These stems are as follows:

⁴⁹ Mid. prs. sg. 3 ú-e-ša-la-at-ta is interpreted by E. Neu (StBoT 5 : 200) as prt., for which I see little reason (cf. the other prs. 3 form). The use of the sign ša, instead of šl which appears everywhere else, is hard to explain (except as an instance of the occasional post-OH practice of substituting the former for the latter, cf. MH ar-ša-ni-e-še [StBoT 26 : 29 fn.178: "mittelhethit., gegen A. Kammenhuber HW² 344a"] vs. OH ar-ša-na-a-šl, attestations of which see below).

⁵⁰ It is possible that both the noun and the verb are based on the root yaš-, cf. Hitt. yaštar- c. 'shepherd' (HW¹ : 253b with lit.), in which case the verb stem would be primary. If the form ú-šl-e-it-ta (see text) is old (which is not contradicted by the shape of the class stem suffix, which keeps the older [inherited] e-grade of the vowel) and should be taken at face value, then the zero grade its root shows (ú-šl+) could be taken as evidence for the verb -- this form at least -- being primary.

50. an-na-nu-uz-zi-ia-a⁺ 'to rein, curb'. The only attestation in my collection is the participle an-na-nu-uz-zi-ia-an-ia-a[š] (pl. nom. c.) OH StBoT 25 No.27 Rs.19' 'reined, curbed, haltered' or the like. The same participle possibly occurs in line 11' of the same text, where it is reconstructed on the basis of two post-OH copies: [(an-na-nu)-uz-zi-ia-(an-za)] (nom. sg. c.; see StBoT 25 : 71 ff.). If there is a verb stem an-na-nu-uz-zi-ia-a⁺ (so also HW² : 78a), then it is based on the noun KUŠ an-na-nu-uz-zi- c. "a kind of rein/curb"(?) (e.g. pl. acc. KUŠ an-na-nu-uz-zi-uš in the same text, i.e. StBoT 25 No.27 Rs.1 7'). The stem is dubious because it is attested only in the participles; also, one cannot be absolutely certain about its conjugation type.

51. ar-mi-iz-zi-ia-a⁺ 'to bridge'. The only pre-LH attestation I know of is mid. imperative pl. 3 ar-mi-iz-zi-ia-an-ia-ru MH XV 34 I 46. The stem is based on the noun (GIŠ/)NA₄ ar-mi-iz-zi n. 'bridge' (attestations see in HW² : 327a). Its conjugation type (mi- or hhi-) is not certain, although it is more likely that the stem belongs to mi-conjugation, as hhi-conj., in the pre-LH period in any case, has very few (if any) denominatives.

52. LUGAL =u-iz-zi-i⁺ 'be king'. There is only one possibly pre-LH form of this stem in my collection, namely

mid. prt. sg. 3 LUGAL -u-iz-zi-it-ta-at MH* XXXIII 115 III 6 (see StBoT 5 : 109 for LH attestations). It is possible, in light of LH attestations such as LUGAL -iz-zi-at act. prs. sg. 3 LH XXIII 1 I 42, that the stem belongs in this subclass of class I; however, on its own it is not sufficient for determining its conjugation type. Its putative nominal base, *LUGAL -u-iz-zi-, is unattested.

53. iā-kar-ra-an-ni-a⁺ 'pierce, make holes'. The only attestation I have is the participle iā-kar-ra-an-ni-an MH KBo VIII 35 II 21, insufficient for determining the stem's conjugation type with certainty. But, as the stem appears to be based on the verbal noun written in IBoT I 33 23, 28, 41, etc. as iā-ga-ra-tar n. 'piercing, sticking through' (based on the root verb stem iā-ka-a-r⁺ / iā-ga-r⁺ (hhi-conj.) 'stick through', see StBoT 26 : 79 with attestations), it is more likely to belong to the mi- than to the hhi-conjugation. Cf. tāk-ša-an-ni-i⁺, etc. 'to level, smooth out' below.

54. iā-ta-an-ta-a-i-i⁺ 'linger, hesitate'. The only form in my collection is act. prs. sg. 3 iā-ta-an-ta-a-i-iz-zi OH StBoT 25 No.139 Rs.8. The stem could be denominative, but that is not certain since its putative nominal base is not attested. Although the stem final in this form makes the stem a possible member of class I, more attestations are

needed to be certain that the stem does not in fact belong in class IV (see below).

55. ka-li-(a-)li-a-i⁺ 'to fetter, shackle'. The attestations in my collection are both act. prs. sg. 3 ka-li-li-a-i OH* XXXVI 100 Vs.16 and ka-li-a-li-a-i OH**? XVII 5 I 16. The base is not attested outside the stem, but it can hardly be anything but nominal. The stem's membership in class I is uncertain because the sign li is ambiguous (can be read as both /le/ and /li/), and there are no disambiguating forms such as the participle or act. prs. pl. 3.

56. ka-ru-(ú-)uā-āi-ia(-a=)⁺ 'be silent, hide (intr.)'. The attestations in my collection are all post-OH: act. prs. sg. 3 ka-ru-uā-āi-ia-zi MH* XIII 8 Vs.7 and ka-ru-ú-uā-āi-ia-zi MH* XIII 9 III 13, pl. 3 ka-ru-uā-āi-ia-an-zi MH IBoT I 36 IV 14. The base ka-ru-(ú-)uā-ā⁺ is not attested separately, but is likely to be nominal. It seems to me possible, on both formal and semantic grounds, that the base is derived from the same root as the stem ka/ga-ri-(i-)a-i⁺ : ka/ga-ri-ia-a⁺ 'cover, hide' (see above). A parallel correlation of derivatives apparently exists between stems such as nakk(i)ya- 'be heavy' and nakkuaā(i)ya- 'be ritually impure (?)' or perhaps 'be burdened' (metaphorically), dākk- (hhi-conj.) 'look like,

correspond' and tekkušš(i)ye- 'show (intr.), appear' (see below). I explain *u-uš-š segmented out of these bases as cognate with IE *-us-, zero grade of the suffix *-wos- used to form the perfect participle of IE. See Chapter IV for more detail.

57. kar-tim-mi-ia-(a=) 'be wroth'. The oldest example in my collection is mid. prs. sg. 3 ka[r-tim-mi-]ia-it-ta MH IBoT I 36 I 49; if the missing parts are supplied correctly, this is in fact a class IV form! The other examples are mid. prs. sg. 3 kar-tim-mi-ia-at-ta-[ri] OH** XXIX 9 I 3, kar-tim-mi-ia-ta-ri ibide. 21, pl. 3 kar-tim-mi-ia-an-ta-ri OH* KBo VI 3 II 32. This stem's presumably nominal base (it could hardly be anything but nominal, for structural reasons) is unattested. Also, one could not be absolutely sure about the conjugational type of the stem, although, as I have already pointed out, it is more likely to belong to the mi-conj. than to hhi, if it is denominative. On the morphology of the verb, see van Brock 1960 : 143 f.

58. ki-iš-ta-an-zi-a 'to hunger, starve'. The only attestation in my collection is mid. prt. sg. 3 ki-iš-ta-an-zi-at-ta-at (see also StBoT 5 : 99). Its conjugation type is thus not certain, although likely to be mi-. The stem is based on the noun kištant- c. 'hunger' (HW¹ : 111b). (On /t/ becoming [ts] before /i/, see above).

59. ku-ud-da-ni-e-i⁺ '?. The meaning of this verb is uncertain. Its only attestation in my collection is act. prs. sg. 3 ku-ud-da-ni-e-iz-zi- MH XVI 25 Vs.I 8'. There is too little context to be sure about what the form means. The base (ku-ud-da-n⁺ or ku-ud-da-ni⁺) certainly looks nominal, and there is a noun, kuttar n. : obl. kuttan- 'shoulder, upper arm'; 'physical strength' (HW¹ : 121ab) or 'chest' (Erg.2 : 16b) (cf. Sturtevant's etymologizing with Lat. guttur 'throat', see reference in HW¹ : 121b).

60. li-e-la-ni-(e-)¹ : li-e-la-ni-(ia-)² 'be furious/enraged'. Attestations in my collection include: mid. prs. sg. 3 li-e-[la-]ni-at-ta OH KBo VI 2 II 14 (if E. Neu [StBoT 5 : 108] is correct), prt. ~~li-e-la-ni-it-ta-at~~ MH XXXIII 10 Vs. 15, li-e-l[la-ni-e-it-ta-at 9, participle li-e-la-ni-ia-an-za (nom.sg.c.) MH XVII 10 II 33, IV 4. Now see also HD : 58b f. with attestations and lit. The conjugation type of this stem is not known with certainty, and its nominal base (structurally, hardly other than nominal) is not attested independently.

61. na-ah-ša-ri-(ia-)² 'be afraid'. The attestations in my collection are not sufficient for determining the stem's conjugation type with certainty. They are: mid. prt. sg. 3 na-ah-ša-ri-ia-ta-ti OPH** KBo III 1 I 35, na-ah-ša-ri-ia-at-ta-at MH* XII 60 I 12, pl. na-ah-ša-ri-ia-an-

ta-ii OH XXXVI 100 Rs.4, want-adjective na-ah-ša-ri-la-wa-an-za 'fearful' (nom.sg.c.) Q?H** KBo III 21 II 17. The stem seems to be based on the noun nahšar(a)- 'fear' or the like, attested in sg. abl. na-ah-ša-ra-az IBoT I 36 I 59.

62. na-ak-ki-e-(i=)+ 'be hard/difficult/heavy'. The attestations in my collection (act. prs. sg. 3 na-ak-ki-e-zi M?H* KBo XIII 13 Vs.14', prt. na-ak-ki-e-it OH** XXXI 4, 17; KBo III 41, 16) are not sufficient to be certain about the stem's class, due to the ambivalence of the sign ki (both /Ki/ and /Ke/). Watkins 1973 normalizes the stem as nakke- and uses it as an example of the denominative stative in -ē- (op.cit. p.72 f.). His normalization, however, is not necessary; actually, the stem in question is more likely to belong to class I, cf. the factitive nakkiiahh- 'make heavy, respect', etc. [HW¹ : 148a] (not *nakkahh-). The stem is apparently based on the adjective nakki- 'heavy', etc. (HW¹ : 148a). It is also possible, however, that it is primary (i.e. based on the root nakk-*, cf. the following stem).

63. na-ak-ku-uš-ši-e+ 'be ritually impure (?)'. The two attestations in my collection come from the same MH text: act. prs. sg. 3 na-ak-ku-uš-ši-e-zi MH KBo XIII 13 Vs.6' and na-ak-ku-uš-ši-e-zi ibid. 13'. The use of the sign ši (not šg) puts the stem unambiguously in class I.

Its supposed nominal base na-ak-ku-uš-ā⁺ (possibly derived from the same root as nakki-, see preceding page and the paragraph on ka-ru-(ū-)uš-āi-la-(a=)⁺ above) is not attested separately.

64. nu-un-tar-ri-(a=)₁⁺ 'hurry'. Attestations in my collection are insufficient for determining the stem's class with certainty, due to the ambiguous value of ri (/ri/ and /re/) and the lack of disambiguating forms (such as prs. pl. 3 and the participle). The attestations are as follows:
 act. prs. sg. 3 (?) nu-un-tar-ri-a-i [z-z] MH KBo XVI 25 I 7', imperative sg. 3 nu-un-tar-ri-id-du MH KBo XVI 24 I 16', KBo XVI 25 I 66', mid. prs. or imper. sg. 3 nu-un-tar-ri-it-ta [ibid. 69'. The stem's nominal base is attested in the gen. sg. (adv.) form nuntaraš 'hastily' (q.v. in HW¹ : 152b with lit.) and may be either a consonant stem (nuntar-*) or an a-stem (nuntara-*); cf. Oettinger 1979 : 351 "zu *nuntar in nuntaraš 'eilends'".

65. pa-an-ga-ri-la-a⁺ 'be copious, increase'. The two attestations in my collection are insufficient for determining the stem's conjugation type with certainty:
 mid. prt. sg. 3 pa-an-ga-ri-la-at-ta-ti OH** KBo III 1 II 31 and 33 (in both cases, the subject is a-aš-har 'blood [letting]'; see StBoT 5 : 135 for contexts). The stem's nominal base is attested in the instr. [pa-]an-ga-ri-it 'en

masse' (cf. e.g. Russ. tolpaj 'in a crowd' instr. sg.); see also StBoT 18 : 64 for a discussion and other attestations (all instr.) of the noun. The instrumental can be formed not only from an r-stem (pangar-*) but also from an a-stem (pangara-*) or an i-stem (pangari-*). Since the stem is denominative, it is more likely to belong to the mi-conjugation.

66. pa-tal-li-ia-a⁵¹ 'fetter'. I have only one attestation of this stem: act. imper. pl. 3 pa-tal-li-ia-an-du MH* StBoT 22 Eld 1 Vs.I 30'.⁵¹ The form is not sufficient to determine the stem's conjugation type. The supposed nominal base of the stem is not attested separately. It is likely, however, that the noun from which the stem is derived is *pa-tal-li⁺ 'fetter' which, I propose, is based on the noun pa(a)- 'foot' (HW¹ : 165b) (cf. Gk. pod-ós gen sg. 'foot', etc.); cf. German Fessel and English fetter for typological (at least) parallels of word formation. For the suffix +al-li⁺, cf. the list of derived adjectives and substantivized adjectives in +al-li⁺ (and in +a-li⁺), see Kronasser 1966 : 211 f.; cf. also Oettinger 1979 : 265 on hulali- and harnali-).

⁵¹ Oettinger 1979 : 29 and 600 lists the stem as "pattal₁e-", with tt which is incorrect (cf. the attestation).

67. pít-tu-li-a=/ia⁺ 'to cause anguish'. The attestations in my collection (acc. sg. c. of participle pít-tu-li-ia-u-wa-ar ibid. III 6) are not sufficient for determining with certainty the stem's conjugation type; however, if the stem is based on the noun píttul- 'noose' or 'lace, cord' ("Einschnürung" Erg.i : 16b with lit. f píttula- "Schlinge" HW¹ : 172a; Kronasser 1966 : 342 with lit. píttul(a)- "Schlinge"),⁵² then it is more likely to belong to the *mi*-conjugation, since *hhi*-conjugation hardly contains denominatives of this kind (at least in pre-LH).

For the possible semantic connection of 'noose/cord' and 'anguish', cf. e.g. Lat. angō 'choke, strangle' and 'anguish, torment' and the possible Slavic cognates OCS qza 'časnós' : Russ. úzy 'fettters' and OCS qzŭkŭ 'stanós' : Russ. úzok '(is) narrow', úzal 'knot', etc.⁵³

68. pu-ta-li-ia-a⁺ 'tuck up'; 'dress lightly'(?). Only the participle is attested in pre-LH: pu-ta-li-ia-an-te-aš- (nom.sg.c.) OH StBoT 25 No.4 Vs.I 20' and pu-ta-li-ia[(-a)]n-te-aš- No.3 Vs.I 25'. The conjugation type is not known for certain, and the putative nominal base is not attested.

⁵² Cf. also the noun píttulija- c. OH 'anxiety' (attestations listed in StBoT 26 : 152), a deverbative of píttul- n.

⁵³ Cf. e.g. Vasmer 1973 : 152 with lit.

69. ša-ak-ku-ri-ia⁺ 'overpower, subdue'. The only attestation in my collection is act. prs. sg. 1 ša-ak-ku-ri-ia-nu-un OH** KBo X 2 Vs.II 19; cf. also mediopassives (all post-OH) in StBoT 5. The supposed nominal base is not attested separately.

70. ša-a-ki-i⁺ 'reveal'. The only attestation I have is act. prs. sg. 3 ša-a-ki-iz-zi OH* XXXVI 32, 2. The stem may be based on the noun šagal- c. 'omen, sign' (e.g. ša-ga-i=[i]š nom.sg. OH StBoT 25 No.3 Rs.IV 9; see KW¹ : 176a), as Kronasser (1966 : 124 and 495) proposes. It is also possible, however, that the verb is primary (Oettinger 1979 : 345). The absence of forms such as prs. pl. 3 or the participle make it possible that the stem belongs in a different class (since the sign ki is ambiguous, i.e. can be read as both /Ki/ and /Ke/), namely such that its prs. pl. 3 (act.) would end in =kán-zi and the participle, in =kán-t= or the like, cf. my provisional classes V and VI (defined above in detail see further in this Chapter).

71. šal-li-i⁺ and šal-li-ia-i⁺ (class IV!) mid. 'to sprawl, be wide'. The only attestation of the class I stem (possibly) is mid. imperative sg. 3 šal-li-it-ta-ru MH* StBoT 22 Eid 1 (=KBo VI 34) Vs.II 2. The class, or even the conjugation type of this stem, cannot be determined with certainty: the former, because the sign li is ambiguous

(/li/ and /le/); the latter, because only the mediopassive forms are attested. The stem is possibly based on the adjective šalli- 'big/large' (HW¹ : 179ab with lit.) The same text that contains the above attestation has the class IV attestation: mid. prs. sg. 3 šal-li-ia-it-ta MH* StBoT 22 Eid 1 Vs.I 50. The form ša-li-iz-zi in StBoT 25 No.139 Vs.11' occurs in what appears to be a Palaic context (q.v.) and, most likely, has nothing to do with the stem in question (StBoT 26 : 319 treats it as a Palaic word).

72. še-hu-ri-e-i+ 'urinate'. The single attestation in my collection is act. prs. sg. 3 še-hu-ri-e-iz-zi MH KBo XXIII 23 Vs.29'. The stem is derived from the noun šehur- n. 'urine' (HW¹ : 189b). Its class, however, is not known with certainty because of the ambivalence of the sign ri (/ri/ and /re/) and the absence of disambiguating forms (e.g. either *še-hu-ra-an-zi or *še-hu-ri-(ia-)an-zi [act. prs. pl. 3]).

73. ši-ia-at-tal-li-ia-a+ 'to seal as acquired / purchased' or the like. The only attestation I have is act. prs. sg. 3 ši-ia-at-tal-li-ia-az-zi OH** KBo VI 5 IV 3. The unattested noun on which the stem is likely to be based (viz. *ši-ia-at-tal-la- [or *ši-ia-at-tal-li- under the possible Luwian influence; see Laroche 1959 : 139 paragraph 30.3]) looks like a nomen agentis in -talla- [Luw. -talli-]

of the verb (+ā-)āi-i+ : (+ā-)āi-la+ 'press', etc., see above. The stem is apparently a late replacement of the stem āi-it-ta-ri-i+, etc. 'id.'.

74. āi-it-ta-ri-i+/āi-la-at-ta-ri-i-a-i+ : āi-la-at-ta-ri-la+ 'to seal as acquired/purchased'. The attestations in my collection are: act. prs. sg. 3 āi-it-ta-ri-iz-zi OH KBo XIX 1 Vs.II 19', āi-it-ta-ri-iz-zi ibid. 24', āi-la-at-ta-ri-la-zi OH* KBo VI 3 II 39, āi-la-at-ta-ri-i-a-iz-zi ibid. 45, prt. āi-it-ta-ri-it OH KBo VI 2 III 19, OH* KBo VI 3 III 22. The stem's putative nominal base is āivatar* n. 'seal' apparently attested in É āiyannaš = É NA₄ KIŠIB "house of the seal" = 'treasury' or the like (HW¹ : 193a).⁵⁴ Even more likely is the possibility that the stem is based on some extension of āivatar* such as *āiyatara- or *āiyatari-, because otherwise the expected verb stem would be based on the shape of the stem in the oblique cases (i.e. *āiyann(i)ye- or the like [?]), cf. e.g. tāk-ša-an-ni-i+ from tākšatar n., see below.

75. tāk-ka/ga-li-i=/a=/a+ : tāk-ka/ga-li-la-a+ 'embrace, enclose'. The attestations in my collection are as follows: act. prs. sg. 2 tāg-ga-li-e-ši O7H** II BoTU (=KBo III 17+18+19) III 22, prt. sg. 3 tāk-ka-li-it OH KBo VII 14 Vs.8, 9, 10, OH** XXXVI 100 Rs.6, participle tāg-ga-

⁵⁴ āiyannaš gen. sg. of the verbal noun āivatar* derived from (+ā-)āi-i+ 'to press', etc. (q.v. above).

li-la-an-da (neut.pl.) OH** KBo VI 10 I 17, KBo VI 11 I 14,
tá-ga-li-la-an-da- OH** KBo VI 11 I 12, ták-ka-li-la-an-da-
 OH** XXIX 23, 8, ták-ka-li-en-d[á] *ibid.* 10. This stem's
 base, although unattested separately, could have hardly been
 anything but nominal.⁵⁵

76. ták-ša-an-ni-i+ / ták-ša-at-ni-i+ : ták-ša-at-ni-
ia-a+ to level, smooth out'. The stem is apparently based
 on the noun tákšatar n. 'level/smoothed out surface' (see
 HW¹ : 204a [with a wrong meaning] and [improved] Erg.3 :
 30b). The attestations in my collection are insufficient
 for determining the stem's conjugation type with certainty
 (although it is more likely to belong to the *mi-* than to the
*hhi-*conjugation due to its denominative derivation): *mid.*
imperative pl. 3 ták-ša-at-ni-la-an-ta-ru MH XV 34 I 45,
/ske/-forms: act. prt. sg. 3 ták-ša-an-ni-iš-ki-it OH** KBo
 X 2 II 5, *act. imperative pl. 2* ták-ša-at-ni-iš-(ki)-it-ten
 MH XV 34 III 52. Only the OH** attestation has the properly
 Hittite shape of the nominal base stem (i.e. Hitt. =/Tn/= >
 =[nn]=, cf. HE² : 34 paragraph 32a11); the others preserve
 the cluster and thus perhaps show Luwian influence (see e.g.
 HE² : 185 paragraph 379c).

⁵⁵ See Kronasser 1966 : 509 with lit. on the possibility
 that the stem has the same root as tággani- 'breast' (HW¹
 : 204a).

77. te-ik-ku-uš-šī-e-i+ 'show oneself, appear'.⁵⁶ The attestation in my collection is act. prt. sg. 3 te-ik-ku-uš-šī-e-i OH** KBo III 60 Vs.I 5. The putative nominal base is *te-ik-ku-uš-šī+, cf. lemma 56 above.

78. tu-pī-i+ : tup-pī-a+ '?' ('strike', 'caedere/incidere?'). It is not even clear whether the stem to the left of colon belongs to the same paradigm as the stem to the right (note the use of tu in the former vs. tup in the latter). Attestations: act. pres. sg. 3 tu-pī-iz-zi OH** KBo XII 3 Rs.III 6'; participle tup-pī-an-za (nom.sg.c.) MH Mat.75/10 öy.4, 75/11 öy.5, 75/69 öy.6, [tu]p-pī-an-za 75/13 öy.12. The uncertainty of the stem's meaning creates obvious difficulties in hypothesizing about its derivation. If the stem means 'caedere/incidere' or the like (as is suggested by its possible Luwian and Lycian cognates, viz. Cuneiform Luw. du-ū-pī+ 'strike', Hieroglyphic Luw. tu-pī+ 'caedere' and ā-ta tu-pī+ 'incidere', Lyc. tubi- : tube- 'caedere', see Chapter 3), it might be based on the noun tuppi- n. 'clay tablet' (HW¹ : 228b: "als Idgr. 1st DUB anzusehen; akk. entspricht tuppu"; also Elam. tuppi and possibly OPers. dipi 'inscription'; all likely to be "traveling loanwords").

⁵⁶ The meaning acc. to Oettinger 1979 : 29, 255, 340, 356.

79. ú-e/i-šu-(u-)ri-ia-(a=)+ 'be tied; suffocate; be oppressed'. The attestations in my collection are as follows:

mid. prt. sg. 3 ú-i-šu-u-ri-ia-ti OH* XVII 10 III 14
ú-i-šu-u-ri-ia-at-ta-ti OH** XXXIII 51 II 5
ú-e-šu-ri-ia-at-ta-ti OH** XXXIII 11 III 9
ú-i-šu-ri-ia-at-ta-ti OH**? XXXIII 46 I 11
ú-i-šu-ri-ia-ad-da-at OH**? XXXIII 45+ 53+ II 8
 pl. ú-i-šu-u-ri-ia-an-ta-ti OH* XVII 10 I 6, 7, 8
 MH* KBo XIV 86 I 15
ú-i-šu-ri-ia-an-ta-ti OH** XXXIII 37+39 IV 2
ri-ia⁰ ibid. 1
ú-i-š]u-ri-ia-an-ta-at OH* XXXIII 36 II 6
ú-i-šu-ri-an-da-at ibid. 8
 participle ú-i-šu-u-ri-ia-an-za- OH* XVII 10 II 8

The stem's conjugation type is not certain, for the want of active forms (sg.). The putative nominal base (*we/išur-, *wešura- or *wešuri-) is not attested separately. Other attestations (LH) see in StBoT 5 : 201 f. The stem is discussed in StBoT 2 : 49 ff.

uš-ša-ni-ia-(a=)+ 'sell, trade'. See uš-na-a+ below (class IX).

80. ud-da-ni-ia-a+ 'proclaim'. The only attestation I have is act. imperative pl. 2 ud-[d]a-ni-ia-at-ten OH**/MH*

XVII 8 IV 5. The form is insufficient for determining the stem's conjugation type and class, but it is likely to be a class I denominative based on the noun uttar (neuter r/n-stem) 'word/thing' (HW¹ : 237a; e.g. ut-tar-ša-it 'his/her word' OH StBoT 25 No.13 Vs.II 10').

81. wa-ag-ga/qa-ri-ia-(a=)⁺ 'make (someone) suffer deprivation; be rebellious'. I have the following attestations: act. prt. sg. 3 wa-ag-ga-ri-ia-at OH** KBo III 1 II 21, imperative sg. 2 wa-ag-ga-ri-ia OH** I 16 II 65, verbal noun wa-ag-ga-ri-ia-u-ar MH* XXIII 11 III 6, wa-a]q-ga-ri-ia-u-ar MH XXIII 12 III 7. The stem's putative base is not attested independently, but it could hardly be anything but nominal (*waggar- or the like, cf. ha-ap-pa-ri-a/1⁺ 'give, turn over (to)' (see above) based on ha-ap-pa-r⁺ n. 'exchange', etc.).⁵⁷

82. wa-ar-ši-ia-a⁺ 'drip; be satisfied'.⁵⁸ The attestations in my collection are not sufficient for determining the stem's conjugation type and class with certainty: mid. prs. pl. 3 wa-ar-ši-ia-an-da MH XXI 47 I 10,

⁵⁷ The root is wa-ag-g⁺, cf. the root verb stem wa-ag-g⁺ 'be missing' in wa-ag-ga-a-ri (mid. prs. sg. 3) pre-LH KBo IV 8 II 10; cf. the same root also in wa-ak-ši-ia-(a=)⁺ 'to lack, be missing' (only LH, as far as I know) in e.g. act. prs. sg. 3 wa-ak-ši-ia-zi VIII 35 I 11, etc.

⁵⁸ If one stem originally, the semantic development may have been (roughly) 'drip' → 'overflow (from abundance)' → 'be satisfied'?? Or two different stems?

participle sg.nom.c. wa-ar-ši-la-an-za MH XXIII 82 Rs.16,
 MH XXI 47 I 10. The stem is possibly based on the noun
wašša- 'dew, moisture' or the like (HW¹ : 247a and esp.
 Erg.3 : 36a; see also Oettinger 1979 : 429 with lit.)

83. za-ah-hi-(a=)i⁺ : za-ah-hi-la-(a=)⁺ 'to flight'.

The attestations in my collection are as follows:

- act. prs. sg. 1 za-ah-hi-la-mi MH KBo XVI 47 Vs.9', 12'
 2 za-ah-hi-la-ši ibid. 13'
 3 za-ah-hi-e-iz-zi MH XXIII 77, 76
 pl. 2 za-ah-hi-at-te-ni- MH XXIII 77, 16
 prt. sg. 3 za-ah-hi-la-at MH XXIII 72 Vs.38
 pl. za-ah-hi-ir MH XIV 1 Vs.63
 za-ah-[hi-]ir ibid. 59
 imper. pl. 2 za-ah-hi-la-at-ten MH XXXI 103 Vs.19
 MH* XXVI 29, 16
 mid. prs. sg. 1 za-ah-hi-la-ah-ha MH XXIII 72 Rs.41
 za-ah-hi-la-ah-ha-ri MH XIV 1 Vs.31
 za-ah-hi-la-ah-ha-ri ibid. 29
 3 za-ah-hi-la-at-ta OH** KBo III 46 Rs.32
 ibid. 41
 pl. 2 z]a-ah-hi-la-ad-du-ma MH XXIII 11 III 30
 prt. sg. 1 za-ah-hi-la-ah-ha-at MH* XXIII 11 III 30
 imper. sg. 1 za-ah-hi-la-ah-h[a-ru OH** XXVI 35, 7
 2 za-ah-hi-la-ah-hu-ut ibid. 8
 pl. 2 za-ah-hi-la-ad-du-ma-at MH XXVI 17 I 5
 LMH XIII 20 I 7
 ^o[-at(?) ibid. 19

-/ske/-forms:

act. prs. sg. 1 za-ah-hi-iš-ki-m[1 OH** KBo III 41 Rs.7
 za-ah-hi-eš-ki-mi MH* XXXIII 75 II 2
 3 za-ah-hi-iš-k[i-i]z-zi MH XVII 10 II 34
 za-ah-hi-iš-ki-iz-zi MH* KBo XII 126 I 34
 mid. prs. sg. 3 za-ah-hi-iš-kán-ta OH StBoT 25 No.54 Vs.II 16'

One possibility is that the stem is based on the noun zahhāi- c. 'fight, battle' (gen.sg. zahhilaš, dir. zahhila, etc.; HW¹ : 257a); this is the view of Kronasser 1966 : 497 shared by Oettinger 1979 : 446. The other possibility (just as likely, if not more likely that the first) is that the stem is based on the root stem zahh- 'to strike' (see attestations in Kronasser 1966 : 387 and in Oettinger 1979 : 446 with lit.).⁵⁹ The semantic difference between the root stem and the class I stem is that between semelfactive ('strike') and iterative ('fight') and seems to be well represented in Hittite, cf. hatt- : hazz(i)ya-, karp- : karp(i)ya-, war-* : war(i)ya-, etc. in the section on deverbatives above.

⁵⁹ Oettinger 1979 : 446 classifies zahh- as a hhi-verb based on one MH* form (za-a-hi KBo VI 25+ III 7', StBoT 9; note the spelling with a "single" h, which arouses suspicion: is this a misspelling? or a different word?), while mi-forms are also attested (e.g. act. imperative sg. 3 za-ah-du XLIII 35, 10' LMH) and other forms (such as za-ah-hu-u-a-ni OH** KBo III 60 II 17 or za-ah-ha-an-zi StBoT 29 : 165) are neutral with regard to conjugation type.

2.3.1.4 Secondary Stems (c): ?

84. kat-kat-ti-i⁺ : kat-kat-ti-ia-⁺ 'sink, drop' appears to be neither denominative nor deverbative. Its attestations in my collection are: act. prs. sg. 3 kat-kat-ti-ia-zi OH** XXIX 9 I 6; -/ske/-form: kat-kat-ti-is-ki-iz-zi (act. prs. sg. 3) NH* XXXIII 103 III 5. Morphologically, the stem reminds one of hu-ul-hu-ul-li-ia-a⁺ 'fight one another' based on the same root as hu-ul-li-i⁺ 'combat' (see above). There is, however, no known verb base to the stem in question; a root katt- is apparently found in the adverb katti (loc.), katta (dir.), kattan (nom./acc. sg. neut.??) which, according to Starke (StBoT 23 : 181 ff.) means 'together with' (a philologically well-justified improvement on HW¹ : 105 katta... "unten; hinab; herab...", etc.). If katti, katta did mean 'down, downward' at some point, I would have felt better about the possibility that kat-kat-ti-ia⁺ is based on the root-reduplicated locative katti. As it stands, I simply do not have enough information to explain the derivation of this stem.

2.3.1.5 Opaque Stems

85. pal-ku-i-ia-a⁺ 'applaud; praise' (??) is attested in my collection once: mid. prs. pl. 3 pal-ku-i-ia-an-ta OH** XXIX 1 III 5.⁶⁰ Noteworthy is Güterbock's (1946 : 79f.) proposal connecting this stem with pal-wa-(a-)₁⁺ 'clap

⁶⁰ See StBoT 5 : 134 f. for the context and literature.

(one's hands)' (q.v. below). Since only a middle form is attested, the stem's conjugation type is uncertain. There is not enough information for determining whether the stem is primary or secondary (and if the latter, whether it is deverbative or denominative).

86. pu-ut-ki-i-a-i+ 'to swell, rise (dough)'. The stem's only attestation in my collection is mid. prs. sg. 3 pu-ut-ki-a-it-ta MH* StBoT 22 Eid 1 Vs.I 39 (=KBo VI 34 I 33). Neu (StBoT 5 : 143) adduces also pu-ut-ki-iš-ki-it-ta-ri n.d. VIII 36 II 14, mid. prs. sg. 3 -ske-form to this stem.

87. šar-hi-i-a-i+ 'to knock down, attack suddenly'. In my collection, the stem is represented by act. imperative sg. 3 šar-hi-i-a-id-du MH KBo XVI 24, 15' (other [LH] attestations see in Oettinger 1979 : 288 footnote 57).

88. ta-a-ni-i+ '?'. The only occurrence of this stem in my collection is act. prs. sg. 3 ta-a-ni-iz-zi OH KBo XX 10 I 5. Oettinger (1979 : 29 footnote 24) suggests possible connection with "taninu- 'ordnen', das jedoch gelegentlich luw. Endung oder Glossenkeil (Bo 2562 IV 27') aufweist".

89. za-an-pi-la-a+ 'to sweat; drop'; mid. 'leak, be leaky'. The stem's attestations in my collection (mid. prs.

sg. 3 za-ap-pí-la-aí-ta OH** KBo III 23 Vs.11; MH* XXXI 90
 III 7, XIII 2 II 38; -/ske/-form [act. prs. sg. 3] za-ap-pí-
lā-ki-iz-zi LMH XX 10 Rs.15) are not sufficient to
 determine with certainty the stem's conjugational type,
 class and derivational nature (i.e. primary or secondary).

2.3.2 Class II

There are no primary stems in this class, only
 secondary (denominative) ones. These are as follows:

1. ha-aš-šū-u-a-i+ / LUGAL -u-a-i+ 'be king'. The
 attestations in my collection are: act. prt. sg. 3 ha-aš-
šū-u-a-i OH** KBo III 1 I 12; the same form written with
 the sumerogram: LUGAL -u-a-i ibid. 23, LUGAL -e-i KBo III
 57 II 4 (OH**). The stem is based on the noun ha-aš-šū-u+
 c. 'king' (written phonetically in OH* XXXI 100 II 9, 10;
 more frequently written with the sumerogram LUGAL); so also
 Kronasser 1966 : 492, Oettinger 1979 : 331. Watkins's
 (1973 : 77 f.) assumption of "an g-verb haššū-a-" is
 discussed in Chapter IV.

2. ka-pu-(u)a/i+ / ka-ap-pu-u-i+ : ka-pu-u-a+/
ka-pu-(u)wa-(a=)+ 'count, reckon, consider'

This stem is represented in my collection with the following
 attestations:

act. prs. sg. 2 ka-pu-u-e-ši OH** KBo III 28 II 13*

- kap-pu-u-wa-šl OH** XXXI 127 I 48
- 3 kap-pu-u-iz-zi MH IBoT I 36 5y.I 46
- kap-pu-e-iz-zi MH* XIII 7 I 9
- kap-pu-u-wa-iz-zi OH** XXXIII 37+39 IV 3, 4, 5
(class IV transfer!)
- pl. 3 kap-pu-u-en-zi OH KBo VI 2 IV 20
- kap-pu-u-an-zi OH* KBo VI 3 IV 16
- prt. sg. 3 kap-pu-u-e-it OH* XVII 10 I 21; IV 20, 26
- kap-pu-u-it OH* XVII 10 IV 27
OH** XXXIII 38 IV 5
- pl. kap-pu-u-e-ir OH** XXIX 1 III 6
- imper. sg. 2 kap-pu-u-i OH* XXXI 130 Rs.8
MH* XIII 2 IV 20
- ka-pu-u-i OH** KBo III 28 II 13'
- 3 kap-pu-id-du OH** XXXI 131 Vs.8
- kap-pu-u-id-du MH* XIII 2 I 27
- kap-pu-u-wa-id-du ibid. 13
(class IV transfer!)
- imper. pl. 2 kap-pu-wa-at-te-en MH* XIII 2 II 33
MH* VBoT 58b I 19
- kap-pu-wa-at-ti-en XIII 2 III 1
- participle kap-p[u]-wa-an-da OH** KBo X 2 II 17
- kap-pu-u-wa-an MH XVII 21 Vs.I 8, 13
XXXI 87 I 8
MH* XIII 2 I 23, 27,
32; IV 27
- verbal noun kap-pu-u-wa-u-wa-ar OH** XXIX 1 II 9
- /ske/-forms:
- act. prs. sg. 3 kap-pu-u-uš-ki-iz-zi MH XXIII 72 Vs.27
- kap-pu-uš-ki-iz-zi MH KBo XVII 105 IV 21'
- imper. kap-pu-u-iš-ki-id-du MH XXXI 87 II 13

MH* XXXI 86 II 40

Note the writing of the stem in the two forms from KBo III 28 II 13' with the sign ka instead of kap. The obvious transfers into class IV (discussed below) can be explained by analogy statable in e.g. the following proportion:

tar-ma-an-zi : kap-pu-u-wa-an-zi = tar-ma-iz-zi : x (x = kap-pu-u-wa-iz-zi).

The putative nominal (hardly other) base is not attested independently. (See also Oettinger 1979 : 332 f.)

3. šar-ku-a-i+/šar-ku-u+ : šar-ku-wa-a+

ša-ra-ku-wa-a+ 'put on footwear'

act. prs. sg. 3 šar-ku-e-iz-zi OH** XX 4 I 8'

prt. šar-ku-ut-ta OH** XXXIII 67 I 28.

participle šar-ku-wa-an-za MH* StBoT 14 Appu I 26

ša-ra-ku-wa-an-te-eš OH** XXV 148 III 39

(cf. Oettinger 1979 : 335)

The stem is apparently based on the u-stem adjective šarku- 'high, elevated' (pl.nom.comm. šargawāš; HW¹ : 186a).

Since the adjective is an u-stem, as e.g. the quoted plural form seems to show (and not a consonant stem with the final /K^w/, which would be the other possibility), the sign ku here stands for /Ku/, not /K^w/. (For this reason, entering this verb into the index of StBoT 26 (: 161) as "šarkya-" is, in my view, unduly biased.) Prt. sg. 3 šar-ku-ut-ta

OH** looks athematic; the form may be a backformation to e.g. the participle and the (unattested) prs. pl. 3 *šar-ku-wa-an-zi if these were pronounced with [kw] instead of [kuā] or [kuwa] (two syllables).⁶¹

4. ša-ru-u-a-i+ / šar-wa-i+ 'to plunder'

act. prt. sg. 3 šar-wa-it MH* XXIII 21 Vs.30

pl. ša-ru-u-e-ir MH XXXI 124 Vs.II 14
XVII 21 II 5; III 3

Cf. Oettinger 1979 : 336 (where also see LH attestations).

The stem is apparently based on the noun šaru- 'booty' (HW¹ : 187b); so Oettinger 1979 loc.cit. The form šar-wa-it MH* is a late transfer into class IV (q.v.) along the lines suggested above.⁶²

⁶¹ At this point, I owe the reader a brief explanation which of necessity anticipates the later discussion. The stems that belong to my provisional class II are members of the same morphological class as those belonging to the provisional class I, i.e. the -/ye/- : -/ya/- (: IE *-ye- : *-yo-) class. After the final =y- of the base and before the following a- of the ending, in this case, /y/ became phonetic zero. Following this change, the /u/ possibly became [w] before a; it is also possible that the /u/ preserved its vocalic character but the glide [w] developed in the transition from y to a. Thus it is possible that, in the case of the base /sarKu/-, the base final =Ku before a coincided with /Kw/. It is this latter possibility that would make the athematic backformation possible.

⁶² It appears relevant to quote in this connection the following à propos passage from Oettinger 1979 : 336 f.: "Der Grund, warum fast alle diese Stämme bisher auf "uwāi-" angesetzt wurden, liegt in den jung-hethitischen Umbildungen nach der hatarā-Klasse (=my preliminary class IV - A.L.)... So erscheint in dieser Epoche [huesuāezzi], [huesuāet] (see my class III below - A.L.), [karuāezzi],

2.3.3 Class III

2.3.3.1 Primary (?) Stem

1. šu-ú-i+/šu-ú-i-a-i+ : šu-wa-a+

'reject, expel, cast off'

act. prs. sg. 3 šu-ú-iz-zi OH KBo VI 2 IV 48
 OH* KBo VI 3 IV 58
 OH** KBo VI 26 II 4
 MH KBo XVI 25 Rs.IV 5

šu-ú-i-a-iz-zi MH* VIII 81 Rs.III 7

prt. sg. 3 šu-ú-it MH KBo XVI 25 Vs.I 68'

pl. 2 šu-wa-at-te-en MH* IV 1 III 13

3 šu-ú-ir OH** XXXVI 105 Rs.4'

Cf. Oettinger 1979 : 294 for other attestations (incl.LH)
 and datings.

The stem appears to be primary (i.e. not derived from
 another verb stem or a noun, etc.). It is quite possible;
 however, that two middle forms (MH*) previously thought to
 belong to the paradigm of another (similar-sounding) verb,
 viz. šu-wa-i+* 'to fill' (see StBoT 5 : 159), could very
 well belong to this stem:

mid. prt. sg. 3 šu-ut-ta-ti MH* StBoT 22 Eld 1
 (=KBo VI 34) III 17

imper. sg. 3 šu-ut-ta-ru ibid. 21

[karuṣṣānzi], [karuṣṣai], [karuṣṣatu], ...usw. Diese
 Analogietendenz... ging von den a-haltigen
 Flexionsausgängen aus."

The meaning 'be pulled out' or the like (a viable mediopassive to the above active stem) seems to fit very well in their contexts ("then he breaks the oath and the oath gods seized him, and his inside was pulled out [formerly: "swollen"], and his hand held the entrails high"; "let his inside be pulled out!"; see the texts in StBoT 5 : 159). Unless these forms are morphologically late (replacements, via syncope, of the expected *šū-wa-at-ta-ti and *šū-wa-at-ta-ru), which is quite possible in view of their late attestation, they might be taken at face value as based on the root verb stem šū-u+. In that case, šū-u-i+, etc. would be secondary.

2.3.3.2 Denominative

2. hu-(u-)i-šū-(ú-)a-/i+ : hu-(i-)šū-wa-a
/hu-iš-(šū-)wa-a+ 'be alive'

act. prs. sg. 3 hu-iš-ú-iz-zi OH* XXXVI 75 IV 3

prt. pl. 2 hu-iš-ú-e-te-en- MH XIV 1 Vs.12

3 hu-u-i-šū-ir OH** XXXI 64 I 17'

participle hu-šū-wa-an-da-an OH StBoT 25 No.4 Vs.II 14'

hu-šū-wa-an-za ibid. No.112 Vs.II 4'

hu-iš-šū-wa-a[n-te-eš(?) No.124 Vs.II 15'

h]u-i-šū-wa-an-t[e-eš ibid., No.117 Rs.37"

hu-iš-w[a-an-za ibid., No.124 Vs.II 8'

hu-iš-wa-an-du-uš MH XXIX 7 Vs.20, 27

hu-iš-wa-an-za ibid. 31

Cf. Oettinger 1979 : 331.

There is also a hhi-conj. act. prt. sg. 3 hu-iṣ-wa-a-iṣ KBo III 63 I 2' OH**?. The dating notwithstanding, the form could have arisen through resegmentation of the stem alternant attested in the participle (e.g. [huiswa][nt]+).

The stem appears to be based on the adjective huiǎu- (huesu-) 'live, fresh, raw' (HW¹ : 72a); so also Oettinger 1979 loc.cit.

2.3.3.3 Other

3. $\hat{u}=(a-)i+/ \hat{u}=e+/ \hat{u}=i-i+ : \hat{u}=wa+/ \hat{u}=(wa-)a+ \text{ 'come'}$

act. prs. sg. 1 ū-wa-mi OH StBoT 25 No.7 Rs.IV? 11'
No.139 Vs.15'; etc.
OH* XVII 5 i i; etc.
MH* XIII 20 I 28

ú-wa-a-mi OH** XXIX 1 I 20

ú-wa-am-ni MH* VBoT 24 IV 9

sg. 2 ú-wa-ši OH KBo VII 14 Vs.5

3 ũ-e-iz-zi OH StBoT 25 No.3 Rs.III 13

ú-e-iz-zi OH* XVII 10 I 17

ū-iz-zi OH StBoT 25 No.3 Vs.I 40'
 ibid. No.12 Vs.I 13'
 II 16', etc.
 No.18 Rs.? 2';
 No.19 Rs.67
 et passim
 OH** KBo III 27 Vs.26; etc.
 MH XXVI 17 I 10; etc.
 MH* XIII 2 III 39; etc.

pl. 1 ū-wa-u-e-ni OH StBoT 25 No.3 Rs.IV 7
No.4 Rs.III 16
MH XXIII 72 Vs.28

ú-wa-ú-e-ni OH** KBo XII 42, 4

- 2 ũ-wa-at-te-ni OH* KBo VII 28 Rs.40, 45
MH KBo VIII 35 II 19
- 3 ũ-en-zi OH KBo VI IV 13
StBoT 25 No.12 Vs.II 18'; Rs.IV 2
No.25 Rs.IV 24'
No.34 Vs.7'
No.38, 8'; No.43 Vs.I 5'
etc.
OH* KBo XVII+ Vs.I 5'
OH** XLIII 48, 4'
- ũ-an-zi OH StBoT 25 No.19 Vs.16 (end of line)
MH IBoT I 36 öy.I 7
- ũ-wa-an-zi OH StBoT 25 No.54 Rs.III 7'
MH IBoT I 36 öy.I 22
MH* XIII 2 I 6; etc.

prt. sg. 1 ũ-wa-nu-un OH** KBo X 2 I 41, 45
MH XIV 1 Rs.55

2 ũ-wa-aš OH* XXXIII 27 Vs.2

3 ũ-e-it OH StBoT 18 Rs.66

ũ-e-it StBoT 17A Rs.13'

ũ-e-it OH* XXXIII 59 III 11, 12
XVII 10 I 17

ũ-e-it! OH** XXXI 4 Vs.18

ũ-i-it- OH StBoT 25 No.123 4'

ũ-it OH XXXVI 99 Vs.I 3, 5; Rs.8
StBoT 17A Rs.8'
KBo VII 14 Vs.7
OH* XVII 10 IV 20
OH** StBoT 17B Rs.30'
(//StBoT 17A Rs.13')
etc.
MH XIV 1 Vs.13, 18, 60, 62
MH* KBo II 3 I 57

pl. 1 ũ-wa-u-en OH KBo VIII 42 Vs.? 5

3 ũ-e-ir OH KBo VI 2 III 16
OH* KBo VI 3 III 19
MH XIV 1 Vs.71
MH* XXIII 17, 5

imper. sg. 3 ũ-id-du OH** XXIX 1 III 1

MH XIV 1 Vs.74

pl. 2 ū-wa-at-ten OH XLIII 23 Rs.14'
OH** I 16 II 45 end

ū-wa-at-te-en OH StBoT 17A Vs.15
OH** KBo III 41 Rs.23

ū-it-te-en OH** KBo III 41 Rs.2

3 ū-wa-an-du MH* KBo XIII 58 II 25'

participle ū-wa-an-za MH XXIII 72 Vs.44

infinitive ū-wa-u-an-zi MH XIV 1 Rs.31

Cf. the paradigm in Oettinger 1979 : 131 f.

This stem is placed in class III on a purely descriptive basis, due to mechanical application of the class identification procedure as stated in Chapter 1. The stem is plausibly explained as consisting of the preverb /ū/ 'hither' and the root +(e-)i+ 'go' (: IE *ey-); its imperative sg. 2 a-hu 'come here' (attestations: OH XLIII 23 Rs.10', KBo VII 14 Vs.4, etc.; MH XIV 1 Vs.17, 77, etc.; MH* VBoT 24 I 28, 37, etc.) is explicable as the same combination in the reverse order. See the summary to this chapter and Chapter IV.

2.3.4 Class IV

2.3.4.1 Primary Stem

1. ša-a-i+ : ša-a-a+ 'be wroth'

act. pres. pl. 3 ša-a-an-zi OH* XXXI 135 Vs.14'

ša-an-zi OH* XXXI 127 I 47

prt. sg. 3 ša-a-it OH* XXXIII 67 I 26
MH XXX 10 Rs.2

ša-a-it- OH* XVII 10 I 22

participle ša-a-an-za MH KBo XXVI 127 Vs.? 3'

verbal noun ša-a-u-wa-ar OH* XVII 10 III 20

Cf. the paradigm in Oettinger 1979 : 362.

2.3.4.2 Secondary Stems

These seem to be denominative only. Those the bases of which are attested appear below.

2. ha-ap-(pa-)ra-(a-)l+ : ha-ap-pa/pí-ra-a+ 'to trade'

act. prs. sg. 3 ha-ap-pa-ra-iz-zi OH KBo XIX 1 II 17'
OH** KBo VI 10 III 28

ha-ap-ra-iz-zi OH** XXVI 56 II 5

pl. 2 ha-ap-pí-ra-at-te-ni MH XXIII 72 Rs.58

3 ha-ap-pa-ra-an-zi OH** KBo VI 26 II 22

prt. sg. 3 ha-ap-pa-ra-a-it OH KBo VI 2 II 52

participle ha-ap-pí-ra-an MH* XIII 2 IV 16

Cf. also the stem ha-ap-pa-ri-a+/l+ 'give, turn over (to)' (class I, see above) based on a similar (if not identical) nominal stem, namely happar n. 'exchange, transfer, trade' (HW¹ : 54a). The class IV stem, however, is more likely to be based on a derivative of the r-stem happar, such as *happara- or *happira- (with the e-grade of the suffix, cf. the MH(*) attestations in the paradigm above). The writing ha-ap-ra-l+ OH** perhaps reflects a later syncope rather

than indicating that ha-an-na-ra-i⁺ etc. should be read as
[hapra]-.

3. ir-ha-(a-)i⁺ : ir-ha-(a-)a⁺ 'delimit'

act. prs. sg. 3 ir-ha-a-i[z-z]i OH StBoT 25 No.12 Vs.I 5'

ir-ha-a-iz-zi OH** XXXIII 13 II 23'

VBoT 58b IV 38

MH KBo XXI 33 II 27'

XV 34 IV 26

ir-ha-iz-[zi OH StBoT 25 No.45 r.col.7'

OH* VBoT 58b IV 41

pl. 3 ir-ha-a-an-[zi OH StBoT 25 No.87, 8'

ir-ha-an-zi OH StBoT 255 No.26 Vs.2 I 18'

prt. sg. 3 ir-ha-a-it OH* KBo VII 28, 42

imper. pl. 2 [ir]-ha-at-te-en ibid. 43

participle ir-ha-a-an ibid. 41

The stem is based on the noun irha- c. 'border, limit' HW¹ :
83b.

4. ga-an-ga-ta/da-a-i⁺ : ga-an-ga-ta-a-a⁺ 'cleanse
with the gangati-plant'

act. prs. sg. 3 ga-an-ga-ta-a-iz-zi MH XXIX 7 Vs.2, 8, 9
10, 15; Rs.64

ga-an-ga-da-a-iz-zi ibid. Rs.64 end

participle ga-an-ga-ta-a-an-za- ibid. Vs.11; 32

ga-an-ga-ta-a-an-te-eš ibid. 12

Cf. Oettinger 1979 : 379. The stem is apparently based on the noun gangati- n. (a kind of plant) HW¹ : 98a with lit., possibly a Hurrian loanword.

5. ku-(u-)ut-ru-wa-a-i+ 'be witness'

act. prs. sg. 3 ku-u-ut-ru-wa-a-iz-zi OH** KBo VI 4 IV 7

ku-ut-ru-wa-a-iz-zi ibid. 10

The stem is apparently based on the noun kutruwa- c. 'witness' (which also shows some n-stem forms; see HW¹ : 121b and Oettinger 1979 : 494 footnote 94).

6. li-la-a-i+ : li-la-(a-)a+ 'conciliate, pacify'

See now HD : 57b for a complete list of attestations (most of the pre-LH ones are MH(*)). The base of the stem is the noun lila- c. 'conciliation, pacification' HD : 57a.

7. pār-aš-na-a-i+ : pār-ša-na-a-a+ 'squat, crouch, cower down'

act. prs. sg. 3 pār-aš-na-a-[iz-zi OH StBoT 25 No.153 Rs.III 16'

participle pār-ša-na-a-an OH StBoT 25 No.27 Rs.I 16'

The stem is apparently based on the noun written as pār-ši-na-* (acc. pl. comm. pār-ši-nu-uš OH**/MH* XXXIII 120 I 25 'buttocks, cheeks'(?)). The sign ši is used here either in an attempt to render the cluster /rsn/ (cf. the use of aš

and ša in the same slot in the verb stem) or perhaps to indicate a real anaptyctic [i] (hardly [e] as Oettinger would have it (1979 : 365 "[parsēna-]") because ši is used while ša is available). For possible IE cognates of the noun, see e.g. HW¹ : 163b (Skt. pārsni-, Goth. fairzna, etc.)

8. pār-ša-(a-)i⁺/pār-ša-i-i⁺ : pār-ša-(a-)a⁺

'crumble (tr.)'

act. prs. sg. 3 pār-ša-a-iz-zi MH XV 34 Vs.I 27
ibid. Rs.III 33

pār-ša-iz-zi MH* KBo II 9 IV 2

pār-ša-i-iz-zi MH KBo XVII 105 II 27'

participle pār-ša-an MH XV 34 Vs.I 37

pār-ša-a-an ibid. Rs.III 44

The stem is apparently based on the a-stem noun NINDA parša- 'bread crumb' (HW¹ : 163a; OH attestations now see in StBoT 26 : 139; also Hoffner 1974 : 175). The form pār-ša-i-iz-zi qualifies the stem for class I, but the joint evidence of MH pār-ša-a-iz-zi and pār-ša-a-an necessitates its classification here (with some caution). The form pār-ša-an could well belong to the root verb stem pār-š⁺ on which the class I deverbative pār-ši-(ia-)a⁺ 'break (bread)' is based (see p.62 ff. above).

9. pa-tal-ha-a⁺ 'to fetter, tether'

act. prs. sg. 1 pa]-tal-ha-e-mi OH StBoT 25 No.150, 4'
 pa-ta]l-ha-e-mi ibid. 5'

The stem is based on the noun (GIŠ) natalha- 'fetter, ankle-cuff' (without the determinative [and perhaps originally] 'ankle') HW¹ : 106a; Erg.2 : 20a. Cf. na-tal-li-ia-a+ id. above.

10. píd-da-(a-)]t 'give (grants/allotments of land)'

act. prs. sg. 3 píd-da-a-iz-zi OH* KBo VI 3 II 26
 píd-da-a-iz-zi ibid. 23
 píd-da-iz-zi OH* KBo VI 3 II 11
 prt. píd-da-a-]t ibid. 15

This stem is apparently based on the noun pitta- n. 'grant, allotment (of land)' (neut. pl. nom./acc. pí-it-ta 'grants' MH* XIII 2 III 41, pí-a-it-ta id. MH* XXXI 84 III 66-67, pí-l-a-it-ta id. MH* XXX 29 Vs.9).

11. ták-šú-la-a-e+ / ták-šú-la-]t

'be bound by a peace treaty'

act. prs. sg. 3 ták-šú-la-iz-zi MH* XXIV 9 II 9
 prt. 2 ták-šú-ú-la-a-eš MH XIV 1 Vs.75

The noun on which this stem is based is an a-stem derivative of the noun tákšul- 'friend(ly); friendship, peace; treaty, contract', cf. LÚ tákšulaš "man of peace" = 'friend, ally'

(where tákšulaš is interpreted as the genitive of tákšul)

HW¹ : 205. Cf. Göttinger 1979 : 264.

12. dam-ma/mi-iš-ha-(a-)l⁺ : dam-ma/mi-iš-ha-(a-)a⁺

'oppress violently'

act. pres. sg. 3 dam-me-iš-ha-a-iz-zi MH Mst.75/13 ay.21

dam-mi-iš-ha-iz-zi MH* XIII 7 I 4

mid. pl. dam-mi-iš-ha-an-da-ri MH Mst.74/104 ōy.12

participle dam-me-iš-ha-an-da-aš OH** XXXI 127 I 35

dam-mi-iš-ha-an-da-aš XXXI 132, 14

dam-mi-iš-ha-an MH* XIII 2 IV 14

Based on dammešha- c. 'violence' (HW¹ : 208a).

13. tar-ma-(a-)e-/l⁺ : tar-ma-(a-)a⁺ 'to affix, peg

down'

act. pres. sg. 1 tar-ma-e-mi OH StBot 25 No.3 Rs.III 9

tar-ma-e-mi lbld. No.4 Rs.III 9

OH** XXXI 4 Vs.13

tar-ma-a-e-[mi OH StBot 25 No.7 Rs.IV? 3'

tar-ma-a-mi OH** XXXI 4 Vs.14

sg. 3 tar-ma-a-iz-zi MH IBoT II 111 ōy.8

MIO 1 (Rost) II 16

pl. tar-ma-a-an-zi MH* VBoT 24 II 18

prt. sg. 1 tar-ma-a-nu-un MH* XXIV 9 II 23

3 tar-ma-a-it MH MIO 1 (Rost) II 20

participle tar-ma-a-an-te-eš MH* XXIV 9 II 24

tar-ma-an MH* XXIV 11 II 13

The stem is based on (GIŠ) tarma- c. 'peg' (nom. sg. tar-na-aš- OH StBoT 25 No.4 Vs.I 4').

14. ur-ki-ia-i+ 'track down, trace'

act. prs. sg. 3 ur-ki-ia-iz-zi OH XXIX 30 Vs.II 5
OH** KBo VI 10 III 30

Cf. Oettinger 1979 : 29, 257, 355, where this stem appears, without any justification, as "urki-a-". The stem is apparently not based directly on the noun urki- c. 'trace' (HW¹ : 235, with two MH attestations), but rather on an a-stem derivative (urkiya-* or the like).

There are a number of class IV stems the derivation of which is unclear because their bases are not attested independently. Among these are the following:

15. a-ra-(a-)i+/a-ra-i-i+/a-a-ra-i-e-i+ : a-ra-a+ 'to stop (trans.)'

act. prs. sg. 3 a-ra-a-iz-zi OH* XVII 10 IV 5
a-ra-iz-zi OH** XXXIII 49 III 1
a-ra-i-iz-zi MH VIII 10 IV 5
prt. a-ra-a-it OH* XVII 10 III 1, 2(twice)
pl. a-a-ra-i-e-ir OH** XXIX 1 I 4
imper. pl. 3 a-ra-an-du OH* XVII 10 IV 7

The forms a-ra-i-iz-zi and a-a-ra-i-e-ir show writings characteristic of class I (cf. e.g. āu-wa-i-i+, etc. 'look after' above), but older forms such as a-ra-a-iz-zi OH* and especially a-ra-an-du OH* show that the stem belongs to class IV. It could be denominative, based on *ara- 'stop' or the like (cf. Oettinger's further taking this stem back to *h₃ór-eh₂- 'Stand, aufgestanden Sein' [1979 : 369]; why not *h₃ór-o- which would have been quite sufficient?). This putative noun would be based on the same root as the hhi-verb a-ra-a-i 'gets up, arises'.

It is also possible that the stem under discussion is deverbative from the hhi-verb stem.

16. a-ru-wa-a+/a-ru-wa-(a-)i+ : a-ru-wa-(a-)a+ 'to bow, supplicate'

act. prs. sg. 3 a-ru-wa-iz-zi OH StBoT 25 Vs.I 10'
MH KBo XXV 187 Vs.? II 7'

a-ru-wa-a-iz-z[i OH** KBo X 28 III 6

ar-wa-iz-zi MH* KBo XIX 161 I 16'; II 12'

pl. a-ru-wa-a-an-zi OH KBo VI 2 III 16

a-r]u-wa-an-zi OH StBoT 25 No.25 Rs.IV 7'

a-ru-wa-en-zi ibid. No.76 l.col.6'

prt. sg. 3 a-ru-wa-a-it OH** XXXI 127 I 13

a-ru-wa-it OH** XXXVI 101 II 6; 8 0it
XXXVI 102, 7

infinitive a-ru-wa-an-zi OH StBoT 17A Rs.13'

a-ru-wa-u-wa-an-z[i OH** StBoT 17B Rs.30'
//17A Rs.13'

-/ske/-forms:

act. prs. sg. 3 a-ru-i-iš-ga-zi OH* KBo XX 34 Rs.7'
 pl. a-ru-e-eš-kán-zi OH** XXXI 134, 3
 a-ru-ú-iš-kán-zi OH** XXXVI 75 I 12
 imper. pl. 3 a-ru-e-eš-kán-zi OH** XXXIII 23 I 18

(Note the haplography in the OH form of the infinitive,
 corrected in the OH** copy of the text.)

Although no base for this stem is attested separately
 in Hittite, it is possible that the stem is denominative (to
 *a-ru-wa-/ar-wa- or the like, cf. Hom. ἄρα 'imprecation'
 *arwā [Arc. kat-arwos], see e.g. Lejeune 1972 : 159).

17. ha-an-da/ta-(a-)i⁺ : ha-an-da/ta-(a-)a⁺ 'set in
 order, determine through an oracle'

act. prs. sg. 3 ha-an-ta-a-iz-zi OH StBoT 25 No.19 Vs.9
 ha-an-da-a-iz-zi OH* KBo VIII 109, 1'
 ha-an-da-a-iz-zi MH IBoT I 36 ōy.57
 KBo XV 10 Vs.I 11; etc.
 pl. ha-an-da-a-an-zi MH IBoT I 36 III 20, 48
 KBo XVII 62 I 15'
 ha-an-da-an-zi MH KBo XVI 31, 6'
 prt. sg. 3 ha-an-da-a-it OH* XLIII 60 I 30
 ha-an-da-it OH** KBo III 7 I 15
 imper. sg. 2 ha-an-da MH XXXVI 127 Vs.? 6
 MH* XXXIV 76 I 13
 3 ha-an-ta-id-du MH* XIII 2 II 6
 aif. prs. sg. 3 ha-an-da-a-it-ta OH StBoT 25 No.34 Vs.22'
 MH IBoT I 36 IV 21

ha-an-da-it-ta-ri OH** XXIX 1 IV 8
MH IBoT I 36 5y.40

ha-an-da-a-it-ta-ri ibid. IV 22

ha-an-ta-it-ta OH** Bo 2599+Vs.II 9', 17'
(in: StBoT 25 No.31 and 32)

ha-an-d[a]-a-e-it-ta OH StBoT 25 No.31 Vs.II 11'

ha-an-da-i-it-ta-ri MH* KBo XIII 58 II 24'

prt. sg. 3 ha-an-da-a-it-ta-at MH XIV 1 Rs.90

ha-an-da-[a]t-ta-at MH* XXXIII 19 III 3

pl. ha-an-da-an-ta-ti OH* XVII 10 IV 22

ha]-an-da-a-an-ta-ti OH*/MH XXXIII 29 Rs.5

ha-an-da-an-da-ti OH** XXXIII 40 IV 6

ha-an-ta-an-da-ti MH* XXXIII 19 III 4

ha-an-ta-an-ta-ti ibid. 6, 7

imper. sg. 2 ha-an-da-ah-hu-ut OH* XVII 10 II 32
OH** XXXIII 11 II 14

participle ha-an-da-a-an OH StBoT 25 No.109 Rs.III 13
ibid. No.110 Vs.II 10, 17, etc.
OH** KBo III 23 Rs.12'
MH KBo XVII 61 Vs.11'
XV 34 I 4, 20

ha-an-da-an MH KBo XVI 24 Vs.II 8'
MH* XIII 7 I 21

ha-an-da-an-te-eš OH** KBo X 23 Vs.II 11

ha-an-da-a-an-za XXXI 127 I 20

ha-an-ta-an-ta-an ibid. 51

ha-an-da-an-da MH* XXIV 9 IV 12

(For middle forms, see also StBoT 5 : 40 ff.)

-/ske/-forms:

act. imp. sg. 2 ha-an-te-iš-ki-ši OH** XXXI 127 I 17

prs. 3 ha-an-te-eš-ki-zi MH XIV 1 Vs.81

imp. pl. ha-an-te-eš-kán-du MH XIII 1, 27

The stem's base is apparently a derivative of hant- c.

'front' (HWⁱ : 51b; OR ablative ha-an-ta-az StBoT 15 No.124 Rs.III 19'). In Kronasser's view, the stem is derived from adv. handa 'according to, appropriate (to)', directive ("dat.-loc.") of hant-. To my mind, direct derivation from an adverb is less likely than derivation from an a-stem derivative of hant-, viz. hanta-*.⁶³

18. ha-at-ra-(a-)g/l⁺ : ha-at-ra-(a-)a⁺ 'write, command, appoint'

act. prs. sg. 1 ha-at-ra-a-mi MH XXI 47 I 19
XIV 1 Vs.77 ⁰at-ra⁰
MH* XIII 20 I 25

3 ha-at-ra-a-iz-zi MH VIII 81 Vs.II 7
MH* XIII 20 I 25
XXXVI 127 Vs.75 ⁰zi

pl. 1 ha-]at-ra-a-u-ni MH XIV 1 Rs.36

2 ha-at-ra-a-at-te-[ni MH XXIII 72 Rs.45

3 ha-at-ra-a-an-zi ibid. 24

prt. sg. 1 ha-at-r]a-a-nu-un MH XIV 1 Vs.83

2 ha-at-ra-a-eš MH XIV 1 Vs.76
Mst.75/14, 5
Mst.75/15 öy.5
Mst.75/43 öy.4; ay.14
Mst.75/104 öy.4, 15

⁶³ Semantically, the derivation scenario with hant- c. 'front' seems unlikely to me. If hanta-* means something like 'front' (adj.), then I do not see how its class IV verb stem could mean 'set in order'; one would expect something like 'make front, put in front'.

3 ha-at-ra-a-it OH** StBoT 17B Rs. 17'
 (=KBo III 38)
 KBo III 34 I 14
 XXXVI 101 II 12
 MH XIV 1 Vs.66, 69, 78; Rs.73

ha-at-ra-i[t] MH Mst.75/13 öy.5

imper. sg. 2 ha-at-ra-a-i MH XIV 1 Vs.38

ha-at-ra-a-i Mst.75/104 öy.18

pl. 3 ha-at-ra-a-an-du MH Mst.75/64 ay.32

-/ske/-forms:

act. prs. sg. 1 ha-at-ri-eš-ki-mi- MH XIV 1 Vs.25

ha-at-ri-eš-ki-iz-zi OH KBo XXII 1, 22'

ha]-at-ri-eš-ki-iz-zi OH** KBo III 41 Rs.19

ha-at-ri-eš-ki-zi MH XIV 1 Rs.25

ha-at-ra-eš-ki-zi ibid. Vs.40

prt. sg. 1 ha-at-ri-eš-ki-nu-un ibid. Rs.60

3 ha-at-ri-eš-ki-it KBo XIX 38 Rs.43
 XIV 1 Rs.65 [ha-a]⁰

pl. ha-at-ri-eš-ki-ir XIV 1 Rs.35

imper. sg. 2 ha-at-ri-eš-ki Mst.75/43 öy.10, ay.23

The stem could be a denominative of *hakra- based on ha-at-
 i+ 'hit' (see above). So also Oettinger 1979 : 374 with
 lit.

19. hu-up-pa-i+ : hu-up-pa-a+ 'prepare (a meal)'(?)

act. prs. sg. 3 hu-up-pa-iz-zi OH StBoT²⁵ No.98 l.col.12'

participle hu-up-pa-an-du-uš MH* VBoT 24 II 20

See now StBoT 29 : 81 f. The stem is possibly based on the noun hu-up-pa-*, an r-less form of the r-stem huppar- n. 'tureen' or the like (Hitt. word-final -r regularly disappears in present middles, unless the ending appears with the analogic primary -i taken from actives, e.g. ki-it-ta 'lies (down)', cf. Palaic ki-i-tar id., e.g. XXXV 165 Vs.12, but ki-it-ta-ri; it is also often missing in nom. acc. sg. of counter r-stems, e.g. ha-an-pa 'trade' OH** XXIX 29 Vs.10 (nom.sg.n.), ha-na-aš-ša (a vessel) OH StBoT 25 No.80 Rs.IV 8' (r-stem, OH** copy has [ha-n]e-aš-šar; see StBoT 26 : 48 footnote 243; ibid. see the reference to Neu 1982 on the word-final /r/ in Hittite). Cf. also (DUG) hu-u-up-pi-i+ c. (a vessel) StBoT 26 : 72 with footnote 298.

20. kar-ta-a+ 'cut'. The two attestations in my collection are act. prt. sg. 1 kar-ta-a-nu-un MH* XXIV 10 III 27 and participle kar-ta-an-ta-aš pre-LH XIII 4 I 15. It seems to me possible to compare the putative nominal base of this stem, viz. *karta-, with RV kartā- 'hole' (a-[< *o-] stem derivative of the root kṛi 'cut'). Cf. Oettinger 1979 : 375 f. and 416 footnote 42, where he explains this stem as a ye-denominative to verbal adjective *kṛ-tó-; cf. other possible *-to-formations in Hittite listed by him on p.377, op.cit., such as mita- 'fasten' (: Skt. mitā- 'fixed'), muta- 'remove' (: Skt. mūtā- 'pushed', "ai. kāma-mūta- 'von Begierde getrieben'), šuta- 'fill out' (?) "zu

ku-uš-du-wa-a-ta OH** I 16 II 51

k]u-uš-du-wa-a-ta ibid. 55

-/ske/-form:

act. prt. pl. 3 ku-uš-tu-e-eš-ki-ir OH** I 16 II 64

Little can be said about this stem except that it looks denominative. Cf. Kronasser 1966 : 481.

23. la-ah-hi-ia-i⁺ : la-ah-hi-ia-(a=)⁺ 'travel,

go on an expedition, attack', etc.

A list of attestations now see in HD : 7b f. The stem on which this verb is based is apparently derived from the noun listed in HD : 4a (also in HW¹ : 124a and in StBoT 26 : 106) as lahha- c. 'military campaign', etc., although it is by no means certain, judging from its attestations, that the noun was an a-stem and not a root stem (see esp. HD loc.cit. for the attestations). This verb stem's base appears to be something like *la-ah-hi-ia-. The stem "lakhic-^{mi}" cited by Oettinger (1979 : 384, 494) is not attested.

24. mu-ka-a-i⁺/mu-(ú=)ga-(a=)⁺_i : mu-ga-(a-a=)⁺

'complain, wail'

act. prs. sg. 1 mu-ga-mi OH** VBoT 58b IV 10

2 mu-ga-a-š1 MH XXIII 77, 66

3 mu-ga-a-iz-zi OH* XXXIII 62 III 14

prt. mu-ga-it OH** XXXVI 54, 3

mu-ú-ga-it KBo III 7 I 13

pl. 2
 or imper. mu-ka-e-it-te-en OH** KBo III 43 Rs.9
 participle mu-ga-a-an-za MH* XXXIII 21 III 19
 infinitive mu-ga-u-an-zi OH* XXXIII 62 III 21
 verbal noun mu-ga-a-u-wa-ar OH** XXXI 127 I 6
 (gen.) mu-ga-a-u-wa-aš OH* XXXIII 68 II 3
 OH** VBoT 58b IV 13
 MH* KBo IX 109 Rs.11

-/ske/-forms:

act. prs. sg. 3 mu-ki-iš-ki-lz-z[i MH* XXXIII 17 Rs.IV 5
 prt. pl. 3 mu-ki-iš-ki-ir MH KBo XVII 105 II 18'
 supine mu-ki-iš-eš-ki-u-wa-an OH** KBo III 16 Rs.13

In the -ske-supine, either iš or aš should be deleted.
 Perhaps the original had aš; the scribe wrote iš which was
 standard in his day, instead, and then copied the original's
aš. Cf. OH(*) writings of the stem final before -/ske/- in
 paradigms above).

The stem is possibly denominative (based on *muga-
 'complaint' or the like), although deverbative origin cannot
 be ruled out. Cf. Oettinger 1979 : 369 with footnote 230
 (Oettinger's assumption of *múg-eh₂- as the base's etymon
 is, in my view, not necessary: positing an -o-stem would
 suffice; see Chapter IV for a discussion).

25. mu-(u-)un-na-(a-)i⁺ : mu-un-na-(a-)a(=)⁺ 'hide
 (tr.)'

act. prs. sg. 1 mu-un-na-a-mi OH** VBoT 58a I 5
 2 mu-un-na-a-ši MH* XIII 9 III 14

- 3 mu-un-na-a-iz-zi MH XXIII 72 Rs.50
 MH* XXXVI 127 Rs.13
 mu-u[n-na-]a-iz-zi XXIII 68+ Vs.24
- mu-un-na-iz-zi MH VIII 81 Vs.II 14; Rs.III 3
 KBo XVI 25 Vs.I 58'

- pl. 2 a]u-un-na-at-te-ni MH XXIII 77, 58
 mu-un-n]a-at-te-ni MH* XXIII 68+ Vs.6'

- 3 mu-un-na-an-zi OH** KBo III 1 II 29
 MH* XIII 20 I 4

- prt. sg. mu-ú-un-na-a-it OH** XVII 5 I 4
- mu-ú-un-na-it OH** KBo III 7 I 28
- mu-un-na-a-it MH XIV 1 Rs.49
 MH* XXXVI 127 Rs.12 ⁰n[a]⁰

- imper. sg. 3 mu-un-na-a-ld-du MH MIO 1 (Rost) III 28

Cf. Oettinger's Belegauswahl (1979 : 161). He explains this stem as a remake of a possible n-infix verb to a root "ultimae h₃", which is a possibility (although he overestimates, in my view, the distinctive value of the writing mu-un-na-an-zi — without plene in the stem final — as against e.g. p[ld-da-a-an-zi] (see stem No.8 above), which writing he takes to be a mark of the stem's different origin: it is possible that an instance with plene has simply not been found yet, cf. the many writings of the denominative class IV stems without plene). A nominal base to this stem also cannot be ruled out.

26. pal-wa-a-i+ : pal-wa-a+ 'clan (one's hands)'(?)

- act. prs. sg. 3 p]al-wa-a-iz-zi OH StBoT 25 No.82 Rs.712'
- pal-wa-a-iz-zi OH** KBo X 28 II 9;

The stem is possibly based on a noun, *piyana- 'present' (so already Kronasser 1966 : 569: "*piyana- "Geschenk"? Eine Funktion der n-Erweiterung lässt sich nicht festlegen") derived, most likely, from the hhi-conjugation stem pa-a-i : pi-(i=) 'give'; the function and form of the suffix -ana- appear to be comparable with e.g. Ved. suffix nominis actionis (neut.) and agentis (masc.) -ana- (e.g. kār-ana-m 'deed', kār-ana-h 'active'); cf. the passage from Kronasser quoted above.

28. ša-(a-)ak-ta-(a-)i 'take care of
/look after (a patient)'

act. pres. sg. 3 ša-a-ak-ta-a-iz-zi OH KBo VI 2 I 17
ša-a-ak-ta-a-iz-zi OH* KBo VI 3 I 26
ša-ak-ta-iz-zi- OH** KBo VI 4 I 23

The stem is likely to be denominative (based on šakta- or the like; Cf. Watkins's etymon ["*sok-to- 'dryness' 'sickness' (air. socht 'stupor')]" 1974 : 70 f.] seems to me unlikely as it would suggest the opposite meaning for the forms fonḏaa, viz. 'make sick').

29. tar-kum-ma-i and tar-kum-mi-ia-i : tar-kum-mi-ia-a 'interpret, translate'.

These two stems are attested as follows:

act. imp. sg. 2 tar-kum-ma-i

prs. pl. 2 tar-kum-mi-la-an-zi MH IBoT I 36 öy.58

imp. sg. 2 tar-kum-mi-la-l MH XXX 10 Vs.5'

The stems are likely to be denominative, based on *tar-kum- ma- (the former) and *tar-kum-mi-la- (the latter). The common part of both is found in Akkadian tarkumānu 'interpreter' (HW¹ : 214b), as well as in Hebrew and Aramaic targūm 'translation' (also Arabic targ̃amātun 'rubric, section (of a book)' the root tgrm of which is an Aramaic loan acc. to Brūnnow 1928 : 17b). The quadriliteral root *tgrm is structurally rare in Semitic (with its preponderantly trilateral roots [e.g. Djjakonov 1965 : 27 ff.]) and is likely to be a borrowing (one of the *Wanderwörter*).

30. ú-i-da-a-i+ : ú-e/i-da/ta-a(-)+ 'bring, lead, convey'

act. prs. sg. 1 ú-i-da-a-mi MH KBo XVI 24+ I 10'

3 ú-i-da-a-iz-zi MH IBoT I 36 I 62

pl. 1 ú-e-da-u-e-ni OH** KBo XIII 42 III 6'

ú-e-da-a-u-e-ni MH* XXXI 42 II 21

2 ú-i-ta-at-te-ni MH XXIII 77+ Rs.73'

ú-i-da-a-at-[te-ni MH XXIII 72 Vs.60

Also see Oettinger 1979 : 373 f. The stem could be based on

*ú-a/i-da/ta- (a-stem) 'convoy' or the like. Similarly Oettinger 1979 : 374: "Morphologisch könnte ein Denominativ vorliegen, weshalb urheth. *yédā- 'das Bringen, die Führung' < *yédh-eh₂- zu uridg. *yedh-". The writing of the root with i in the oldest attestations (MH) makes the posited etymon more problematic than one would like. Oettinger's statement that "der graph. Wechsel ú-i/ú-e spricht bei yedae- gemäss § 431 ff. eher für kurzes a" remains unsupported (even in paragraph 431 ff.)

31. za-am-mu-ra-(a/a-)i⁺ : za-am-mu-ra-a⁺

'offend, insult'

act. prs. sg. 3 za-a₃m-mu-ra-a-iz-zi MH XIV 1 Vs.I 38

za-am-mu-ra-a-iz-zi MH* XIII 20 I 27
XXXI 42 II 5

za-a₃m-mu-ra-e-iz-zi MH KBo VIII 35 I 25'

za-am-mu-ra-iz-[zi MH KBo XVI 25 Rs.IV

pl. za-am-mu-ra-an-zi MH XXIII 72 Rs.26

This likely denominative is possibly based on *zammura-, an a-stem (cf. another possibility in Oettinger 1979 : 386:

"zum (vielleicht zugrundeliegenden) Nomen zammuri-

['?'-A.L.] R.LEBRUN, Samuha, foyer religieux de l'empire

Hittite, 1976, p.55"). I suggest that the putative

*zammura- might be cognate with Russ. smuryi 'grim', ONorse

mayr id. (for IE *sm-- : Hitt. [ts(a)m]-- cf. Hitt. za-ma-

kur- 'beard' OH** XXXI 127 I 11 : RV śmāśru ← *smāśru

'beard', Lith. smākras 'chin').

There are also a number of stems the classification of which presents some problems. These stems are as follows:

32. a=(a=)+ 'be hot'

mid. prs. sg. 3 a-ri MH* HT 1 I 49

pl. a-a-an-ta OH** VBoT 58b I 24

participle a-a-an-ta-an OH** XXXIII 70 II 5

Other attestations (LH and n.d.) see in StBoT 5 : 1 and HW² : 44 f. This stem's root is possibly the same as that of the nu-factitive i-nu-u+ 'heat up' (act.prt.pl.2 i-nu-ut-ta-an OH StBoT i7A Vs.9); if so, then morphophonemically a=(a=)+ = /aya/-, which qualifies the stem for membership in class IV (mechanically). Since only middle forms (a-middles) and participles are attested, it is not clear whether the verb belongs to the mi- or to the hhi-conjugation, and for this reason its membership in class IV is questionable.

33. ar-ku-?wa-i+ : ar-ku-(wa=)a+ 'pray, recite'

act. prs. sg. 3 ar-ku-[wa-]iz-zi MH* XLIII 57 IV 7

pl. ar-ku-an-zi OH StBoT 25 No.34 Vs.17'

ar-ku-wa-an-zi ibid. 15'

The (MH*) form important for determining the stem's class is uncertain. LH forms such as prt. sg. 3 ar-ku-wa-it KBo XI 1

Vs.18, 32, Rs.4, etc.; ar-ku-wa-a-it L 53, 12, etc. (HW² : 309b), belong to class IV. The stem is possibly denominative (*ark^wa/- 'prayer' or the like). For semantic reasons, Ved. ꣳꣳ (as in e.g. ꣳꣳ, arkā- m. 'hymn', etc., áꣳꣳati 'shines, praises') seems to me a more likely cognate than Lat. arguere (which is still a possibility).⁶⁴ Cf. Oettinger 1979 : 369. Noteworthy is the fact (pointed out by Otten and Ruster 1977 : 61) that this stem and the stem a-ru-wa-a⁺/a-ru-wa-(a-)i⁺ 'to bow, supplicate' (q.v. above) can interchange; it is thus possible that the two stems are cognate. Cf. also the pair pal-ku-i-ia-a⁺, pal-wa-a-i⁺ (q.v. above).⁶⁵

34. ar-ša-(a-)i⁺/ar-še-i⁺ 'to plant'

act. prs. sg. 3	<u>ar-ša-a-iz-zi</u>	OH** KBo VI 12 I 20
	<u>ar-ša-iz-zi</u>	XXIX 21, 15
	<u>ar-še-iz-zi</u>	KBo VI 12 I 12
	<u>ar]-še-iz-zi</u>	XXIX 21, 7

-/ske/-form :

act. prs. pl. 3	<u>ar-ši-eš-kán-zi</u>	OH** XXIX 1 IV 24
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⁶⁴ Cf. e.g. Laroche 1965 : 19 ff.

⁶⁵ Cf. also pairs such as /tark^w/- : /tarw/- 'to dance' and Hitt. /walk^wa/- 'evil, dangerous' : Luw. /walwa/- 'lion' or 'wolf' discussed in Lehrman 1985.

The stem appears to be based on the noun arāi- c. 'plant' (HW² : 345b), unless of course both are independently produced from the root ar-ā+. The stem ar-āe-i+ belongs in my provisional class XI (see discussion below). As the listing above shows, forms belonging to both stems are found in the same text. Since all the attestations are OH**, it is difficult to determine which of the stems is morphologically older.

35. ša-ku-wa-i-a-i+ : ša-ku-(ú-)wa-(a-)a+/
ša-ku-wa-ia+ 'observe, watch'

act. prs. pl. 3 ša-ku-wa-an-zi MH* XIII 9 III 11, 12
 prt. sg. 3 ša-ku-wa-i-e-it MH* XXXIII 32 II 4
 imper. sg. 2 ša-ku-wa-ia OH* KBo VII 28 Rs.12^o
 participle ša-ku-wa-a-an OH KBo VI 2 II 62^o
ša-ku-wa-an OH* XXXIII 38 I 6
ša-ku-wa-an-ta-an OH** XXXIII 70 II 5
ša-ku-ú-wa-an OH* XVII 10 II 16

Cf. the paradigm in Oettinger 1979 : 394 (incomplete).

The forms ša-ku-wa-i-e-it and ša-ku-wa-ia qualify the stem for class I (q.v. above); it is because of these and similar forms that Oettinger classifies this verb together with ta-a-i-i+, etc. in his "tāiie-Klasse". The fundamental difference between the stem under consideration and the stem such as ta-a-i-i+ is that the latter keeps the i (= [y]) of the suffix before the a-grade alternant (see the paradigm

above) whereas the former, in its oldest attestations, does not. Oettinger seems to ignore this.

In the case of imper. sg. 2 ša-ku-wa-ia, it is at least possible that the form consists of the imperative proper ša-ku-wa⁺ and the enclitic 'and' (+a after consonants, +ia after vowels).

The stem is apparently based on the noun šakuwa 'eyes' (n. pl.; stem uncertain [Gertz 1982 : 35]; OH attestations in StBoT 25 No.3 (=KBo XVII 1) Vs.I 24' ša-a-ku-wa-a⁺.

36. pa-(a-)i⁺ : pa-a-a⁺ 'go'

act. pres. sg. 1 pa-i-mi OH KBo VI 14 Vs.4
StBoT 25 No.2 Vs.I? 9'
No.3 Rs.IV 11
etc. (often)

pa-a-i-mi- OH** KBo III 55 Vs.5

2 pa-i-ši OH KBo XXII 1, 28'
OH*/MH XXX 10 Vs.4

pa-a-i-ši OH** KBo III 7 III 10

3 pa-iz-zi OH StBoT 18 Rs.78
KBo VI 2 I 51
StBoT 25 No.4 Vs.II 9'
ibid. No.25 Vs.I 35'
etc. (often)

pl. 1 pa-i-wa-ni OH StBoT 17A Vs.15
StBoT 25 No.3 Rs.IV 7, 24
ibid. No.4 Vs.I 15', etc.
(often)

pa-a-i-wa-ni OH** KBo III 7 IV 6

2 pa-it-te-ni OH KBo XXII 1, 24'

pa-it-ta-ni OH** KBo III 23 Rs.16

3 pa-a-an-zi OH KBo VI 2 IV 12
StBoT 25 No.12 Rs.III 23', 27',

etc.
MH IBoT I 36 5y.I 4
etc. (often)

přt. sg. 1 pa-a-un OH StBoT 25 No.4 Rs.IV 9
StBoT 17A Rs.5'
OH** ibid.B (=KBo III 38) Rs.21'
etc. (often)

3 pa-it OH StBoT 17A Rs.10', 14
KBo VIII 42 Vs.11, Rs.9
OH** StBoT 17B (=KBo III 38) Rs.18'
etc. (often)

pa-i-it OH** KBo III 60 Vs.I 13

pl. 1 pa-i-ú-u-en OH** KBo III 60 Rs.III 11

3 pa-a-ir OH StBoT 17A Vs.6
OH** KBo III 46 Rs.12, 13
MH XXIII 72 Vs.31
etc. (often)

pa-i-e[-ir] OH** KBo III 60 Vs.II 9

imper. sg. 3 pa-it-tu- OH StBoT 25 No.123, 7'

pa-it-tu OH** KBo III 28 Vs.II 11

pa-id-du OH* XVII 10 IV 8; XXXIII 3, 4
OH** StBoT 17B (=KBo III 38) Vs.6'
etc. (often)

pl. pa-a-an-du- OH** KBo III 1 II 13

participle pa-a-an-za MH XXIII 72 Vs.46, Rs.14

infinitive pa-a-u-wa-an-zi OH** KBo VI 6 I 30

-/ske/-forms:

act. imp. pl. 2 pa-iš-ki-it-ten OH** XXXIII 60 Rs.13

mid. prs. pa-iš-kat-tu-ma OH KBo VIII 42 Vs.79

3 pa-iš-kán-ta MH IBoT I 36 I 63

pa-iš-kán-da ibid. 60

přt. sg. 1 pa-iš-ga-ha-at OH StBoT 25 No.3 Rs.IV 13

imper. sg. 2 pa-iš-ka-ah-hu-[ut OH** XXXIII 60 II 10

3 pa-iš-ga-ta-ru OH** VBoT 58 Vs.11

pa-iš-kat-ta-ru MH* IV 1 I 40

This stem's presence in class IV is due to mechanical application of the classification procedure described in Chapter I (q.v.) The fact that this stem is quite different from ordinary class IV stems shows up in the distribution of the stem-final alternants (prs. sg. 1 pa-(a-)i-mi vs. =a-(a-)mi/=a-a-mi (rarer) in other class IV stems), the n-less prt. sg. 1 (pa-a-un) vs. the "normal" =a-a-nu-un, in the presence of some class I forms (such as OH pa-i-iz-zi, OH** pa-i-iz-zi, pa-i-it, pa-i-ú-u-en [the last three from the same text], and in the "suppletive" imperative forms act. sg. 2 i-it OH StBoT 25 No.3 Rs.III 5, etc., OH** KBo III 23 Vs.10, etc., pl. i-it-te-en OH KBo VI 2 III 19, KBo VII 14 Vs.3, etc., OH** KBo III 41 Rs. 19, etc. These latter make it necessary to analyze this stem as consisting of the preverb pa-a⁺ "hin" (pi-(a-)⁺/pi-a⁺ before consonants, e.g. pi-a-ta-i OH StBoT 25 No.3 Vs.I 32¹ "schafft hin" vs. ú-da-i OH StBoT 25 No.26 Vs.I? 14¹ "schafft her", pi-aš-si-e-mi 'I throw (away)' [q.v. above], and the stem ú-(a-)i⁺/ú-a⁺/ú-i-i⁺ : ú-wa⁺/ú-(wa-)a⁺ 'come' with its preverb ú⁺ and the same root in the shape +(a-)i⁺/+a⁺/+i-i⁺ alternating with +x⁺/0 where +x⁺ is the glide in the transition from [ú] to [a] filling in for the zero (=morphophonemic /y/).

act. prt. sg. 3 šar-la-a-it MH KBo XVI 25 IV 14'

-/ske/-forms:

act. sg. prs. 1 šar-li-iš-ki-mi MH XXX 11 Rs.10'

3 (šar)-l]i-iš-ki-iz-zi MH* XXIV 8 + I 3

The stem, attested only from the MH period, is likely to be a Luwian loanword. The participle šar-la-i/im-mi- (Luw. in Hitt.), used as divine epithet, bears witness to that; so does the possible etymology of the stem as a compound of the preverb /sar/ (Luw.; Hitt. še-e-ir /ser/) with the originally hhi-conjugation stem la-a+ (cf. Hitt. la-a+ [hhi-conj.] 'let (go)' and da-a-i : da-a+ (hhi-conj.) 'take').

The mi-conjugation of the stem šar-la-a-i+ in Hittite is easy to explain by the fact that most of the forms of the Luwian stem by the time of the borrowing (the MH period) were either ambiguous or mi- (the only unambiguous hhi- series ending still in use being -i).

2.3.5 Class Y

This provisional class consists of stems with the easily identifiable suffix +š-ki-(a-)+/š-ki-(a-)i+ : š-ki+/šga-a+ (as well as some other writing which see below). The morphophonemic shorthand for all these writings is -/ske/- : -/ska/-; cf. the well-known Indo-European suffix *-sk'é- : *-sk'ó-. The Hittite suffix forms secondary stems (iteratives) to virtually any verb stem. The active

endings the suffix requires are of the *mi*-series; the middle ending of the third person singular has a *ti* in it.

Below is a paradigm listing of the various writings of class V stems.⁶⁶

- act. prs. sg. 1 da-aš-ki-e-mi OH StBoT 25 No.4 Rs.IV 10
 ('take')
 tar-ma-iš-ki-mi OH** XXXI 4 Vs.13
 ('peg down')
 ū-i-la-iš-ki-mi MH* VBoT 24 IV 14
 ('send here')
 tar-šl-ki-mi OH** KBo III 1 II 15
 ('say')
- 2 ak-ku-uš-ki-e-šl OH StBoT 25 No.110 Vs.II 16
 ('drink')
 ak-ku-uš-ki-šl ibid. 9
- me-mi-iš-ki-šl OH** XXXI 127 I 34
 ('speak')
- 3 an-ni-iš-ki-iz-zi OH KBo VI 2 I 18
 ('work')
 ha-at-ri-eš-ki-iz-zi OH KBo XXII 1, 22'
 ('writes')
 da-aš-ki-iz-zi ibid. 12'
 ('takes')
 an-ni-eš-ki-iz-zi OH* KBo VI 3 I 27
 ('works')
 an-ni-iš-ki-iz-zi (id.) OH** KBo III 16 Rs.8
- tar-šl-ki-iz-zi OH StBoT 17A Rs.4'
 ('says')
- tar-aš-ki-iz-zi (id.) OH** KBo III 16 Rs.8
- tar-aš-ki-[iz-]zi KBo III 38 Rs.20
- iš-pa-an-za-aš-ki-i[z-zi OH StBoT 25 No.66 Vs.I 3'
 (išpand- [hhi-conj.] 'libate')
- iš-pa-an-za-ki-zi (id.) OH* KBo XX 34 Rs.6'
- zi-ik-ki-iz-zi OH StBoT 25 Rs.IV 3'
 (da-a-i/da-i+ : ti+ [hhi-conj.] 'place')
 OH* KBo XXI 85 Vs.I 49'

⁶⁶ For important discussions of *-/ske/-verbs*, see Bechtel 1936, Kammenhuber 1956 : 40 f., Risch 1965, Kronasser 1966 : 575 ff., Dressler 1968 : 159 ff., Neu 1968, Oettinger 1979 : 315 ff. and Otten 1979.

MH Mst. 75/43 6y.7

- a-ru-i-iš-ga-zi OH*? KBo XX 34 Vs.7'
('bows')
- pl. 1 da-aš-ki-e-u-e-n[1] OH StBoT 17A Vs.19
('take')
zi-ki-e-ú-e-n[1] OH** KBo III 40a Vs.5
('place')
ša-an-hi-iš-ki-u-e-ni OH StBoT 17A Vs.14
('seek')
šar-ni-in-ki-eš-ki-u-e-ni MH XXIII 72 Vs.28
('compensate')
- ak-ku-uš-ki-e-wa-ni OH StBoT 25 No.140 Rs.7'
('drink')
hu-it-ti-ia-an-ni-iš-ki-u-wa-ni MH XV 34 IV 31
('pull')
- mu-ki-iš -ga-u-e-ni ('complain') ibid.
- act. prs. pl. 2 da-me-eš-kat-te-ni OH KBo XXII 1, 18'
('oppress')
pí-iš-kat-te-ni ('give') ibid. 20'

ša-an-hi-iš-kat-te-ni ibid. 24'
('seek')
te]-ip-nu-uš-ki-te-ni MH XXIII 72 Rs.62
('make small')
- az-zi-ik-ki-ta-ni OH** VBoT 58 I 18
(e-it+ : a-t/d+ 'eat')
- ak-ku-uš-ki-it-ta-ni ibid.
(e-ku+ : a-ku+ 'drink')
- ša]-aš-nu-uš-ki-it-ta-ni OH* KBo VII 28 Vs.25
('let sleep with')
- ša-aš-nu-uš-ga-at-te-ni- ibid. 24 end
- act. prs. pl. 3 an-ni-iš-kán-zi OH KBo XIX 1 Vs.II 21'
('work')
an-ni-eš-kán-zi OH** KBo XII 49 III 7
- pí-iš-kán-zi OH StBoT 25 No.19 Vs.8
('give') MH XXX 29 Vs.9
- tar-ši-kán-zi OH StBoT 17A Vs.8
('say') OH** KBo VIII 41, 8
- tar-ši-ik-kán-zi OH** KBo III 1 II 33
- tar-aš-kán-zi (id.) KBo VI 3 III 20

zi-ik-kán-zi OH* KBo XXI 85 Rs.IV 23'
 ('place')
 zi-lg-ga-an-zi (id.) MH Mst.75/15 öy.10

prt. sg. 1 za-ah-hi-eš-ki-nu-un OH** KBo X 2 I 47
 ('fought')
 3 zi-ki-e-it OH StBoT 17A Vs.3
 ('placed')
 hu-iš-nu-uš-ki-e-it OH** KBo III 28 II 18
 ('let live')

ha-an-di-li-iš-ki-it OH XXXVI 105 Rs.20

ták-ša-an-ni-iš-ki-it OH** KBo X 2 II 5
 ('leveled')

ap-pí-iš-ki-it MH XXIX 7 Vs.29

('seized')

ša-al-la-nu-uš-kat OH StBoT 17A Vs.7

('raised')

pl. 1 tar-aš-ki-u-en OH** KBo III 16 Rs.15

('said')

ú-wa-an-ši-ki-u-en OH** KBo III 60 Rs.III 13

('fucked')

act. prt. pl. 3 da-⟨aš⟩-ki-e-ir OH KBo VI 2 I 14

('took')

da-aš-ki-e-ir ibid. 58

da-aš-ki-ir OH StBoT 25 No.47 II 15'

šal-la-nu-uš-ki-ir OH** XXIX 1 I 27

('raised')

ša-al-la-nu-uš-ki-ir XXIX 3 I 9'

mu-ki-iš-ki-ir MH KBo XVII 105 Vs.II 18'

('complained')

imper. sg. 2 me-e-mi-iš-ki OH StBoT 25 No.4 Rs.III 5

('speak')

ú-uš-ki OH** KBo III 29 Vs.I 6

ha-at-ri-eš-ki MH Mst.75/43 öy.10, etc.

('write')

ak-ku-uš-ki-i OH* KBo VII 28 Rs.18

('drink')

az-zi-ik-ki-i ibid.

('eat')

az-zi-ki-i OH** KBo III 24, 17

3 pí-iš-ki-id-du OH XLIII 23 Vs.19', 22'

('give')

az-zi-ik-ki-id-du OH** I 16 II 33; III 21

- ('eat')
 pl. 2 me-mi-iš-ki-it-te-en OH XLIII 23 Vs.8
 ('speak')
 ak-ku-uš-kat-te-en OH** KBo III 28 Vs.II 8
 ('drink')
 az-zi-kat-te-en ibid.
 ('eat')
 pi-iš-kat-ten MH XV 34 Vs.II 24; III 18
 ('give')
 pi-i]š-ki-it-ten ibid. 25'end
- 3 ak-ku-uš-kán-du OH** KBo III 1 II 14
 ('drink')
 az-zi-ik-kán-du ibid.
 ('eat')
 hu-u-la-li-iš-kán-du MH KBo XVII 105 II 24'
 ('wrap')
 pi-iš-kán-du MH KBo XX 42 Vs.I 36
 ('give')
 pi-eš-kán-du Mæt.75/64 öy.15
- mid. prs. sg. 1 [e-e]š-ka-ah-ha-ri OH KBo VII 14+II 7
 (e-eš+/e-š+ [a-mid.] 'sit')
 e-eš-ka-ah-ha OH** KBo III 41+ 11
- 2 šar-ra-aš-ki-it-ta OH* XXXI 133 I 11
 ('step through/across')
 im-pa-iš-kat-ta MH* XXXIII 76, 17
 ('be troubled')
- 3 uš-ne-eš-kat-ta OH XXIX 29 Vs.12
 ('sell/trade') OH** KBo VI 10 III 18, 22
- hal-zi-iš-kat-ta-ri OH** X 45 III 11
 ('call')
 ša-a-hi-iš-kat-ta-ri MH* XXXI 86 II 31
 ('besmear')
- mi-i-e-eš-ki-it-ta[OH XLIII 23 Rs.9'
 ('prosper')
 ti-it-hi-iš-ki-it-ta OH* XVII 10 II 34
 ('thunder')
 ar-ki-iš-ki-it-ta OH** XXIX 1 I 30
 ('fuck')
 ú-iš-[k]i-it-ta OH** I 16 II 36
 ('come')
 na-iš-ki-it-ta-ri MH Mæt.75/43 öy.9
 ('turn to')
 ú-e-eš-ki-it-ta MH* XXIII 68 Rs.3
 ('come')
- pl. 2 pa-iš-kat-tu-ma OH KBo VIII 42 Vs.? 9
 ('go')
 pa-iš-kat-tu[-ma ibid. 10

- 3 za-ah-hi-iš-kán-ta OH StBoT 25 No.54 Vs.II 16'
('flight')
- ú-e-eš-kán-ta OH** KBo III 1 + II 4
('come')
ú-i-iš-kán-ta (id.) OH** XI 1 II 10
- e-eš-kán-ta OH** KBo III 34 III 15
('sit down')
har-ki-iš-kán-ta-ri OH** KBo III 1 II 57
('perish')
- pa-iš-kán-ta MH IBoT I 36 I 63
('go')
pa-iš-kán-da ibid. 60
- mid. prs. pl. 3 ú-iš-kán-da-ri MH IBoT I 36 I 74
('come')
- prt. sg. 1 pa-iš-ga-ha-at OH StBoT 25 No.3 Rs.IV 13
('go')
- 3 kur-ku-ri-iš-kat-ta-t[i] OH* XVII 10 I 2
('cut/injure')
- ú-i-iš-ki-it-ta-at MH* XXIII 68 Rs.1
('come')
- pl. 2 e-eš-ki-du-ma-at OH* XII 63 + I 5
('sit down')
wa-al-lu-uš-ki-id-du-ma-at- OH* XXXVI 44 IV 14
('be praised')
- ú-li-li-iš-ki-id-du-ma-at OH** XXIX 1 Vs.I 28
('be green')
- 3 e-eš-kán-ta-ti OH KBo VII 14+ II 2
('sit down')
- imper. sg. 2 pa-iš-ka-ah-hu-[ut OH** XXXIII 60 II 10
('go')
na-i-eš-ga-hu-ut MH* VII 8 + II 5
('turn to')
še-eš-ki-ia-ah-hu-ut OPH** or LH
KBo III 16 III 9
- 3 pa-iš-k]at-ta-ru OH StBoT 25 No.107, 3'
('go')
pa-iš-kat-ta-ru MH* IV 1 I 40
- tu-uš-ki-iš-kat-ta-ru OH** KBo III 40a Vs.3
('rejoice')
- ú-iš-ki-it-ta-ru OH** I 16 II 34
('come')
pa-iš-ga-ta-ru OH** VBoT 58 Vs.11
('go')

pl.	ú-iš-kán-ta-ru MH XXXI 103 Vs.10 ('come')
participle	zi-ik-kán-te-eš OH** VBoT 58 Rs.15 ('place')
supine	ša-an-hi-iš-ki-u-wa-an OH* XVII 10 I 23, 32

wa-al-lu-uš-ki-u-an OH* XXXVI 44 IV 6
('praise')
ši-ip-pa-za-ki-u-wa-an OH** XXXI 127 I 50
('libate')

še-eš-ki-u-wa-an OH** KBo III 1 I ??
('sleep')
hu-wa-a-i-iš-ki-wa-an OH** KBo III 40a Vs.9
('run')

The suffix notably changes its written (and occasionally perhaps also phonetic) shape after consonant-final stems, cf. e.g. tar-ši-ki-iz-zi OH, tar-aš-ki-iz-zi OH** (root tar-) as attempts to render /rsk/; az-zi-ik-ki-id-du OH** has /dsk/; iš-pa-an-za-aš-ki-i[z-zi OH, iš-pa-an-za-ki-zi OH* and ši-ip-pa-za-ki-u-wa-an OH** grapple with /ndsk/; ša-an-hi-iš-ki-u-e-ni OH and ša-an-hi-iš-ka-t-te-ni OH (root ša-an-h-), /nhsk/ (= [nhisk] ?); har-ki-iš-kán-ta-ri OH** (root har-k-), /rKsk/ (= /rKisk/ ?); etc.

The phonetic value of the sign ka, important for determining the quality of the thematic vowel alternant in the suffix, remains problematic. It makes sense to conclude that, since the sequence -skVt (= (i.e. the suffix + t-ending) is mostly written +š-ki-it(-t=) (keeping in mind the plene spellings with a such as hu-iš-nu-uš-ki-e-it and zi-ki-e-it), and only sporadically +š-ga-(at-)t=, the writing +š-ka(-t)= which occasionally alternates with the former in

the same text must represent *-/sket/=* (see Oettinger 1979 : 317 on the reading of the sign as *kit₉*, with lit.). It is recognized, however, that *kat* might be phonetically ambiguous. Oettinger loc.cit. cites *du-uš-kat-ti*, a LH analogic hhi-conj. prs. sg. 2 form where, in his view, the sign must be read as [kat] because other *-/ske/-stem* forms in the hhi-conj. such as prs. sg. 1 *na-aš-ga-ab-hi* 'set up', *du-uš-ga-i* 'rejoices' show the /a/-alternant. This argument is hardly compelling, since *du-uš-kat-ti* might well parallel middles like *du-uš-kat-ta* (prs. sg. 3 [and in principle 2]), where *kat* should represent the same as *=ki-(a)-it=*. In *ša-al-la-nu-uš-kat* (OH), *kat* can hardly represent anything but [ket] (no **+š-ga-at* is found, as far as I know. The change of postaccentual *g* to *a* occurs only in open syllables, e.g. 1. sg. pl. primary ending *-/weni/* appears as *+(u-)wa-ni*, 2. sg. pl. primary ending *-/teni/* appears as *+(=t-)ta-ni*, pre-Anat. enclitic **-te* 'tibi, te' (: IE **te*, Pedersen 1938 : 74) shows up as *+t-ta*; there is, however, no **-wan* or **-tan* as secondary endings: only *+u-en* and *+(=t-)ten/ta-en* [on the relation of the accent and plane writing, see section I 6 of this chapter, with lit.]). One may cite OH midd. prs. sg. 3 *lu-uk-kat-ta* (passim, see class VI below) spelled out as *lu-ug-ga-at-ta* OH StBot 25 No.4 Rs.IV 21 in support of reading *kat* also as [kat]; no writings of the **lu-uk-ki-it-ta* are found here. In comparison with this latter, writings of the suffix *-/ske/-* with *ga* before /t/-endings are rare

and relatively late, while writings with ki(-e-)+ clearly predominate. One may therefore posit, with due caution, that kai (in -/ske/-verbs) is more likely to be read as [ket] than [kat]. If so, then the /e/-alternant is the dominant one in the older language with the /a/-alternant occurring there before the 3rd plural ending (-/n̥ti/) and before the participial suffix (rare as it is) beginning with /n/, and before the middle endings that begin with /hh/ (viz. prs. and prt. sg. 1 and imperative sg. 2 [no example of imperative sg. 1 in my collection]). The replacement of the /e/-alternant with /a/ in certain forms (such as +ā-za-zi for +ā-ki-iz-zi, +ā-ga-u-e-ni for +ā-ki-(e)-u-e-ni, +ā-ga-ta-ru for +ā-ki-it-ta-ru) is post-OH proper and sporadic (regional or other register encroachment upon the written language?).⁶⁷ An interesting combinatorial property of class V stems is the rarity of participles (first noted by Bechtel 1936 : 102); the exceptions are zi-ik-kān-t+ (OH** hapax) sufficiently different from other class V stems (and perhaps not identifiable as part of the paradigm of da-a-i : ti-(ia-)an-zi, etc. 'place' in synchronic terms)⁶⁸ and iā-

⁶⁷ The possible Hittite evidence for Indo-European reduced grade forms in pl.1 *-sk'⁰-més (< *-sk'-més) and pl.2 *-sk'^e-té (< *-sk'-té), namely forms such as "daškaweni" and "daškatteni" adduced by Risch (1965 : 239 ff.), is thus disqualified.

⁶⁸ Eichner 1980 paragraph 14: "Erst als sich der paradigmatische Zusammenhang zwischen tijanzi und zikkanzi gelockert hat, bildet man schliesslich doch vereinzelt zikkant-". Eichner does not mention iāhaškant-.

ha-aš-kán-it⁺ (e.g. OH pl.acc.comm. iš-ha-aš-kán-tu-uš StBoT 25 No.4 Vs.II 7') 'bloodspotted, bloodshot', the morphology of which is opaque.⁶⁹

2.3.6 Class VI

The only stem that clearly belongs in this class is apparently deverbative: 1. lu-uk-ki-it⁺ : lu-uk-ká⁺/lu-ug-ga-a⁺/lu-ug-ga⁺ 'set alight, light (tr.)' based on lu-uk⁺ 'be (a)light, dawn'; see paradigms below.

act. prs. sg. 3 lu-uk-ki-iz-zi OH KBo VI 2 IV 53, 56, 59
 XXIX 38 l.c. 1
 OH* KBo XXV 14 II 7
 KBo VI 3 IV 52, 55, 59
 OH** KBo VI 12 I 17, 23
 MH* KBo XV 48 II 14

pl. lu-uk-kán-zi OH StBoT 25 No.105
 OH* KBo XX 34, 10', 11'
 OH** XXXIII 11 III 10
 KBo X 26 I 2
 MH* XXXIII 128 II 10

prt. sg. lu-uk-ki-it OH** XXVI 71 I 13
 XXIII 20, 13'

pl. lu-uk-ki-e-ir MH XIV 1 Rs.54

mid. prs. sg. 3 lu-uk-kat-ta- OH StBoT 25 No.3 Vs.II 30'
 ibld. IV 7, 24 ⁰[uk-k]⁰
 OH** VBoT 53b IV 40
 MH XIII 1 I 29

⁶⁹ The stem could be based on an s-denominative to the r/n-stem e-aš-haš n. 'blood' OH [e.g. StBoT 25 No.3 Vs.I 27']: *išhans- 'bleed'?, cf. kammarā- 'to shit' to *kammar 'shit' (on which kammara- c. 'stench'?, 'fumes' is apparently based) and ištamaš- (< *ištamanš-?) 'hear' to ištaman- [instr.sg. ištamanta XII 21, 11; more often a-stem forms to ištamana- c.] 'ear'; cf. Eichner 1975 : 83.

MH* VBoT 24 I 22

lu-ug-ga-at-ta- OH StBoT 25 No.4 Rs.IV 21

lu-uq-qa-ta MH* KBo X 41, 6

prt. lu-uk-kat-ta-ti OH** KBo III 38 Vs.2
 (=StBoT 17B)

The root verb stem on which this stem appears to be based is
 attested as follows:

mid. prs. sg. 3 lu-uk-ta OH StBoT 25 No.68 Rs.9
 (=KBo XVII 13 x+1
 and KBo XXV 68 Rs.6)

prt. lu-uk-ta-at OH** KBo III 34 I 19

The participle lu-uk-kān-t⁺ could in principle belong to
 both, but, as its contexts make clear (see HD : 78 f.), it
 in fact belongs to lu-uk-ki-l⁺, etc. Attestations are as
 shown:

(acc. pl. c.) lu-uk-kān-tu-uš OH StBoT 25 No.105, 6'

(acc. sg. n.) lu-uk-kān OH** KBo VI 11 I 6
 XX 96 IV 2
 MH KBo XVII 61 Rs.21'

(Cf. listings in HD : 74b ff., 78 f. and Oettinger 1979 :
 271 f.)

The writing lu-uk-kat-ta cannot be interpreted as
 equivalent to lu-uk-ta (i.e. it does not stand for [lukta],
 see Oettinger 1979 : 274 f. Thus Hoffmann's statement (1968
 : 218) that "Präs. lukkatta lautlich auf *lukta
 zurückgeführt werden darf" must be corrected, with all due

consequences. For this reason, one may not list the forms lu-uk-kat-ta/lu-ug-ga-at-ta, etc. in the paradigm of lu-uk-ta without explaining first how the two forms got to coexist in the same paradigm. If the root stem is the older of the two (as is usually assumed), then perhaps the stem with /a/ between the root and the middle ending arose analogically, via resegmentation of e.g. the 3rd person pl. *lu-uk-kān-ta; but this type of thematization does not occur in Hittite of the period within the scope of this dissertation (see root stem and other athematic verb paradigms e.g. in Oettinger 1979). Nor is it likely that /lukata/ came into being via hypercharacterizing addition of the middle ending -/ta/ to a /t/-less midd. prs. sg. 3 */luka/: there is no evidence for such a form, whether in Anatolian or in pre-Anatolian (as also in extra-Anatolian IE, see Chapter IV for a discussion). By far the more obvious step, descriptively in any case, is to assign the forms in question to the paradigm where the verb has a vowel between the same root and endings, namely to the paradigm of lu-uk-ki-iz-zi, as its regular middles. Semantically, there is no obstacle to regarding /lukata/ as the middle to /lukeṭi/ 'light (tr)'. In some IE languages, such as my native Russian, verbs typically used as predicates with the words for 'fire' and those for things being lighted (as both subject and object) are used, in their mediopassive (reflexive) form, with regard to 'dawn', e.g. zagorelsia požar (ogoni)/dom 'the

fire has been lit'/'the house caught on fire' : zagorelasj zaria 'the dawn lit up' (Russian has none of the "poetic" ring English seems to have), zažečj požar 'to set fire (to)', zažglasj zaria 'the dawn lit up'; (za)pylatj (intr.) 'be ablaze' and zanjatisja 'begin' [idiomatically of fire/dawn] have the same distribution with regard to 'fire', etc., and 'dawn'. If this is possible in Russian, it could also be possible in Hittite.

Thus, if /lukata/ is the middle of /lukeṭi/ which is a deverbative (transitive) of /luk/- (medium tantum, intr.), the stem lu-uk-ki-i+ : lu-uk-ka+, etc., cannot be interpreted as corresponding to "den thematischen Flexionstypen uškizzi, uškanzi, uškit, uškaat-..." as K. Hoffmann determines at the outset of his influential paper (Hoffmann 1968 : 214):⁷⁰ -/ske/-stems have the vowel /e/ in the suffix before the middle endings (often written (=k)i-l(t=); note the absence of such spellings in the stem under investigation, coupled with =ga-at= spelling out the ka sign in one OH example, q.v.), and they are not transitive deverbatives based on intransitive */sk/-stems. In lexical comparisons of all kinds, meaning (function) is an obviously important factor in establishing and validating connections among items; this should not be forgotten in establishing and validating morphological relations.⁷¹

⁷⁰ K. Hoffmann further puts pehutezzi in the same class; on this latter, see below and Chapter IV.

⁷¹ The superficial similarity between /lukke/- and

2. la-lu-uk-ki-i⁺ 'be/become luminous'. This stem, the only attestation of which, viz. act. prs. sg. 3 la-lu-uk-ki-i OH* XXXIII 66 II 17, is insufficient for determining its class (it could very well belong to class I) is listed here because it is based on the same root (albeit reduplicated) as the two stems dealt with above.

2.3.7 Class VII

2.3.7.1 Primary

1. hu-ul-li-i⁺ : hu-(u)-(ul-)la-(a=)⁺/

hu-(u)ul-li-la-(a=)⁺ 'combat, contest, defeat'

act. prs. sg. 2 hu-ul-la-ši OH XXXVII 223 Rs.5

3 hu-ul-la-az-zi OH XXXVII 223 Vs.4

hu-u-ul-la-az-zi OH** KBo VI 26 II 11

hu-ul-li-[iz-zi OH StBoT 18 Vs.35

hu-ul-li-iz-zi MH XXXIV 53 Rs.9'

hu-u-ul-li-la-az-zi OH** KBo VI 26 II 13

pl. hu-ul-la-an-zi OH* KBo VI 3 II 12

hu-u-ul-la-an-zi OH** KBo VI 55 III 8

hu-ul-la-an-zi MH XVII 21 IV 19

prt. sg. 1 hu-ul-la-nu-un OH StBoT 18 Vs.11, 15

/ske/-verbs is akin to that between any *bona fide* class IV denominative and the stem pa-(a=)⁺ : pa-a-a⁺ 'go' (see the class IV section above): it becomes obvious as merely superficial even after a cursory look at the distribution of alternants in the paradigm compared to other class IV stems. Further comparison shows that the stem does not belong here at all.

hu-ul-la-a-nu-[un MH* XXIII 21 Rs.III 28

hu-ul-li-la-nu-un OH** KBo X 2 Vs.I 35
XXIII 33, 55'

3 hu-ul-li-it OH StBoT 17A Rs.8'
XXXVI 99 Rs.4
OH** StBoT 17B (=KBo III) Vs.31'
KBo III 46 Vs.25
KBo III 1 I 29

hu-ul-li-iš OH** StBoT 17B Rs.24'

pl. 1 hu-ul-lu-mi-en MH* XXIII 21 Vs.29

hu-ul-li-e-ir OH** KBo III 16 Rs.2,3,4
KBo XII 3 III 11'

hu-ul-li-ir OH** StBoT 17B Vs.32'
MH* XXXI 124 Vs.II 12

mid. prt. sg. 3 hu-ul-la-at-ta-ti OH** KBo III 29, 14

imper. hu-la-da-ru OH** KBo VIII 41, 5

hu-ul-la-at-ta-ru MH* KBo XVI 56, 8'

(Cf. attestation listings with discussion in StBoT 18 :
74 ff. and Oettinger 1979 : 261 ff.)

Note also the tar-abstracts to this stem (meaning
'aggressiveness', 'fighting spirit' or the like): hu-ul-la-
tar- OH** XXIX 1 II 37, hu-ul-la-a-tar MH* KBo XXI 8 III
15'.

Cf. hu-ul-hu-li-la-a+ 'fight one another' to the same
root (class I. 37).

The /a/-alternant before the endings of the 2nd and 3rd
person sg. appears in OH XXXVII 223 (and in OH** KBo VI 26
II 11). Other texts show =i-i= (in 3 sg. prs. and prt.

where the same alternant is expected). Late Hittite copies contain innovations such as class I forms hu-u-ul-li-ia-az-zi (with the Late generalization of the /a/-alternant in the suffix) and hu-ul-li-ia-nu-un, easy to explain by analogy if the writing =i-i= in the stem final is to be interpreted as /i/, e.g.: ú-a-mi-iz-zi : hu-ul-li-iz-zi = ú-e-mi-ia-nu-un : x, where x = hu-ul-li-ia-nu-un (etc. mutatis mutandis for other forms; cf. Oettinger's unconvincing statement [he assumes /hulle/-]: "...wird [hullēzzi] zu [hullēzzi] umgeformt, was zur Durchführung eines Stamms hullia- (im Ablaut mit hullia-) im Sinne der uamie-mi-Klasse... führt" (1979 : 263), without an explanation of how this Umformung took place). It is important to note in this connection that, in the case of lu-uk-ki-i+, etc. (cf. above), no forms of the type *lu-uk-ki-ia-an-zi are attested, probably due to the fact that lu-uk-ki-i+ did stand for /luke/- and thus there was no basis for transfer into class I (see summary at the end of this chapter and Chapter IV).

The MH* form hu-ul-lu-mi-en matches the copiously attested hhi-conj. transfers such as hu-ul-la-i (LH); for a good account of this transfer, see Oettinger 1979 : 263 (parallels: hhi-verb farnai 'lets loose' : farnanzi : farnumman : farnant- and the like).

Act. pres. sg. 3 hu-ul-li-iš is a hhi-conj. inspired mistake for hu-ul-li-it in the OH original, or else a hypercorrect form due to the post-OH replacement of

2.sg.prt. +š with +t.⁷²

The other possible member of this class is (2.) šū-ul-li-(i=)+ : šū-ul-la-(a=)+/šū-ul-li-ia-a+ 'seek confrontation, confront aggressively' or the like; evidence for the šū-ul-la-(a=)+ alternant is furnished only by the ātar-abstract (attested since OH*) and is thus not entirely reliable. The stem might in fact belong to class I. Its attestations in my collection are as follows:

act. prs. sg. 2 šū-ul-li-ši- MH XXXVI 114, 6'

3 šū-ul-li-iz-zi- ibid. 14'

prt. šū-ul-li-ia-at OH** XII 60 I 3

-ātar-deverbatives: šū-ul-la-an-na-az (abl.) OH* KBo VI 3 I 4
OH** KBo VI 10 II 17

šū-ul-la-tar (nom.sg.) OH** KBo VI 13 I 9

Cf. paradigm with different datings in Oettinger 1979 : 291.

Again, contrary to Oettinger's interpretation (loc.cit. ff.) there is no evidence for reading šū-ul-li-(i=)+ as /sulle/- instead of /sulli/- (cf. /hulli/- above).

2.3.8 Class VIII

2.3.8.1 Primary

1. hur-ni-a-i+ : hur-na+/hu-u-ur-nu-u+/hur-ni-ia
'sprinkle, water'

⁷² The latter was suggested to me by Warren Cowgill (mündlich).

act. prs. sg. 3 hur-ni-e-iz-zi OH** VBoT 58b IV 24
 hur-ni-la-zi MH* or OH** KBo X 45 II 15
 pl. 1 hur-na-u-e-ni OH StBoT 25 No.137 Vs.II 17
 verbal noun hu-u-ur-nu-u-wa-aē MH*? XXXIX 6 Vs.14^o

Cf. Oettinger's list of attestations (with different datings) in 1979 : 307.

Cumulative evidence of these forms points to class VIII. The forms hur-ni-e-iz-zi and hur-ni-la-zi are analogic class I transfers for *hur-ni-iz-zi (cf. hu-ul-li-iz-zi, etc. of class VII above). Further discussion of this and other class VIII verbs see below and in Chapter IV. (Cf. Oettinger's view of the stem as descriptively "einfach thematisch", loc. cit.).

2. tu/du-wa-ar-ni-(i=)+ : tu/du-wa-ar-na-(a=)+/
tu-wa-ar-ni-la+ 'pierce, break (into)'

act. prs. sg. 3 tu-wa-ar-ni-iz-zi OH* KBo VI 3 I 29
 du-[w]a-ar-ni-iz-zi OH* XXXIII 68 II 9
 du-wa-ar-ni-iz-zi OH** KBo VI 4 I 27, 30
 MH* KBo II 3 II 44
 du-wa-ar-ni-zi OH* KBo VI 3 III 70
 tu-wa-ar-na-zi OH* KBo VI 3 I 31
 pl. tu-wa-ar-ni-la-an-zi OH*(/MH?) KBo XX 34 Vs.10,12
 du-wa-ar-na-an-zi OH** KBo XIII 146 I 17
 prt. pl. 1 du-wa-ar-ni-nu-un MH* XLI 19 Rs.8'
 3 du-wa-ar-ni-it OH* XVII 10 I 33'
 pl. tu-wa-ar-ni-ir OH XXXVI 104 Vs.7'

OH** KBo III 34 Vs.I 9

-/ske/-forms:

act. prs. sg. 3 tu-wa-ar-ni-iš-ki-iz-zi MH MIO 1 III 36,
 ibid. 33 ⁰a[r]⁰

du-wa-ar-[ni-iš]-ki-iz-zi MH* KBo II 3 II 41

Cf. Oettinger 1979 : 308 f. (with different datings); to him, this is a descriptively simple thematic stem (viz. "[duwarnězzi]"). Note, however, that (as also in the case of hur-ni-e-i⁺) the available sign ne is not used here.

For tu-wa-ar-na-zi, cf. hu-ul-la-az-zi of class VII.

tu-wa-ar-ni-la-an-zi (and perhaps du-wa-ar-ni-nu-un) are analogic class I transfers (cf. the proportion formulated for class VII above).

3. zi-in-ni-i⁺ : zi-in-na-a⁺ 'finish'

act. prs. sg. 2 zi-in-ni-šl OH** XXIX 1 I 5

3 zi-in-ni-zi- OH KBo XX 10 I 5

zi]-in-ni-iz-[zi OH StBoT 25 No.47 Rs.III 20'

zi-in-ni-iz-[zi OH** VBoT 58b IV 35

zi-in-ni-iz-zi MH* XXIV 11 III 13

zi-in-na-i MH XXIX 8 II 17

act. prs. pl. 1 z]i-in-na-ú-e-ni OH StBoT 25 No.138 Vs.? 2'

3 zi-in-na-an-z[i OH StBoT 25 No.27 Vs.: 19'
 ibid. No.66 Vs.4'

prt. sg. 3 zi-in-ni-i⁺t OH** XXXIII 33, 12'

zi-in-ni-i⁺t OH**(?) KBo III 21 Vs.II 2
 MH XXXIII 10 Vs.3 ⁰i[t

imper. pl. 2 zi-in-na-at-ten OH** XXXI 64 III 20'

mid. prs. sg. 3 zi-in-na-at-ta-ri OH** XXXIII 67 IV 26

pl. zi-in-na-an-ta-ri MH IBoT I 36 III 51

participle zi-in-n[a-a]n-[t]e-eš MH* VIII 83, 13'

Cf. Oettinger 1979 : 311 f. (with different datings); he normalizes the stem as "zinne-" despite the fact that it is never written with ne but with ni.

zi-in-na-i is analogic (tarnanzi : zinnanzi = tarnai : xi; x = zinnai).

It is possible that zi-in-ni-i⁺ is secondary, a deverbative (transitive) to zi/zá-e-(i=)⁺ 'be ready/cooked' (medium tantum).

The forms zi-in-na-ú-a-ni, zi-in-na-at-ten and zi-in-na-at-ta-ri (especially the latter two) can be easily explained as regular (not analogic) in light of the origin of this stem (and the other class VIII stems) as *-né- : -n- infixing (transitive) imperfectives to roots ending in *x'.⁷³ See esp. Chapter IV.

⁷³ So also Oettinger 1979 : 307: "auf n-Infix-Präsentien ultimas h₁ zurückgehenden Verben", and paragraph 59 (p.150 f.). He, however, apparently confuses himself through his assumption that these verbs "-innerhethitisch gesehen - ebenfalls der einfach thematischen Klasse angehören". This assumption does not bear out because, as most writings show, *-né-x' > Hitt. -/ni/- (not *-/ne/-). Oettinger further forgets his own important qualifier "innerhethitisch" and blames forms like zi-in-na-at-ten on the "sekundäre Einführung der dunklen Variante des Themavokals", whereas positing the expected *--n-x'-te-- and *--n-x'-to-r would be sufficient to explain the /a/ in zi-in-na-at-ten and zi-in-na-at-ta-ri (Eichner's views on the outcome of *x' in this context, which Oettinger appears implicitly to accept, would allow him to posit the development mentioned above; Eichner

2.3.9 Class IX

2.3.9.1 Denominative

1. ar-ša-ne-a⁺/ar-ša-ni-a⁺ : ar-ša-na-a⁺

'be jealous, envy'

act. pres. sg. 2 ar-ša-ne-e-ši OH StBoT 25 No.122
Rs.III 2',4',6',8'

[a]r-ša-ne-e-ši ibid. 10'

[a]r-ša-ne-e-ši ibid. 12'

ar-ša-ne-e-ši ibid. 14'

ar-ša-ni-e-še MH ABoT 65 Rs.6

prt. sg. 1 ar-ša-ni-e-n[u-un ibid. 4

participle ar-ša-na-an-d[a MH* XXXIII 9 III 7

Cf. Oettinger 1979 : 28 et passim. Oettinger normalizes the stem as "aršanje-^{m1}" and treats it as a ye-stem (my class I), in disregard of the OH evidence (q.v. above) which he condemns as "Fehlschreibung" while preferring as "korrekt" the MH ar-ša-ni-e-še, with its idiosyncratic še instead of the normal ši as the 2nd person sg. ending -- all this without explanation (see op. cit. p.342).

The stem is likely to be a denominative (intransitive) of *aršana- 'jealous, envious' (nomen agentis in -ana- to the verb root *arš- 'envy'; cf. the transitive denominative ni-ia-na-(a-)i⁺ 'give as a present (to)' possibly based on

1973 : 55: "H₁(d.i. a₁) wird im Heth. vermutlich zunächst zu einem indifferentem Murrelvokal a und bei ungestörter Weiterentwicklung zu a (wie H₂ = a₂)."

nomen actionis in -ana- to na-a-i : ni-(i=)+ 'give', cf. class IV stem 27 above).

2. uš-ša-ni-ia-(a=)+ 'sell, trade'. Its attestations (all post-OH) are as follows:

act. prs. sg. 3 uš-ša-ni-ia-zi- MH*? XIII 4 II 40

pl. 2 uš-ša-ni-ia-at-te-ni MH*? XIII 4 II 72;
ibid. IV 26

imper. sg. 3 uš-ša-ni-ia-ad-du ibid. II 39

These attestations, taken at face value, require that the stem be classified as belonging to class I (with the mostly post-OH generalization of the /a/-alternant, cf. class I paradigms, passim). It is the /ske/-stem to this verb, attested in OH and in OH**, that makes the classification of the verb stem under consideration sub class I rather unlikely. The stem final of class I preceding the suffix -/ske/- has the shape =i-i+ or =i-a+ (cf. an-ni-iš-ki-i+ /an-ni-aš-ki-i+, a-ri-iš-ki-a+ /a-ri-iš-ki-i+, ni-iš-ši-iš-ká+, tal-li-aš-ki+, ti-iš-ši-ki+ /ti-iš-ša-ká+ (to ti-i((a=)i=)+ : ti-(i-)ia(-a=)+ 'stand (up)'), i-e-ni-iš-ki-i+, za-an-ni-iš-ki-i+: q.v. in their paradigms). The stem final of this verb, however, invariably has the shape =e-a+ (uš-nu-a+) before the iterative suffix:

mid. prs. sg. 3 uš-ne-eš-kat-ta OH XXIX 29 Vs.12

uš-ne-eš-[kat-ta ibid. 8; 15

uš-ne-eš-kat-ta OH* KBo VI 10 III 18; 28

act. prs. sg. 1 uš-ne-eš-ki-mi KBo XXI 22 Vs.18, 19

This evidence is not to be taken lightly, especially in view of the nature of the sign na used here (see section 1.5 of this chapter). The stem uš-ne-a+* thus abstracted belongs to class IX (unfortunately, no forms with the alternant *uš-na-a+ or the like are attested, which calls for some caution). The class I forms (all MH*, possibly LH) are likely to be due to analogic remodeling, the model for which is provided by the class I stem ku-(uš-)ša-ni-(i-e-)i+/ku-uš-ne-i+ : ku-uš-ša-ni-ia+ 'to lease, hire', denominative of kuššan- n- 'pay, price', very similar to uš-ne-a+* both formally and semantically. That uš-ne-a+* too served as a model for ku-(uš-)ša-ni-(i-e-)i+ at some point, is shown by OH** ku-uš-ne-iz-zi (act.prs.sg.3) q.v. sub class I stem 45.

The stem uš-ne-a+* is possibly a denominative of *ušna- 'sale, price' (itself a deverbative of wa-a-š+ [hhi-conj.] 'buy'); see discussion below and in Chapter IV.

One more class IX stem is possibly attested in ga/ka-ne-na-a+ 'bend (intr.)' which, in my collection, is presented only by participial forms: ga-ne-na-an-da-aš OH StBoT 25 No.42 Vs.II 10, ga-ne-na-an-ta-aš OH StBoT 25 No.43 Vs.I 9', ka-ne-na-an-ta-[aš OH** XXXI 132, 6. The classification remains uncertain because of insufficient information (mi- or hhi-conjugation? if mi-, then class IX or possibly also VIII?). In any case, there is no evidence

for normalizing the stem as *kanenje-, as Oettinger does (1979 : 28 and 354, no attestations given).

2.3.10 Class X

2.3.10.1 Primary

1. iš-pár-ri-i+ : iš-pár-ra-a+ 'tread (on)'

act. prs. sg. 3 iš-pár-ri-iz-zi MH XIV Rs.91

pl. iš-pár-ra-an-zi OH** KBo XX 32 Vs.II 3

iš-pár-ra-a[n-zi KBo XXV 47 Rs.IV 17'

participle iš-pár-ra-an-za MH KBo XVII 61 Vs.17

Cf. listings in Oettinger 1979 : 266.⁷⁴

2. šar-ri-(a-)i+ : šar-ra-a+ 'divide,

cross over, transgress, (break an oath)'

act. prs. sg. 3 šar-ri-e-iz-zi MH* StBoT 22 I 51; IV 7

šar-ri-iz-zi ibid. I 40; II 35, 46;
III 20, 27, 34, 40;
IV 7

pl. šar-ra-an-zi OH KBo VI 2 III 8, 9, 11

⁷⁴ Oettinger places iš-pár-ri-i+ (mi-conj.) 'tread (on)' in the same paradigm with iš-pa-ra-an-zi (with pa instead of pár in this form and thus a "single" r). I believe, with C. Watkins (1975 : 377), that the writing difference should be taken seriously. As C. Watkins has shown, iš-pa-ra-an-zi belongs to the same paradigm as iš-pa-a-ri 'spreads' OH XX 46 Vs.III 8 (see the context in loc.cit.; also NB Watkins's etyma for the two verbs). For details, see Chapter IV.

StBoT 255 No.47 Rs.III 9'

šar-ra-a[n-zi ibid. No.12 Vs.II 9'

šar-ra-an-zi OH* KBo VI 3 II 19;
 ibid. III 10, 12, 13
 OH** KBo VI 6 I 13, 16, 17
 XIII 11 Vs.3

š]ar-ra-an-z[i OH** XXIX 15, 4

prt. sg. 3 šar-ri-it OH XXXVI 106 Rs.5'

šar-ra-aš MH XXIII 72 Rs.3

pl. šar-ri-i[r MH XXXI 124 II 13'

mid. prs. sg. 3 šar-ra-at-[ta OH XXXVI 108 Vs.10

šar-ra-at-ta OH** I 16 II 50

pl. 2 šar-ra-at-tu-ma OH** KBo III 28 Vs.II 21

šar-ra-at-tu-ma KBo III 27 Vs.25

-/ske/-forms:

act. prs. sg. 2 šar-ri-eš-ki-š[i OH** XXXI 127 I 31

mid. prs. sg. 2 šar-ra-aš-ki-it-ta OH* XXXI 133 I 11
 (parallel to the preceding attestation)

3 šar-ri-eš-kat-ta MH*/OH** XIII 4 III 61

Cf. the paradigm in Oettinger 1979 : 284 ff., with

lit.(p.286).

MH šar-ra-aš is a transfer to the hhi-conjugation (analogy
 e.g. tarnanzi : šarrazi = tarnaš : x, x = šarraš). The
 connection of this stem with šar-hi-a-i+ 'knock down, attack
 suddenly' (q.v. above, class I stem 88) -- both based on the
 root šar-h+? (as proposed by Oettinger 1979 : 288f.)⁷⁵ is

⁷⁵ *šarh₂=(1)š-tu > šar-hi-i-a-id-du... them. Akt. Prs. Sg. 3
 *šarh₂-a-ti > *šarheti > [šarrazzi] (i.e. šar-ri-(a-)iz-

in my view unlikely: cf. e.g. ar-ha (not *ar-ra) 'outward, away', ṣar-h⁺ 'hunt, persecute', tar-h⁺ 'be powerful', which show *rx to be preserved in Hittite (as against *rx' and *rx^v which show other outcomes, incl. progressive assimilation). See Chapter IV for further discussion.

2.3.10.2 Secondary: Denominative (?)

3. pa-ap-ri-i⁺ : pa-ap-ra-a⁺ 'be impure, act profanely'

act. prs. sg. 3 pa-ap-ri-iz-zi OH KBo VI 2 I 56

pa-ap-ri-iz-zi ibid. 57

pa-ap-ri-iz-zi MH KBo XVI 25 II 19'

prt. pa-ap-ri-it-ta OH** KBo III 28 Vs.19

participle pa-ap-ra-an-te-eš MH KBo XVI 27 II 10'

-/ske/-form:

act. prt. pl. 3 pa-ap-ri-eš-kir OH** KBo III 28 Vs.II 17

Cf. Oettinger 1979 : 282. The form pa-ap-ri-it-ta is act. prt. (should be emended to pa-ap-ri-it), see op.cit. p.283 with discussion.

Oettinger analyzes the verb as "pa-pr-a-; diesen reduplizierten, einfach thematischen Verbum ist infolge seiner Isoliertheit im Hethitischen einiges Alter

zi -- A.L.), Med. *sérh₂-o-to-re >*sárhatar >[sarrāta]" (i.e. ṣar-ra-at-ta in Oettinger's interpretation -- A.L.).

zuzutrauen. Die Aktionsart könnte auf ein mit i redupliziertes, duratives Präsens (vgl. uridg. *sí-zd-e-ti 'sitzt'...) mit an die Wurzelsilbe angeglichenem Reduplikationsvokal weisen..." (ibid. p.284). I find this analysis and the whole scenario utterly unconvincing because everything in it is ad hoc. C. Watkins's (1973 : 79 f.) view of the stem as an erstwhile e-stative is also hardly compelling; in particular, pa-ap-ri-it-ta is not a middle preterite parallel to Hom. pháto (as pa-ap-ri-iz-zi is parallel to Hom. phēsi in Watkins's interpretation), and ú-e-da which is a misreading of ú-e-it⁷⁶ (see class III stem 3 above) is thus not an example of the same archaic preterite ending.

Furthermore, the existence of the ahh-factitive pa-ap-ra-ah-h⁺ 'make impure, defile' (e.g. participle pa-ap-ra-ah-ha-an MH XXIX 8 I 39) points to a possible a-stem adjective papra-* 'impure' on which the factitive ' almost certainly based (see Benveniste 1955 : 1 and Lehrs : 1983) and which could very well serve as the base for pa-ri-i⁺ : pa-ap-ra-a⁺. See discussion in the summary to this chapter and in Chapter IV.

⁷⁶ As Gary Beckman points out to me, the copy (XXXI 4 Vs.18) shows a form midway between da and id in an erasure, and so the problematic sign should be transcribed as "it (over erasure)", with or without "!".

There are also two stems which might belong to class X, but cannot be so classified with certainty because of insufficient information. har-ra-a⁺ 'crush', mid. 'perish' has already been dealt with (see class I stem 3). The other is tar-ra-a⁺ 'be able, competent', attested from MH and only in the middle voice:

mid. prs. sg. 2 tar-ra-at-ta MH* XIII 9 I 8

3 tar-ra-at-ta MH KBo XV 32 I 3

This information is insufficient for determining even the conjugational type to which the verb belonged. Cf., however, Oettinger 1979 : 298 f., where the stem is labeled "einfach thematisch"; Oettinger further claims that tar-ra-a⁺ ("tarre-" in his normalization) "ist wahrscheinlich mit tarh-mi 'bezwingen' verwandt und geht... auf tarh₂-o-to-(ra) = al. tāra-te zurück" (op.cit. p.299). I am skeptical about Oettinger's classification and about the connection with tar-h⁺ (see above on *rx in Hittite). At best, tar-ra-a⁺ is a Luwianism (especially in view of the date of its attestation, when Luwian influence noticeably increases), which is made likely by the Luwian outcome of *rx, cf. Cuneiform Luwian ra-ra-a⁺ 'hunt, persecute' (:Hitt. par-h⁺, etc. *id.*); see Laroche 1959 : 77 and Chapter III.

2.3.11 Class XI

2.3.11.1 Secondary: Deverbative

1. wa-aš-še-i+/wa-aš-ši-(a-)i+ :wa-aš-ša-a+/wa-aš-ši-ia+ 'clothe, dress'

act. prs. sg. 2 wa-aš-ša-šl MH* XXXIII 54, 14'

3 wa-aš-še-i[z-zi OH StBoT 25 No.65 Rs.7 3'

wa-aš-še-iz-zi OH KBo XIII 137, 8

wa-aš-ši-e-iz-zi OH** KBo VI 26 IV 13

wa-aš-ši-iz-zi MH KBo XVII 61 Vs.21

MH* XXXIV 76 I 2, 3 ⁰[zi

wa-aš-ši-ia-zi OH** KBo X 23 Vs.I 11'

pl. 3 wa-aš-ša-an-zi MH* KBo XXI 34 II 12

prt. sg. 3 wa-aš-ta MH* XIII 9+ II 4

For an excellent discussion, with attestations, see Eichner 1970; also cf. Oettinger 1979 : 299 f.

The stem is apparently based on the root verb stem ú-a- aš(-š=) (mediū tantum) 'have on (clothes)' which is attested as follows:

mid. prs. sg. 3 ú-e-eš-ta OH StBoT 25 No.34 Vs.12'ú-e-eš-ta OH** KBo III 41+XXXI 4 Vs.2

KBo XII 22 Vs.3

MH* IX 28 I 15

pl. ú-e-eš-ša-[a]n-da- OH StBoT 25 No.3 Vs.I 24'ú-e-eš-ša-an-da- ibid. No.4 Vs.I 19'ú-e-eš-ša-an-ta MH IX 31 I 37

See the discussion in Eichner 1970; see also Chapter IV of this dissertation (largely in agreement with Eichner *op.cit.* on the interpretation of the pattern ú-e-aš(-š=)+ : wa-aš-še-i+ as cognate with IE *wés- (medium tantum) : *wos-éye-; q.v. in Chapter IV.)

The stem wa-aš-še-i+, etc. underwent several types of remakings (transfers) in post-OH proper (for LH results of these, consult Oettinger's paradigm [1979 : 299 f.]). The apparent post-OH uncertainty about the value of še (or possibly some real sound change underlying it) resulting in its replacement with ši in some cases (e.g. OH (+š)še 'to him/her' → post-OH (+š)ši *id.*; cf. the reverse in MH ar-ša-ni-a-še [class IX stem 1], MH pi-aš-še-ad-du and the like [class I stem 14], where še for the expected ši (OH) is a hyperarchaization) helped transfer the stem into class I (OH** wa-aš-ši-a-iz-zi, MH(*) wa-aš-ši-iz-zi, OH** wa-aš-ši-la-zi; the frequent LH wa-aš-ši-la-an-zi). MH* wa-aš-ša-ši is in all likelihood a transfer to class IV (analogy: mu-un-na-an-zi : wa-aš-ša-an-zi = mu-un-na-(a-)ši : x, where x = wa-aš-ša-(a-)ši, cf. LH wa-aš-ša-a-ši, [wa-aš]-ša-iz-zi [Oettinger 1979 : 299]. The MH act prt. sg. 3 wa-aš-ta exploits another analogic possibility: e.g. ha-aš-ša-an-zi (ha-aš-š+, hhi-conj., 'open') : ha-aš-ta = wa-aš-ša-an-zi : x, x = wa-aš-ta.

For Oettinger, the stem is "einfach thematisch". He takes it back to "voruranatolisch *uós-a-...; also

[uāssāzzi] : [uāssāzi] < *uós-e-ti : *uós-o-nti". For a discussion of this, to my mind, untenable view and presentation of my own views (in line with those of Eichner 1970), see the relevant section of Chapter IV.

One more stem possibly belongs to class IX, namely (2.) mar-ša-a-i⁺ : mar-ša-a⁺ 'be fraudulent', the attestations of which are insufficient for determining the stem's conjugation type with certainty:

act. prt. pl. 3 mar-še-e-lr OH KBo VI 2 II 55

participle mar-ša-an-za- OH** KBo III 36 Vs.24
KBo III 34 Vs.II 20

mar-ša-an-ta-an OH** XXXI 115, 20

mar-ša-an-da pre-LH KBo XII 45, 4

The stem is more likely to belong to the mi- than to the hhi-conjugation because it is apparently based on the adjective marša- 'unfit, fraudulent' (acc. sg. c. mar-ša-an MH* KBo V 2 I 4; factitive mar-ša-a-ah-h⁺ MH XXIX 8 I 39); cf. the rarity of denominatives in the hhi-conjugation. Oettinger (1979 : 29, 239 and esp. 355) normalizes the stem as "marš_{ie}-^{mi}", in disregard of the attestations (and without giving any).

2.3.12 Class III

1. pi-(e-)hu-te-(i=)+ : pi-e-hu-da-a+

'bring /lead over there'

act. prs. sg. 1 pi-e-hu-te-mi MH XXIII 77a Rs.9'

3 pi-hu-te-iz-zi OH KBo VI 2 I 40
StBoT 25 No.59 Vs.I 10
MH KBo XVII 61 Rs.18', 19'

pi-hu-te-zi OH StBoT 25 No.59 Vs.I 4

pi]-e-hu-te-iz-zi OH KBo VI 2 I 37
OH* KBo VI 3 I 48

pi-e-hu-te-iz-zi OH* ibid. 46

pi-e-hu-te-iz-zi OH** KBo X 23 Vs.I 28
KBo IV 4 IV 6
KBo IV 5 II 5
KBo XXI 85 I 9'

pl. 2 pi-e-hu-te-it-te-ni OH** I 16 II 45'

3 pi-e-hu-da-an-zi OH StBoT 25 No.31 Vs.II 16'
ibid. No.54 Vs.I 9
MH* VBoT 24 I 26

pi]-e-hu-te-en-zi OH** KBo XXV 50, 7'

prt. sg. 1 pi-e-hu-te-nu-un OH** XXVI 71 (=StBoT 18B) I 18'
OH**? KBo III 16 Rs.1

pi-hu-te-nu-un ibid. Rs.2

3 pi-e-hu-te-it OH** KBo III 7 I 27
XVII 5 I 3
XII 60 I 4
KBo III 60 Vs.II 11

pi-e-hu-te-[it ibid. 10
KBo III 38 Rs.26

pi-hu-te-it OH** KBo III 34 I 19

pl. 2 pi-hu-te-it-te-en OH** XXXI 4+ Vs.10

3 pi-hu-te-ir OH XXXVI 104 Vs.14'
OH** KBo III 34 II 42

KBo III 36 Vs.14

pí-e-hu-te-ir OH** KBo III 34 Vs.II 7

imper. pl. 2 pí-e-hu-te-it-te-[en OH** KBo III 41+ Rs.10

Cf. the paradigm in Oettinger 1979 : 37.

2. ú-wa-te-(i=)+ : ú-wa-te/da-a+

'bring/lead over here'

act. prs. sg. 3 ú-wa-te-iz-zi OH KBo VI 2 I 43, 46ú-wa-te-iz-zi ibid. 48ú-wa-te-iz-zi OH* KBo VI 3 I 51, 56ú-wa-te-iz-zi ibid. 54ú-wa-te-iz-zi ibid. 60ú-wa-te-iz-zi OH** KBo VI 26 IV 10, 17
KBo X 23 Vs.I 32 ú]°
KBo III 27 Vs.4 ú]°
MH IBoT I 36 III 17ú-wa-te-iz-zi VIII 81 Vs.II 1ú-wa-te-iz-zi KBo XVI 27 Rs.III 18'ú-wa-te-iz-z[i MH* XXVI 11 Rs.IV 4pl. 1 ú-wa-te-wa-ni MH* XXXI 42 II 142 ú-wa-te-it-ta-ni MH KBo VIII 35 II 7
XXIII 77, 70
XXIII 78b, 2ú-wa-da-te-e-ni MH* XIII 9 III 103 ú-wa-ta-an-zi OH StBoT 25 No.54 Vs.I 8ú-wa-da-an-zi OH** XXIX 34, 6, 3 úz[i
MH IBoT I 36 II 68prt. sg. 1 ú-wa-te-nu-un OH StBoT 18 Vs.44

MH XIV 1 Rs.38

MH* XXIII 11 II 10, 12, 32,
35, 38 ú-w]a°

- ú]-wa-te-nu-un MH XXIII 12 II 3
- 3 ú-wa-te-it OH StBoT 18 Vs.37
 StBoT 17A Rs.9'
 StBoT 25 No.146 Vs.I 2'
 OH** KBo III 38 Vs.16
 XXXIII 23 I 5 ú]°
- pl. 1 ú-wa-te-u-en MH* XXIII 21 Rs.III 7
- 3 ú-wa-te-ir OH KBo VIII 42 Vs.3'
 XXXVI 104 Vs.12' ú]°
 OH** KBo III 34 I 14; II 39
 KBo III 46 Rs.9
- ú-wa-te-ir^{f-}
 MH XIV 1 Rs.71
- imper. sg. 2 ú-wa-te OH* XXXIII 5 Vs.? II 9
 OH** VBoT 58b I 26
 MH Mæt.75/10 öy.10
- 3 ú-wa-te-id-du MH Mæt.75/45 öy.12
 MH* XIII 2 I 21
- pl. 2 ú-wa-te-it-te-en OH XLIII 23 Vs.1,6
- ú-wa-te-it-ten MH* XIII 9 III 9
 XIII 20 I 27
 XXIII 68+ Vs.12',26',28'
- ú-wa-ta-at-ten MH XV 34 III 16

Cf. Oettinger 1979 : 126; no attestations given.

Analyzed synchronically, the two stems presented above look like one and the same stem, namely /wade/- : /wada/-, compounded in the case of ú-wa-te-(i=)+ with the preverb ú-(a=)+ 'thither' and in the case of ú-wa-te-(i=)+, with the preverb ú+ 'hither'. The root vowel of /wade/- is syncope after ú-(a=)+, but is left intact after ú+ ([uude]- or the like would have made the verb's morphology opaque; morphological opacity was not a threat in

[pe(h)ude]-). h in ní-(e-)hu-te-(i=)+, etc., notably always written single, appears to perform the same function as it does in a-hu 'come!' < *e-u (disyllabic) < *ey-Vw (where V is a back non-high vowel; on a-hu, see above class III stem 1), namely that of a hiatusliger inside the disyllabic [eü]. The syncope of /a/ in /wa/ (>[u]) is likely to be explained by the place of the accent: this syncope is found, as a variant, in certain unaccented positions; the clearest example of this is the post-accentual alternant -[wani] of the 1 pl. primary ending -/weni/, viz. -[wani] > -[uni] in e.g. MH ha-at-ra-a-u-ni 'we write' (for the expected ha-at-ra-a-wa-ni). Apparently, ní-(e-)hu-te-(i=)+ ([pehude]- or [peūde]-) became lexicalized as "standard" early on, while other cases, such as the syncope in the 1. pl. primary ending, remained occasional (register?) variants.

My view of the synchronic makeup of ní-(e-)hu-te-(i=)+ and ú-wa-te-(i=)+ has important implications for my diachronic and comparative explanation of the verb; see Chapter IV for a discussion, with lit.

3. ú-a-te-(i=)+ : ú-i-te-a+/ú-e-de-a+ 'build'

act. prs. sg. 3 ú-e-te-iz-zi OH XXIX 29 Vs.6

ú-e-te-[iz-zi] XXXVI 108 Vs.9

ú-e-[te-iz-zi] KBo VI 2 IV 53
(//KBo VI 3)

ú-e-te-iz-zi OH* KBo VI 3 IV 52, 59
OH** XXIX 1 Vs.I 1

XXIX 20, 4

KBo XIV 65 IV 5 ū]-e-^o

pl. ū-e-da-an-zi MH ABoT 60 Vs.16'

prt. sg. 1 ū-e-te-nu-un OH StBoT 18 Rs.55
MH* XXIII 21 Vs.3, 73 ū-e-te-it OH StBoT 17A Rs.10
OH** XVII 6 I 15

pl. ū-e-te-ir MH KBo XVI 27 Vs.I 18

imper. sg. 3 ū-e-te-id-du MH* XXXI 86 II 20

pl. ū-e-da-an-du MH XXXI 90 III 4
MH* XIII 2 II 35

participle ū-i-ta-an-tu-uš OH XXXVI 108 Vs.6, 8

ū-e-ta-an XXXVI 110 Rs.16

ū-e-da-an MH* XIII 2 II 34
XIII 24, 15

ū-e-da-an-te-eš MH* XIII 2 II 20

Cf. attestations in Oettinger 1979 : 129 (with LH; pre-LH incomplete). My discussion of the stem see in Chapter IV.

4. ū-wa-ri-te-i⁺ : wa-ri-ta-a⁺ 'be afraid'

act. pres. pl. 3 wa-ri-ta-an-zi OH StBoT 25 No.4 Rs.IV 34

[wa-r]i-ta-an-zi ibid. No.3 Rs.IV 39

prt. sg. 3 ū-wa-ri-te-it OH* KBo XX 59, 17

Cf. Oettinger 1979 : 127 f. (See an explanation in Watkins 1973 : 75).

Noteworthy is the noun ū-e-ri-ti-ma- 'fear' (acc. sg. ū-a-ri-ti-ma-an OH** XXIX 1 II 34) related to the stem. See discussion below and in Chapter IV.

One more candidate for membership in class XII is ta-an-na-at-te-i⁺ 'be empty', too meagerly attested to be admitted here without reservations:

act. prs. sg. 3 ta]-an-na-at-te-iz-zi MH KBo XIII 13 Vs.11
 ta-an-na-at]-te-iz-zi ibid. Rs.2

This stem could be a denominative of adj. dannatta- (iannattia-) 'empty' (HW¹ : 209a; factitive dannattahh- ibid. p. 209b).

2.4 SUMMARY

I have surveyed all of the vocalic verb stems of Hittite [OH(?(?)) and MH(?)] that could be comparable with thematic verb stems of Indo-European (thus ny-stems, as well as any hhi-conjugation stems, do not belong in the survey; see the criteria outlined in Chapter I). In order to make the description free of preconceived notions (comparative or any other) I devised and used a purely mechanical procedure of determining the stem and assigning stems to classes. (The procedure consists of separating endings from the stem and then grouping stems according to the segment immediately preceding the thematic segment.) The only case in which the procedure was deliberately violated was the -/ske/-stem class (class V) whose stem final consists of the easily identifiable iterative (etc.) suffix -/ske/-. Now that the

survey has been completed, I shall summarize its results and attempt to come up with a more economical classification based on derivational histories of stems.

The already mentioned class V requires no further comment. Class I contains stems which have, before their thematic vowel, the segment which is necessarily and sufficiently identified as /y/; in other words, class I is defined as a class characterized by the suffix *-/ye/-* : *-/ya/-* (written $+i-(a-)i+ / +i-a-(a)+ : +i-(ia)a+$). There is a tendency to level the morphophonemic alternation in the paradigm by generalizing one or the other alternant. Although in some (chiefly OH(**)) texts a predilection is shown towards the /ye/ alternant, it is the /ya/ alternant that becomes prevalent in MH (and especially LH) texts; cf. e.g. the paradigm of $\acute{u}-a-mi-(a-)i+$, etc. 'find' (Class I stem 21). Among the 25 primary (i.e. those that aren't secondary in Hittite terms) class I stems, at least one belongs here only by virtue of the automatic application of the stem identification procedure, viz. $ki-i+ : ki-(ia)a+$ in which $=i-i+$ is not a suffix but part of the root (see also Chapter IV). At least some of the thirteen deverbatives represent the morphological pattern in which the base (=forme de fondation) and the forme fondée in *-/ye/-* differ with respect to Aktionsart (e.g. $ha-at-t+ / ha-ad-d+ / hat- /$ 'strike (once)' : $ha-az-zi-(a-)i+ / ha\ddot{y}e- /$: $ha-az-zi-a+ / ha\ddot{y}a- /$ 'strike (repeatedly); play (a string

instrument)', cf. the similar pattern in IE where root perfectives pattern with *-ye- : *-yo- imperfectives (see Chapter IV).

But it is the denominatives that help reduce the number of the provisional stem classes. Most class I denominatives (at any rate, all eleven relatively certain denominatives) are based on consonant and i-stem nouns; where other stems (such as a-) are assumed, they are not necessarily so (whereas consonant and i-stems are the only ones attested both as bases to class I stems and independently). My provisional class II has at least two stems whose nominal bases (y-stem nouns) are attested independently, viz. ha- ā-āu-u-a-i+ 'be king' and ā-ru-u-a-i+ 'plunder'. These are also likely to be -/ye/-stems, with the change of /y/ to zero between vowels (cf. ū-an-zi/ū-wa-an-zi 'they come' < *uānti [with the glide y filling in the transition between u and a] < *u-y-anti < *Vy-v-onti [where V is a back non-high vowel]; pa-a-an-zi < *pa-v-anti; class I stems such as āu-wa-i-i+ : āu-wa-ia+ and ta-(a-)i-i+ : ta/da-(a-)(i-)ia+, where intervocalic /y/ remains, have a special explanation q.v. in Chapter IV). The same would apply to the other two class II stems, possible /ye/-denominatives. Class III has āu-ū-(i-a-)i+ : āu-wa-a+ 'expel', which can also without difficulty be regarded as a /ye/-stem (primary?), especially in light of the comparative evidence (q.v. in Chapter IV) and hu-(u-)i-āu-(ū-)e/i+ : hu-(i-)āu-wa-a+ / hu-iā-(āu-)wa-

a+ 'be alive' that could easily be regarded as a
 /ye/-denominative to adj. huišu- 'live', etc.; ú-(e-)i+,
 etc. 'come' is placed in this class for technical reasons
 only (cf. ki-i+ in class I), as it goes back to pre-Anat.
 *éy-ti : *y-énti (: IE *éy-ti : *y-énti) 'be on one's way'
 with the preverb *Vw- > Hitt. ú+ /u/. Most class IV stems
 can likewise be easily explained as /ye/-denominatives based
 on a-stem nouns (see the relevant section above). Thus, my
 provisional classes I through IV can be reduced to one,
 namely the -/ye/-:-/ya/-class. Comparative and diachronic
 motivation makes this reclassification not only sufficient
 but also necessary. In addition, class IX denominatives
 such as ar-ša-ne-a+, etc. 'be jealous', uš-ne-a+ 'sell,
 trade', class X denominative pa-a-ri-i+, etc. 'be impure',
 class XI denominative mar-še-a+ -- all are likely to be
 /ye/-denominatives to their a-stem adjective bases (q.v.),
 with the stem vowel in the /e/-grade: this pattern, well
 motivated by the comparative evidence (cf. Hom. philos
 'friendly' : philáo 'be friendly (towards someone), love'
 vs. the factitive purgáo 'fortify' to púrgos 'fortress'
 which cf. with Hitt. ir-ha-(a-)i+ 'delimit' to irha- c.
 'limit'; see Chapter IV for discussion), is supported by the
 distribution of nominal bases in the -/ye/-:-/ya/-class:
 consonant (=C-ye-) and i-stems (-i-ye-) in the provisional
 class I, u-stems in class II (the plene writing of the base
 stem suffix with u is likely to indicate its diphthongal

origin [see Hart 1983 : 128 ff.]) and III, a-stems (*a-ye-, with the a- [< *o-] grade of the suffix) in class IV, and now a-stems with the a-grade of the suffix (*e-ye-:-e-ya-) in the thematic-looking ar-ā-na-a⁺, na-ap-ri-i⁺, nar-ā-e⁺, etc. If this is so, then the thematic-looking vowel of lu-uk-ki-i⁺, etc. 'to light' (see above), wa-a⁺-ā-e-i⁺, etc. 'put on (clothes)', as well as that of the class X (=r-ri-i⁺ : =(r-)ra-a⁺) stems and class XII (=te-i⁺ : =ta/da-a⁺) stems possibly also stands for *-eye- : *-eya-. This possibility is best considered after the relevant evidence of other Anatolian languages (Chapter III) as well as that of Indo-European and the literature dealing with it are discussed (Chapter IV).

Class VIII (paralleled by VII) shows contrast with class IX in that its stems use the sign ni (cf. class IX's na). On the other hand, neither class VII nor VIII stems can be said to have the suffix -/ye/-:-/ya/- (except in analogic transfers of post-OH proper). The parallelism of class VII and VIII stems makes it possible to regard them as complementary and regroup them in one class: one may posit, provisionally, that the =l-li-i⁺ : =l-la-a⁺ of the two class VII stems goes back to */lni/- : */lna/-, cf. the =r-ni-i⁺ : =r-na-a⁺, =n-ni-i⁺ : =n-na-a⁺ stem finals of class VIII stems (especially since the cluster /ln/, to my knowledge, occurs in Hittite only in gen sg. ū-i-il-na-a⁺ OH StBoT 25 No.3 I 41' / ū-il-na-a-a⁺ OH ibid. No.4 III 8, IV 14

'loam/clay', which cf. with the spelling ú-i-la-a-nu-uš OH
 ibid. No.137 II 16; this latter suggests that /ln/ in this
 oblique form and in similar post-OH proper oblique forms may
 be due to relatively late syncope, or to restoration of the
 cluster (*wiln- > *will- → wiln-) on the analogy of wilan-
 (HW¹ : 255a) in a paradigm with the old ablaut).

Chapter III

VOCALIC (POSSIBLY THEMATIC) VERB STEMS OF OTHER ANATOLIAN LANGUAGES

Below are presented vocalic (possibly thematic) verb stems of Palaic, Cuneiform Luwian, Hieroglyphic Luwian, Lycian and Lydian.⁷⁷ Since these languages are not nearly so well attested and understood as is Hittite (see Chapter I for details), scholars often disagree even on such basic matters as the meaning of certain stems or the interpretation and grammatical category of many items. The purpose of this dissertation -- to determine whether a morphological class (simple thematic verb stems) can be said to have existed in Anatolian -- requires, as a minimum, that these basics about comparanda under discussion be reasonably well known. Thus, in the overview of the possibly thematic verb stems of extra-Hittite Anatolian, I list only those items, the basic characteristics of which (viz. the meaning and grammatical category) have been established with some certainty, or could, in my view, be so established through textual evidence but without getting bogged down in philological detail: where extensive philological

⁷⁷ For an overview of Anatolian (including the verb) for the purposes of subgrouping, see Oettinger 1978; sketches of extra-Hittite Anatolian verb systems (except Lydian and Lycian) see in Oettinger 1979 : 558 ff.

groundwork was necessary, the matter has been left for future study.

3.1 PALAIC

In Palaic,⁷⁸ two types of stems are clearly discernible: consonantal, e.g. the athematic root stems a- aš+ : a-š+ 'be' (cf. Hitt. a-aš+ : a-š+ id.), ú-a-ir+ 'say' (cf. Hitt. ye-deverbative ú-a-ri-i+, etc. I. 36),⁷⁹ and vocalic, some of which look thematic, e.g. a-ni-i+, etc. 'do, work', šú-ú-na-a+ 'throw in' (?) (rather than 'fill', see discussion below), and some of which do not, e.g. ia- a-(aZ-)zu-(u=)+ 'place' (?); many are problematic due to an inadequate understanding of the context.

Below is a list of Palaic vocalic (thematic-looking) stems with their attestations.⁸⁰

1. a-ni-i+/a-ni-a-i+ : a-ni-(i-)ia+ 'do, work'

act. pres. sg. 2 a-ni-i-ia-šl 2 A Rs.10

⁷⁸ Detailed presentations of Palaic are Kammenhuber 1959a, Carruba 1970 (verb : p.45 f.), 1972; a sketch of Palaic verb morphology is also found in Oettinger 1979 : 558-60.

⁷⁹ From here on, Hittite verb stems discussed in Chapter II will be referred to by their provisional class number in capital Roman numerals (I, II...XII) followed by the number of the stem in the class, e.g. "I. 36" = class I, stem 36.

⁸⁰ Attestations are given according to Carruba's edition of Palaic texts in transliteration (Carruba 1970 and 1972), checked with the cuneiform editions. For convenience of orientation, see concordance in Carruba 1970 : 6.

3 a-ni-it-ti ibid.

prt. 1 a-ni-e-eh-ha 3 A Vs.I 4'

imper. sg. 2 a-ni-ia- 2 A Rs.10

(Carruba 1970 : 50 with Hitt. and Luw. parallels.)

Cf. the Hittite primary ye-stem a-ni-(a-)i+, etc. I. 1
'do, perform, work (the soil)'.

2. az-zi-ki+ 'eat'

act. imp. sg. 2 az-zi-ki-i 2 A Vs.15

az-zi-[ki-i? ibid.20

(Carruba 1970 : 52)

A ške-deverbative to a-tt+/a-d+ 'eat' (in act. prs. pl.
3 a]-ta-a-an-ti 1 A I 7, 8; a-da-a-an[-ti?] 12, 7).

Cf. Hitt. imp. sg. 2 az-zi-(ik-)ki-i OH*(*) class V in
Chapter II.

3. pa-ar-ku-i+/par-ku-i+ 'cleanse'

act. prs. sg. 3 pa-ar-ku-i-ti 5 A II 22

par-ku-i-ti 5 B 4

(Carruba 1970 : 67, with Hitt. and Luw. parallels.)

Cognate with Hitt. ye-denominative par-ku-i-e-i+, etc.
'cleanse' I. 47.

4. šū-ū-na-a+ 'throw in'

(Carruba 1970 : 70 "füllen")

act. prt. sg. 3 šu-ú-na-at 2 A Rs.22'

imper. sg. 2 šu-ú-na 2 A Rs.24'

(Carruba 1970 : 70 with lit.)

The stem, if its place with ú is to be taken at face value, could be cognate with Hittite š-ú-ni-(a-)i+ 'sow, plunge, throw in' (I. 16). The latter may thus belong in class VIII (=ni-i+ : =na-a+, etc.), its class I forms (OH** and NH(*)) being later transfers (cf. the class VIII section in Chapter 2; discussion in Chapter IV).

Other possibly thematic stems are too poorly attested and understood to be of use here. These include: hu-uš-ši-i+ 'bring, offer (a libation)' (?) (see Carruba 1970 : 56, 1972 : 27 f.; Kammenhuber 1959a : 37: "unbekannter Bedeutung"), lu-(u-)ki-(i-)i+ : lu-ki(-in/i-)lu-ki-(i-)a+/i+ (Kammenhuber 1959a : 13 f. and 80 f.: "anzünden"; Carruba 1970 : 62: "teilen" o. ä."; similarly Carruba 1972 : 16 f., 28; at least, Kammenhuber's interpretation is based on the similarity with Hitt. lu-uk-ki-i+, etc. 'to light' VI. 1), ha-pa-ri-(i=)+ 'give/turn over (to)'(?) (Carruba 1970 : 54: "Verbum unb[ekannter] B[e]d[e]utung"; cf. Hitt. ha-ap-pa-ri-a+/i+ 'give/turn over (to)' I. 41; except the formal similarity, there is nothing to impose the interpretation), iš-ka+ '?' (act. imper. sg. 2 ? iš-ka 2 A Vs.22, see Carruba 1970 : 57: "Imper.Sg.2, unb. Bd."),⁸¹ tāk-ku-wa-

⁸¹ If the form is an imperative, then the meaning 'go!' is

a⁺/iák-ku-wa-ga⁺ '?' (the relation of the two stems questionable pace Watkins 1975, cf. Szemerényi 1979 : 317 f.), wa-ha-ri-la-a⁺ '?' (cf. Carruba 1970 : 77, 1972 : 44; the suggested connection with the root see in Hitt. ú-e-ah⁺/wa-h⁺, etc. 'turn', see also Watkins 1972, is possible but hardly compelling), ú-i-ta⁺/ú-i-ti⁺ '?' (the meaning 'build' suggested by Kammenhuber, see lit. in Carruba 1970 : 76, based on the similarity with the Hitt., see XII. 3, does not fit the context, q.v. in Carruba 1970 : 16 f.; Carruba's own suggestion, viz. 'bring' based on the similarity with Hitt. ú-i-da-a-i⁺ IV. 30, fares a little better only because 'bring' is likely to fit more contexts than 'build'), šī-(l-)i⁺ '?' (cf. Carruba 1970 : 70, 1972 : 6 f., Kammenhuber 1959a : 49, 51, 53).

possible in its context (q.v. in Carruba 1970 : 16; "translation" and commentary in Carruba 1972 : 20); the passage, however, is not at all clear and other interpretations are possible (such as voc.sg. of an a-stem, iš-ka⁺ '?'). The root 'go' is attested in the imperative i-ú 'come!', corresponding exactly to Hitt. a-hu ld. (on which see III. 3 and Carruba 1972 : 8 f.; see also Cowgill 1979 : 27 footnote 8). Thus, if the stem is a ška-stem to this root, the problem is to explain the difference between the stem vowel of az-zi-ki-i and that of iš-ka. Perhaps the former shows Hittite influence while the latter is Palaic proper.

3.2 CUNEIFORM LUWIAN

The Cuneiform Luwian⁸² verb has consonantal (athematic) and vocalic stems. The former are exemplified by (a-)aš+ : a-š+ 'be' (cf. Hitt. a-eš+ : a-š+, Pal. a-aš+ : a-š+ id.), a-d+/a-z+ [before +t= of the ending, cf. mid. prs. sg. 2 az=tu-u-wa-ri IX 31 II 28] 'eat' (Hitt. e-it+ : a-d+, etc. id., Pal. iter. az-zi-ik-ki+), ta-nár+ 'govern', etc. The latter include possibly thematic stems such as a-a/i-ia-(a=)+ : a-(a=)+ 'do, make', du-ú-pi+/du-ú-pa-i+ 'strike', tu-u-un-ma-a-ta-i-i+ 'listen', pi-pi-iš-ša+ 'give' (redupl. iter. of pi-(i-)ia-(a=)+/pi+ 'give', cf. Hitt. pa-a-i : pi+ [hhi-conj.] id.), az-za-a+ 'eat' (iter. of 'eat', see above). A number of CL thematic-looking stems have obvious athematic Hittite counterparts, e.g. CL a-ku-wa-a+ 'drink' (prt. sg. 3 a-ku-wa-at-ta KBo VII 68 III 13, 18) : Hitt. a-ku-zi : a-ku-a-zi, etc. id. = /eKw+/+ti/ : /aKw+/+anti/; yet others have Hittite cognates that belong to the hhi-conjugation (of which CL has but a few prs. sg. 3 forms in -i left) while the Luwian forms have yi-series endings (corresponding to the Hittite mi-series). The relevant stems are listed (alphabetically) below:

1. a-a/i-ia-(a=)+ : a-(a=)+ 'do, make'

⁸² The best description of CL to date is Laroche 1959 (with lit.). A recent sketch of the CL verb morphology see in Oettinger 1979 : 561 ff. A new edition of the CL corpus is being prepared by Frank Starke (according to his statement in Starke 1980 : 142).

See attestations in Laroche 1959 : 24. Strangely, the distribution of the two stem forms is near complementary, the latter occurring before the endings beginning with i/d and h (once) and the former, elsewhere; e.g. act. prs. sg. 2 a-a-ia-ši KBo IX 141 Vs.16, prt. pl. 3 (?) a-a-ia-an-ta ibid. Vs.20, a-i-ia-an-da XXXV 132 II 8, mid. prs. sg. 3 a-a-ia-ri XXXV 54 II 43, 44, 45, imper. sg. 3 a-a-ia-ru XXXII 8 III 26, 27, a-i-ia-ru XXXV 39 I 266, II 12, etc., participle (in +a-mi-i+) a-i-ia-an-mi-in-zi (pl.nom. KBo IX 145, 6 vs. act. prt. sg. 1 a-ha 59/p 6 (hapax), prs. sg. 3 a-ti, prt. a-a-ta, imper. a-a-du, and, strikingly, prt. sg. 3 a-ia-ta and a-ta in the same text (KBo XIII 260 II 2-4 and II 8-22 respectively). While it cannot be ruled out that the alternation is morphophonemically conditioned, it is also possible that we are dealing here with two stems, namely the root stem a-(a=)⁺ and the ye-stem a-a/i-ia-(a=)⁺; compare the latter with the Hittite I. 4 stem i-i+/i- a-(i=/a=)⁺ : (i-)ia-(a=)⁺ id. (act.).

2. a-ku-wa-a+ 'drink' (?)

act. prs. sg. 3 a-ku-wa-at-ta KBo VII 68 III 13, 18

Laroche (1959 : 24) also lists a-ku-wa-an XXXV 128 III 10 which he qualifies "incertain". He also adduces the Hittite and Palaic parallels (see the former above; Palaic has a-hu+ 'drink', see attestations and lit. in Carruba 1970

: 49). The Hittite and Palaic cognates are athematic; it is easier to suppose that CL thematicized a formerly athematic stems (e.g. through resegmentation of 3. pl. forms such as a-ku-wa-an-ti*, a-ku-wa-an-ta* /aK^w/+/ant/-- as /aK^wa/+/nt/--) than to suppose that Hittite and Palaic dethematicized their originally thematic stems. The originally athematic character of the stem is further supported by Tocharian (B) cognate yokām (act. prs. sg. 3) 'drinks' which is clearly athematic (the corresponding thematic form would have been *yośām).⁸³

3. a-(a-)an-ni-(i-)⁺ : a-ni-(a-)ia-(a=)⁺ 'do, perform'

act. prs. sg. 3 a-an-ni-ti XXXV 39 III 26

a-an-ni-i-ti XXXV 14 I 8

a-a-an-ni-i-[ti XXXV 88 II 11

an-ni-i-ti HT 82, 5

pl. 3(?) a-ni-e-ia-an-t[i XXXV 15 III 12 = 14 IV 14

imp. sg. 2(?) a-ni-ia XXXV 133 III 4

See Laroche 1959 : 27 with lit. Cognate with Hitt.

ye-stem a-ni-(a-)i⁺, etc. 'do, perform' and Palaic ye-stem a-ni-i⁺, etc. id. (Palaic 1).

4. a-ar-ši-ia-a⁺ 'flow, run'

⁸³ I owe the Tocharian example to Warren Cowgill (personal communication).

act. imper. pl. 3 a-ar-šī-la-an-du XXXV 39 I 25

See Laroche 1959 : 32 for lit. and the Hitt. connection. Cognate with Hitt. ar-šī-(i-)a-(i=)+, etc. 'flow, pour (intr.)' I. 26, deverbative.

5. a-ta/da-ri-(i=)+ 'feed, nourish'

act. prt. sg. 3 (?) a-ta-ri-[it-ta] KBo IX 141 Rs.2

[a]-da-ri-it-ta XXXV 15 II 2
(dupl. to the above)

imper. pl. 2 a-da-ri-ta-an IX 31 II 32

a-ta-ri-ta-an HT 1 II 8

See Laroche 1959 : 34, with lit. and the Hitt. parallel. Apparently, the stem is a ye-denominative of *a-ta/da-r(i=)+ 'food' or the like, cf. the Hitt. ske-stem a-it-ri-eš-ki-i+ (OH* KBo VI 3 IV 60) based on e-it-ri-e+* id.

6. a-ú-i+/a-wi+ (: a-wi-ia-a+?) 'come' and
i(-i)+ : i-ia-a+ 'go'

act. prs. sg. 1 a-ú-i-mi⁸⁴ XXXV 71 II 5

2 a-ú-i-šī XXXV 100, 3

3 a-ú-i-tī XXXV 54 II 41; III 24
ibid. 107 II 1 - 6

⁸⁴ The normal Luwian act. prs. sg. 1 ending is *ú-i (HL *wa/i). Here apparently the m in the ending is the result of dissimilation (from *a-ú-i-ú-i/-wi /awiwi/; so Laroche 1959 : 36).

106, 4
KBo VII 67, 4

a-wi-ti XXXV 123 IV 10

i-ti XXXV 21 Vs.5 et passim

prt. sg. 1 a-ú-i-ha XXXV 136 IV 12, 16, 20, 22

(?) a-wi-la-ah-ha XXXV 96, 12

3 a-ú-i-ta XXXV 79 IV 4
ibid.88 II 1
103 III 11
133 II 7

(?) i-i-ta XXX 109 III i

pl. a-ú-i-en-ta XXXV 98, 14

a-ú-i-in-ta KBo IV 11, 46

imper. sg. 2(?): i-ia-a XXV 39 I 27

imper. sg. 3 a-ú-i-du XXXV 30+31 II 2
ibid.75, 14
XXV 39 IV 9

a-wi-du XXXV 133 III 16

i-du KBo VII 66, 6

pl. 3 i-ia-an-du XXXV 103 II 13 et passim

See Laroche 1959 : 36 with lit.

The stem is related to Hitt. ú-e-it, etc. 'come' III. 3; cf. also Palaic i-ú 'come here!' (see footnote 81 of this chapter) and the HL cognate á-wa/i(-i)+ id. (also i+ 'go'; see section III below). Thus it is a thematic-looking⁸⁵

⁸⁵ Apparently, pre-Anatolian *ey became i in Luwian (cf. Hittite where it became ē, e.g. *-ey-ti > ú-e-iz-zi, q.v. Chapter II); but so did *ye after consonants (as Luwian continuations of *-ye-stems to consonant-final bases amply show). For this reason, CL a-ú-i-ti looks thematic, i.e. it looks as if it might have contained the suffix *-ye-.

root stem with the preverb a-ú+/a-w⁺ 'hither' (:Hitt. ú+, etc.)⁸⁶ and belongs here only descriptively. Cf. stem 12 below. The root stem is attested in Hittite only in the imperative sg. and pl.2, q.v. anud pa-i in Chapter II, class IV. Cf. also the HL cognate in section 3 below.

7. hal-ta-a+/hal-ti-i 'call'

act. prs. sg. 3 hal-ta-at-ti XXXV 145 Rs.4 (Luw. in Hitt.)

mid. hal-ti-it-ta-ri KBo IV 11, 49

See Laroche 1959 : 39 with lit. and the Hitt. cognate.

Corresponds to the Hitt. hhi-conj. stem halzāi : halzi- 'call' (HW¹: 49a; Cottinger 1979 : 69 ff.); the stem's wi-conj. forms are most likely secondary.

8. ha-an-da-a 'set in order, prepare'

Attested only in the nomen actionis ha-an-da-at-t+

'decision' or the like (see attestations and the Hitt.

parallel in Laroche 1959 : 40 f.). Cf. the Hittite stem ha-an-da/ta-(a-)+, etc. (IV. 17) 'set in order'.

19. ha-aš-pa 'destroy, pillage'

act. prs. sg. 3 ha-aš-pa-ti 579/d 9

⁸⁶ The diphthong ay seems to be preserved in CL and HL prevocally (as in CL a-ú-i+, etc. : HL á-wa/i-(i-) 'come', cf. Hitt. ú-(a-)+, etc. id., Palaic i-ú 'come here!') but monophthongized to u before consonants (as possibly in ú-pa-(a-) 'afferre', ú-wa-ta-a 'adducere').

prt. 1 ha-aš-pa-ha XIV 3 I 41'

See Laroche 1959 : 44. Quite possibly stands for /hasp+/ti/, and the like (i. e. is athematic). Hittite has, from MH on, ha-aš-pi-ir (act. prt. pl. 3) '(they) destroyed' MH XIV 1 Vs.52, MH* XXIII 11 III 8, etc. The attestations above come from LH texts where they are marked with the gloss wedge. Oettinger 1979 : 101 (with a reference to Kronasser 1966 : 408 "mit Lit."), setting up the stem in Hittite as "hašpⁿⁱ", also cites (participle) ha-aš-pa-an Bo 7863 I 5 and "unklar ar-ha ha-aš-pa-ta(-)iā-x KBo XVI 22 Vs.9". It seems appropriate in this connection to quote Oettinger loc.cit. further: "Auch sonst dringen m.E. in mittelheth. Zeit keil.-luw. [footnote 28: "Thematische Flexion von hašp(a)- im Keil.-Luwischen (E.LAROCHE, RA 62, 1968, p.88) ist graphisch nicht beweisbar."] Verbalstämme ins Hethitische ein und werden dort hethitisch flektiert. In der Grossreichszeit dagegen, als sich die luwischen Sprachen stärker ausdehnten, werden diese alten Luwismen (zusammen mit neuen) oft durch luwische Endung und Glossenkeil als Fremdwörter gekennzeichnet...".

10. hu-u-i-ia-(a=)⁺ 'run, move'

See Laroche 1959 : 46 for attestations and the literature. The Hittite cognate hu-(u)wa-a-i : hu-(u)i⁺ id. belongs to the hhi-conjugation (see e.g. Oettinger 1979 : 74 for the

paradigm); thus it is likely that the CL forms, notably
 act. prs. sg. 1 hu-u-i-ia-mi (with -mi for the expected -wi
 due to dissimilation under the influence of /w/ in the root,
 cf. [awimi] instead of [awiwi] above) are later (Luwian)
 transfers. Note also the reduplicated stem hu-u/i-hu-i-
ia-(a=)+ id. (attested in act. prt. pl. 3 hu-u-hu-i-ia-an-da
 XXV 39 IV 2, imperative sg. 2 hu-i-hu-i-ia Tunnawi I 59
 and the fragmentary hu-i-hu-ia-an-[XXXV 139 IV 2, qq.v. in
 Laroche 1959 : 46 with other Anat. parallels and lit.).
 Compare the HL cognate in the next section.

11. kán-ga-ti+ : ga-an-ga-ta-(a-)i

'cleanse with the gangati-plant'

act. prs. sg. 3 kán-ga-ti-ti XXII 40 III 18 (Luw. in Hitt.)

participle ga-an-ga-ta-im-mi-iš XXXV 67 II 3

ga-an-ga-ta-a-im-ma-an *ibid.* 6

See Laroche 1959 : 54; no meaning given; with lit.; "Emprunt
 du hitt. et du louv. au hourrite".

Cf. Hitt. denom.(?) ga-an-ga-ta/da-a-i+, etc. id. (IV.
 4).

12. kat-mar-ši-i+ 'to shit'

act. prs. sg. 3 kat-mar-ši-it-ti XXX 31 I 6

See Laroche 1959 : 55, with the Hitt. parallel and lit.

Cf. Hitt. ka(m)arš- (mi-conj.) id. (see attestations in Kronasser 1966 : 403 and Oettinger 1979 : 198). The CL stem could be a ye-deverbative to CL *kat-mar-š+ (cf. the Hittite pattern of ye-deverbatives [frequentative/ durative] based on consonant stems [semelfactive], e.g. ha-at-i+/ha-ad-g+ /hat/- 'strike (once)' : ha-az-zi-(a=)i+ /hatye/- : ha-az-zi-a+ /hatya/- 'strike (repeatedly); play a string instrument').

13. ki-(i=)ša-a+ 'to comb'

act. prt. pl. 3 ki-ša-an-da XVIII 24 III 21

participle ki-i-ša-am-m[i-iš] XXXV 108, 40

ki-ša-am-ma-an XXXV 88 III 15

See Laroche 1959 : 55 with lit. and the Hitt. cognate.

Cf. Hitt. ki-i-ša-a-i+ 'to comb, card' (IV. 21 q.v.).

The CL attestations are ambiguous with regard to the conjugation type.

14. la-ah-hi-i+ 'travel'

mid. prs. pl. 3 la-ah-hi-i[n]-ta-ri XXXV 79 IV 12

See Laroche 1959 : 61 with the Hitt. cognate.

Cf. Hitt. la-ah-hi-la-i+ : la-ah-hi-la-(a=)+ id. IV.

23. The CL attestation is ambiguous with regard to the stem's conjugation type.

15. la-(u=)wa-ar-ri-(i=)+ 'break, pierce'

act. prt. sg. 3 la-wa-ar-ri-it-ta XIII 35 II 32

participle [la]-wa-ar-ri-ma XIII 35 II 29
(pl.acc.neut.)

infinitive la-u-wa-ar-ru-na XXIV 3 II 30

See Laroche 1959 : 63 with lit.

It is possible that the stem has a cognate in Hittite, namely tu/du-wa-ar-ni-(i=)+, etc. id. (VIII. 2). For CL l : Hitt. t/g word-initially, cf. Hitt. da-a-i : da-a+ 'take' : CL la-(a=)a+ id. (q.v. in Laroche 1959 : 61), cf. HL ta-la, etc. id. The attestations are insufficient for determining the CL stem's conjugation type.

16. li-la-i+ : li-la-a+ 'absolve'

act. prs. pl. 3 (?) li-la-an-t[1] XVII 32 I 19

imper. sg. 1 (?) li-la-i-lu XXXII 13, 6 (2x)

pl. 3 li-la-an-du- XXXII 13, 7; 10

See Laroche 1959 : 63 with lit.

Cf. Hitt. li-la-a-i+, etc. 'conciliate, pacify' (IV. 6), ye-denominative of lila- c. 'conciliation, pacification'. The stem's conjugation type in CL cannot be determined on the basis of the attestations.

17. na-na-a+ 'see'act. prs. sg. 3 na-na-a-ti KBo IX 143 Vs.3'
755/z r.col.2' (Starke 1980 : 145)

přt.	1	ma-na-a-ha	XXXV 8 I 4; 96, 6; 7
	3	ma-na-a-ta	XXXV 99, 4; KBo VII 68 II 15
imper.		ma-na-a-du	XXXV 88 II 12, 13, 15, 17
"incertain"		niš ma-na-a[XXXII 7, 10

See Laroche 1959 : 67 f. with lit. (meaning not given); now see Hawkins 1980b on this stem's cognate in HL (q.v. in section III below) and Starke 1980 on the CL stem.

There is also what appears to be a reduplicated stem based on the root of the above. It is attested as follows:

imper. sg. 2	ma-am-ma-an-na	XXXV 16 I 8 =XXXII 5+8 IV 12
	ma-am-ma-an-na-	XXXV 21 II 1 ibid.43 II 36 = 44, 6
3	ma-am-ma-an-na-ad-du	XXXV 16 I 10 ibid.133 III 21, 23
pl. 2	ma-am-ma-an-na-ten	XXIV 12 II 30 ibid. III 5 (gloss)

See Laroche 1959 : 67 and Starke 1980 : 145 ff.

The stem's conjugation type in CL is not clear because of insufficient attestation (pace Starke op.cit. p.146, one cannot be certain that reduplicated stems necessarily belong to the hhi-type, cf. e.g. pa-ap-pár-ku-wa-at-ti, redupl. of pár-ku-wa-i⁺ 'cleanse', see stems 21 and 22 below). The apparent HL cognate, however, belongs to the hhi-type, cf. LITUUS-LITUUS -na-i (Sultanhan stele line 5) prs. sg. 3 (see Hawkins 1980b : 136-8).

18. ma-ar-ša⁺ 'be fraudulent' (?)

act. prt. sg. 3 ma-ar-ša-ta XXXV 123 IV 8

See Laroche 1959 : 69 where adj. mar-ša-aš-ša KBo IV 14 II 59 (gloss) is also adduced.

Cf. the Hittite cognate stem mar-še-e-i⁺ : mar-ša-a⁺ 'be unfit, fraudulent' (XI. 2). The CL stem could be a thematization of root stem *marš- (e.g. *marš-anti resegmented as marša-nti*) or a vocalic stem (+a⁺ < *a-va- *a-ye- ?).

19. pa-ra-a⁺ (and pār-!) 'chase, drive away'

act. imp. sg. 3 pa-ra-ad-du XXXV 43 II 10

pār-du XXXV 90, 9

pl. pa-ra-an-du XXXV 88 III 7
ibid. 89, 7

See Laroche 1959 : 77 with Hitt. and HL cognates.

The Hittite cognate is the athematic pār-ah⁺/pār-h⁺ (mi-conj.) id. (q.v. now in Oettinger 1979 : 213). This correspondence suggests that the CL (and HL, q.v.) thematic forms are secondary in origin (whether the =a-a= of pa-ra-ad-du comes from a vocalized /x/, viz. /parxtu/ > /paratu/ or whether the form is due to resegmentation of act. prs. pl. 3, viz. /par/+/antu/ → /para/+/ntu/, is difficult to decide; the former is supported by the correspondence of HL tu-wa/i-tara/i- and Lyc. khair- 'daughter' to PIE

*dhugxtér- (:Hom. thugátēr, etc.), the latter is supported by the attestation of the athematic imperative form pár-du which may be the direct continuation of a pre-Luwian */parxtu/).

20. pa-ar-ri-i+ : pa-ar-ri-a+/pa-ri-ia+ 'coat, plaster'

act. pres. sg. 3 pa-ar-ri-it-ti XXII 61 I 19 (gloss)

pl. pa-ar-ri-en-ti ibid. 6 (gloss)

See Laroche 1959 : 78; ibid.: "Noter ū pa-ri-ia-u-wa-an-za: XXII 61 I 14; incertain: pár-ri-ya-i[t], (XXXV) 111 II 2"; with lit.)

This stem's derivational history is unknown to me.

21. pár-ku-wa-i+ 'cleanse'

participle pár-ku-wa-i-mi-in-zi XXXV 86 II 7
(pl.nom.comm.)

See Laroche 1959 : 79 with the Hitt. cognate.

Cf. Hitt. pár-ku-i-e-i+, etc. (I. 47); esp. MH* pár-ku-wa-a-i+ and the discussion on p.72 f.). The CL attestation gives no information about the stem's conjugation type.

22. pa-ap-pár-ku-wa-a+ 'cleanse'

act. pres. sg. 3 pa-ap-pár-ku-wa-at-ti XXXV 103 II 16

See Laroche 1959 : 79.

The stem is a reduplicative derivative of the above.
The stem shape could be original (with /ParKuwa/- from *ParKu-ye-, if one assumes that y went to zero in this position, i.e. intervocalically, before *a became i in Luwian after y; for the posited *ParKu-ye-, see Chapter II in the relevant lemma.

23. pa-ši-ha-(a-)i?⁺ : pa-(a-)ši-ha-a⁺ 'crush, mash'

act. prs. sg. 3 pa-ši-ha-a-ti XIV 3 II 25 (gloss)

prt. 1 pa-a-ši-ha-ah-ha Bc 4899 Vs.9

3 pa-ši-ha-a-it?-ta XIV 3 II 24

See Laroche 1959 : 80 with lit. and the Hitt. parallel.

Hitt. has pašihai- id. (see HW¹ : 164b and Burde 1975), which is likely to be a Luwian loanword (Oettinger 1979 : 381: "Priorität des Luwischen ist sehr wahrscheinlich"), in view of the lateness of the Hittite attestations. The stem looks denominative, but could be primary if it is a compound with the preverb pa⁺ (:Hitt. pi(-a)+/pa⁺) 'away, forth', on which see e.g. the Hitt. class IV lemma pa-i⁺, etc. and possibly also HL pa-sa-la⁺ (cf. Hitt. pi-aš-ši-la-a⁺) in the HL section below.

24. pu-(u-)wa-(a-)i⁺ 'crush'

act. prs. sg. 3 pu-wa-a-ti XXXVII 1 I 16

pu-u-wa-ti KBo IV 2 I 40

See Laroche 1959 : 83 with lit. and Hitt. parallel.

The stem's derivational history is opaque. Hitt. has pu-u-wa-(a=)₁⁺ LH (mi-conj.) id. which is likely to be a loanword from Luwian (so Oettinger 1979 : 385).

25. ša-(ah-)ha-ni-i/ša-ša-(a=)⁺ 'to soil, dirty'

act. prt. sg. 3 ša-ah-ha-ni-iš-ša-at-ta XXXV 45 II 21

ša-ha-ni-eš-ša-ta XXXV 48 II 14

Cf. Laroche 1959 : 83.

The stem is a †ša-ša-(a=)-durative/iterative (cf. Hitt. -/ske/-) to what appears to be a *ye-(> Luw. -i-, see Summary below) denominative to ša-ah-ha-an⁺ 'dirt' (cf. Laroche loc.cit.). †ša-ša-(a=)-duratives combine with the hhi-series endings.

26. šap-pa-a⁺ 'to peel, strip'

act. prt. sg. 3 šap-pa-at-ta VIII 50 III 16 (gloss)

See Laroche 1959 : 85.

Cf. Hitt. (MH) class IV stem ši-ip-pa-i⁺ id. (q.v. in Chapter II), apparently a cognate (whose =i-i= may stand for /e/ which corresponds to Luwian /a/ except under special conditions, see summary at the end of this chapter). This stem is possibly a -ye-denominative of *šap-pa- (: Hitt. *ši-ip-pa-) 'peel' or the like.

27. ša-aš-ša+ 'lie (down)'act. imper. sg. 2 ša-aš-ša XXXV 133 III 17

See Laroche 1959 : 87 with the Hitt. cognate.

Cf. Hitt. ša-aš+ : ša-aš+ (mi-conj.) id. and especially its /ske/-stem ša-aš-ki-a+; the CL thematic stem is most likely to be cognate with the latter (viz. the root stem ša-aš+ plus the iterative-durative suffix -/ssa/-). It is also possible, however, that the thematic stem is the result of resegmentation, e.g. act. pres. pl. 3 /sas/+/anti/ (athematic) → /sasa/+/nti/, etc. Although the conditions under which CL consonants are written "double" are far less clear than those described for Hittite (see the introductory section to Chapter II; on the CL situation, see discussion in Morpurgo 1982 : 250 f.), it seems reasonable to suppose that the "double" writing =š-š= in this stem is due to the presence of the thematic suffix -/ssa/- (:Hitt. -/ske/-). It is for this reason that I prefer the former explanation.

28. ta-hu-ši-ia-a+ 'tolerate, watch calmly'act. prt. sg. 3 ta-hu-ši-ia-ah-ha Götze 1925 III 63 (gloss)

See Laroche 1959 : 89 with lit.

The Hittite parallel (cognate?) suggested by Laroche loc.cit., namely tuhuš(š)la- id. (its attestations I know of are LH), is problematic because of the vowel match in the

first syllable (CL a : Hitt. u), which is difficult to explain.⁸⁷ The stem's conjugation type in CL is not shown by the attestation.

29. ta-da-ra-(a-)u/û-(i-)i+ : tar-ra-wa-u-u+

'overcome'

act. prt. sg. 3 ta-ra-a-u-i-it-ta XXXV 54 II 36

pl. 3 tar-ra-wa-u-un-ta VI 15 II 8 (gloss)

imp. sg. 3 da-ra-u/û-id-du XXXV 45 II 25-26
ibid.48 II 21

See Laroche 1959 : 92 with lit.

Apparently, a -ye-denominative of tarru- 'mighty', cf. Hitt. tarru- id.; so Laroche loc.cit. The stem's conjugation type cannot be determined from these attestations.

30. tar-mi+/tar-ma!-i+ 'peg down'

act. prt. sg. 3 tar-mi-ta KBo IX 145, 4

imper. pl. tar-ma!-in-du XXXII 5+8 IV 23

See Laroche 1959 : 93.

⁸⁷ The etymology for the Hittite stem in Oettinger 1979 : 326, viz. "heth. tuhuš(ā)îē- 'ruhig zusehen' *tuh₂s-îē- (mit regulärer Anaptyxe...)" (also "ai. tūnīm ās 'ruhig dasitzen' < *tuh₂-", loc.cit.) does not take into account the CL parallel and does not deal with the fact that the stem is written with a single h, which creates difficulties for its interpretation as *x (=h₂).

Note also the šša-iterative: tar-mi-iš-ša-an-du
(imper.pl.3) KBo IX 145, 8.

The stem is denominative (*-ye-) of tar-mi-i+/tar-ma⁺
(attestations see in Laroche 1959 : 92 f.). Cf. Hitt. tar-
ma-(a-)a/i+, etc. 'peg down' (IV. 13). The CL stem's
attestations are not sufficient for determining its
conjugation type.

31. ti-ta-i-(i=)+* 'give tit, nurse'

Preserved in the participle ti-ta-i-(im-)me-iš 'nursed
(one), nursling' KBo II 1 I 33, 40 (gloss) (Laroche 1959 :
98). Denominative of tita-* 'tit' (cf. n-stem ti-i-ta-an +
'tit' in dat. sg. ti-i-ta-ni XXXV 103 III 6 and Hitt. (UZU)
tita(n)- id.). The HL and Lyc. cognates see below.

32. tu-u-um-ma-a-ta-i-i+* 'hear'

Attested in the participle tu-u-um-ma-a-ta-i-im-mi-iš
XXXV 34, 4 (Laroche 1959 : 99). Cf. the HL cognate below.

33. du-(ú-)pí+/du-(ú/ú)pa-i⁺ 'strike'

act. prs. sg. 3 du-ú-pí-ti XXXV 21 Rs.20
ibid.28 I 1
ibid.103 III 13

participle du-ú-pa-im-mi-i-iš XXXII 8 III 28-29

du-ú-pa-i-mi-in XXXII 8 III 12-13, 18-19

See Laroche 1959 : 99 for more attestations and lit.

Cf. Hitt. (MH and OH**) tu-pi-i+, etc. 'caedere' (?) I. 79 and the HL and Lyc. cognates discussed below. See the Hittite lemma for a discussion of the stem's origin and derivation.

34. ú-wa-ta-a+ 'lead'

act. imper. pl. 3 ú-wa-ta-a[n-du XXXV 102 Rs.2
ibld.103 II 14

See Laroche 1959 : 104.

In Hittite, the stem ú-wa-te-(i=)+ : ú-wa-te/da-a+ 'bring/lead over here' is the cognate (while Hitt. ú-i-da-a-i+ 'lead' also has to be kept in mind as a possible cognate, q.v. sub IV. 30 in Chapter II). See Chapter II, XII. 2 and Summary on class XII stems. See Chapter IV for a detailed discussion.

35. wa-aš-ša-a+ 'to dress, clothe'

act. prs. pl. 3 wa-aš-ša-an-ti I 11 III 3
mid. prs. pl. 3 wa-aš-ša-an-ta-ri IX 31 II 23

See Laroche 1959 : 108.

Laroche loc.cit. also lists prt. sg. 1 wa-aš-ha XXXV 54 II 32 in the same paradigm, with the note "même vb.?" following the listing; indeed it is not clear whether this form has anything to do with the stem⁸⁸ The medial form

⁸⁸ If it does, it could be due to resegmentation of

corresponds to the Hitt. ú-a-aš-ša-an-ta which occurs in the same text (MH, IX 31 I 37).

Compare this stem with Hitt. wa-aš-ša-i+, etc. *id.* (XI. 1). See discussion in Chapter IV.

3.3 HIEROGLYPHIC LUWIAN

The writing of Hieroglyphic Luwian⁸⁹ makes it more difficult to distinguish between consonantal and vocalic stems because signs of the HL syllabary are all of the shape CV (there are no VC signs). It is therefore due mostly to the Hittite and CL evidence that one can ascertain the existence of both types of stems there.

/wassa+/nti/ as /wass+/anti/, i.e. the reverse of the thematicizing resegmentation.

⁸⁹ The edition of HL texts which I use here is Meriggi 1967 - 1975 (three volumes), still the most complete edition to date. The system of transliteration of HL syllabary signs adopted in the dissertation is that of Hawkins et al. 1973.

There is as yet no up-to-date HL grammar or lexicon. As a dictionary, the obsolete Meriggi 1962 is still useful.

Indispensable, with their discussions of important points of grammar and vocabulary as well as numerous textual samples, are papers by J. David Hawkins and Anna Morpurgo Davies such as Hawkins 1971, 1975, 1978, 1980a, 1980b, Morpurgo 1979, 1980, 1982, Hawkins and Morpurgo 1975, in addition to the already mentioned Hawkins et al. 1973.

A brief sketch of the HL verb is attempted in Oettinger 1979 : 565 - 570.

Examples of consonantal (and thus athematic) stems are:

á-sá+ 'be' (e.g. á-sá-ta prt. sg. 3 Karatepe VI Hu 37 et passim), á-tá+ 'eat' (e.g. á-tá-tu imper. pl. 3 Sultanhan g = /adantu/, á-za-tu imper. sg. 3 Karaburna 2, 3 = /aʔtu/ = [atstu], cf. the Hitt. [ts] in place of the root-final /d/ before the initial /t/ of an ending, e.g. act. imper. sg. 3 a-iz-du OH** XLIII 23 Vs.3' vs. act. ind. prs. sg. 1 a-it-mi).

Vocalic stems include the patently athematic -nu-stems (such as i-sá-nu+ 'seat (trans.), establish', e.g. prt. sg. 1 SOLIUM -i-sá-nu-há Karatepe XXXI Ho 158; cf. the thematicized SOLIUM -i-sá-nu-wa/i-ha Hu ibid.) and the stems which show traces of the hhi-series endings. Of these two groups, the former are not discussed here at all, while the latter are considered when relevant (e.g. as evidence that an ambiguous or wi-conj. CL stem originally belonged to the hhi-conjugation). As to the vocalic stems possibly containing thematic suffixes, only the least problematic have been selected for the purposes of this dissertation. These include the following:

1. á-ia+ : á-à+ 'do, make'

prs. sg. 3 á-ia-ti-i Sultanhan, line 6

In this section, I had to rely on my own reading of the published HL texts (the Meriggi edition, with revisions suggested in the Hawkins and Morpurgo papers mentioned above).

á-à-ra/i⁹⁰ Maraş II, line 2

Cf. CL a-a/i-i-a-(a=)⁺ : a-(a=)⁺ id. (see the preceding section, stem 1).

2. á-wa/i-(i=)⁺ = PES-wa/i-(i=)⁺ 'come'⁹¹
and (PES₂)-i⁺ : i/i_a⁺ 'be on one's way'

prs. sg. 1 i-wa/i Kululu I C, line 6

- 3 PES-wa/i-ti Karaburçlu
Carchemish A 11 c, 1.2 (2x)
Gaziantep I

PES-wa/i-ra/i Sultanhan b
Porsuk (end)
Çalapverdi I, 1.3

PES-wa/i-ti-i Aleppo II C, 1.4 (2x)
ibid. B, 1.6

PES₂-i-ra/i Topada, 1.3
Çekke, rev.10

pft. sg. 1 PES-wa/i-i-ha Carchemish A 11 b, 1.5

PES-wa/i-i-ha-â Carchemish A 1 a, 1.3

- 3 PES-wa/i-ta Carchemish A 1 a, 1.3

PES-wa/i-tâ Carchemish A 11 c, 1.6
Veliisa, 1.1

⁹⁰ On the rhotacism in HL now see Morpurgo 1982. In the Hawkins et al. transliteration of HL, the sign '+' (plus) is used to indicate the joining of the syllabary signs ra/i and MI to the preceding sign. In my transliteration, I have replaced this plus with a hyphen which is more convenient for my purposes, since I already use the plus to indicate morpheme boundary. To go back to the Hawkins et al. transliteration, one only has to replace hyphens before ra/i and MI with plusses.

⁹¹ On "FOOT-wa-" (i.e. PES-wa/i-) as identical to "a-wa-" (i.e. á-wa/i-), see Hawkins 1971 : 113 - 6. Morpurgo 1979 : 591: "...the interpretation awi- (rather than awa-) of PES-wa/i-i- is now certain."

Körkūn A, 1.3

PES₂-i-tà Kayseri C, 1.6

imp. sg. 3 á-wa/i-i-tu Kululu I C, 1.5

PES-wa/i-tu Carchemish A 4 d

PES₂-i-tu-u Tell Ahmar VIII, 5.4

i/ia-tu Emirgazi B, 1.6

To these might be added PES-wa/i-i in Bolkarmaden, line 5, and in Palanga, line 3(end). In the Palanga text, however, there is too little context to be certain about the grammatical interpretation of the form, and the form in the Bolkarmaden text is equally problematic (see a discussion of the form and the passage in Morpurgo 1979 : 591 f.).

The stem á-wa/i-(i-)⁺ is a compound of the root stem (PES₂-)i⁺ with the preverb á-w⁺ 'hither' cognate with the CL a-u-i⁺/a-wi⁺ 'come' and i-(i-)⁺ : i-ia-a⁺ 'go' (see the mentioned CL lemmata in the preceding section for other cognates and discussion). Thus, the stem belongs in this survey only on descriptive grounds.

3. ha-ti-(i-)⁺/ha-ra/i-(i-)⁺ 'strike, write'

prs. sg. 3 LOQUI-ha-ti-i-ti Assur letter f 1 ('writes')

LOQUI-ha-ra/i-i-ti Assur letter a 3

ARHA ha-ra/i-i-ti Topada, line 8 ('strikes, destroys')

imp. sg. 3 ha-ra/i-tu Bolkarmaden, line 5(end)

ARHA ha-ra/i-tu-u Topada, line 8

With the logograph LOQUI, the stem means 'write' (in the Assur letters); with the preverb ARHA (and in one case without it) it means 'strike', 'smite', 'destroy' or the like.

The stem is apparently a **-ye-*deverbative of the root stem *ha-i+* which is attested in prt. pl. 3 ARHA *ha-ta-ta* Karaburna, line 1(beg.) ('they smote/destroyed'), in the participle *ha-ta-ma* (neut. pl.) 'destroyed' (e.g. Kululu I B-C, line 1: *á-wa/i REL-la DOMUS-na-á ... á-sa-ta ha-ta-ma wa/i-tà ta-ma-ha* 'and the houses which had been destroyed I (re)built') and in the noun *ha-tu-(á)-ra/i-(i-)+* 'writing, letter' (attestations in the Assur letters). It is cognate with Hitt. *ha-az-zi-(a-)+* 'strike; play (a musical instrument)' derived from *ha-at-t+/ha-ad-d+* 'hit' (I. 27, with discussion).

[Possibly derived from the same root is the stem (Meriggi) *li-ha-ta-li-(i-)+* 'destroy, defeat', the conjugation type of which is uncertain. Its attestations are:

- prt. sg. 1 *li-ha-ta-li-i-ha* Karatepe Hu xxviii 144
li-ha-ta-li-há ibid. //Ho
li-ta-li-ha ibid. Hu xxv 129
li-há-ta-li-há ibid. //Ho
li-ha-ta-li-ha Carchemish A 25a
 3 *li-ha-ta-li-i-ta* Karatepe Hu xxvi 135
li-há-ta-li-i-ta ibid. //Ho

This stem looks denominative, viz. a *-ye-derivative of a noun based on the root ha-t+.]

4. i-zi-(i-)+ : i-zi-ia+ 'make, perform'

Below is a representative list of forms of this copiously attested stem:

- prs. sg. 1 i-zi-i-wa/i Karatepe lxix 365
Til-Barsip I, line 7
passim
- 3 i-zi-i-ti Kōtūkale, line 6
Boybeypınarı III B, 2; passim
- i-zi-i-ti-i Tekirderbent I, line 3
- i-zi-ti Karatepe lxvii 359
- pl. 1 i-zi-ia-mi-na Cekke B, 4
Carchemish A 4 a, line 1
- i-zi-ia-mi-na-à Sultanhan Base, line 9
- prt. sg. 1 i-zi-i-ha Karatepe Hu and Ho viii 44; passim
- i-zi-i-há ibid. Hu x 52; passim
- i-zi-i-ha-à Maraş IV, line 5
- i-zi-ha Karahöyük, line 10
- i-zi-ia-ha Maraş III, line 2
- 3 i-zi-i-ta Topada 6
- i-zi-i-tà Karatepe iii 17
Izgın D 6, line 7
passim
- i-zi-i-tà-à Carchemish A 26 f, line 3
- i-zi-tà Karatepe Ho xviii 88
- pl. i-zi-ia-ta Carchemish A 11 a, line 3(mid.)
Karaburna i(end)
- act. imp. sg. 2 i-zi-ia-à Assur letter b 1

- 3 i-zi-i-tu Izgin D, 19
 i-zi-ia-ru Karatepe Hu 1 281
 i-zi-ia-rú ibid. //Ho
 pl. 3 i-zi-ia-tu Kululu I, line 5
 Cekke B, line 12
 mid. imp. sg. 3 i-zi-ia-ru Carchemish A 3, line 3(end)

Extra-HL connections of this stem remain problematic.
 See a discussion in Hawkins et al. 1973 : 44.

5. LITUUS-na⁺ 'see'

As J. D. Hawkins has shown (1980), with the help of Frank Starke's identification of the CL cognate (1980), the phonetic shape of the stem is mana-* (cf. CL ma-na-a⁺ 'see' in the preceding section). Below is a representative list of the attested forms of the stem (for a complete list of attestations, with discussion, consult Hawkins 1980):

- prs. sg. 2 LITUUS-na-ti-sa Assur letter g "1" (3)
 3 LITUUS-na-ti Carchemish A 15 c, line 3
 LITUUS-na-ti-i Carchemish A 3, line 4
 LITUUS-na-ra/i-i Assur letter g "4" (2)
 pl. 1 LITUUS-na-mi?-na? Izgin B, 11
 prt. sg. 1 LITUUS-na-ha Carchemish A 11 b, line 5
 3 LITUUS-na-tà Carchemish A 2, line 3
 participle LITUUS-na-mi-sa Carchemish A 17 b, line 2

On the 2nd sg. ending -ti-sa now see Morpurgo 1980 : 104.

6. DOMUS-na-zi+ 'construct'

prs. sg. 3 DOMUS-na-zi-ti Kululu I C, line 6(end)

The stem is to be read parnazi-* (cf. the phonetic spelling of the DOMUS logogram in Karatepe lviii Ho: DOMUS-pa-ra/i-ni dat. sg. [the parallel version Hu has DOMUS-n(-i)]).

The nominal stem from which the verb is derived is common to most Anatolian languages, cf. CL pár-n+ 'house', Hitt. pí-ir : obl. pár-n+, Lyc. prān-* id. and Lyd. bir-.

From the same nominal stem is derived the verb stem (DOMUS.)CRUX-pa-ra/i-na-wa+ 'be in service' (attested in Karatepe lviii 325: Hu CRUX-pa-ra/i-na-wa/i-tu-u // Ho DOMUS."CRUX"-pa-ra/i-na-wa/i-tu, [imperative pl.3]); cf. the morphologically identical Lycian prānawa- 'build' q.v. in the Lycian section below. The stem's attestations are insufficient for determining its original conjugation type; but, in view of its denominative derivation, the stem is likely to belong to the wi- (=Hitt. mi-) conjugation.

7. (SA₄)-sa/sá-ni/ní-(i-)+ 'remove'(?)

prs. sg. 3 sa-ni-i-ti Erkilet II, line 1

sa-ni-ti Erkilet I, line 2

SA₄-sa-ni-ti Kululu II B, line 3
Carchemish A 18 e, line 3

SA₄-sá-ni-ti Carchemish A 11 a, line 6

SA₄-sá-ní-ti *ibid.*

SA₄-sá-ní-ti-i Babylon stele, line 6

The meaning 'remove' is inferred from the contexts (Hawkins 1975 : 146). I do not know of any extra-Anatolian cognates to this stem.

8. AEDIFICARE-MI/ta-ma⁺ 'build'

See attestations in Hawkins 1971. To these, the following crucial ones should be added:

prs. sg. 3 AEDIFICARE-MI-ra/i-i-i Karatepe lxxi 373

AEDIFICARE-MI-ra/i-i *ibid.* 379

These forms determine the conjugation type of the stem (namely, *wi-conj.*). The stem is discussed in Morpurgo 1982 : 261 f. (with references). The phonetic interpretation of the writing as tamari^{*} (rhotacized from tamati^{*}) is based on full spellings of other forms, such as prt. sg. 3 ta-ma-ta Karaburna, line 1, *et passim*.

Anna Morpurgo Davies (Morpurgo 1982 : 262) explains the HL stem as cognate with "IE *démH₁- attested e.g. in Greek démō, Myc. future participle de-me-o-te. A present from this root must either be an athematic form *démH₁-ti or a thematic form parallel to the Greek form: *démH₁-e-ti; a form *démēH₁-ti is excluded because in Luwian it would presumably yield *dmīti... *démH₁(e)ti ought to become *dāmāti..."

As W. Cowgill points out to me, Myc. de-na-o-te does not constitute good evidence for the laryngeal as *x' (=H₁) since Greek seems to generalize -eo- as the stem in liquid future; also, Hom. dēmas 'build, stature' suggests that the laryngeal was *x (i.e. H₂). Of the two forms from which the HL may be more plausibly derived, namely *dēmx-ti and *dēmx-e-ti, the former is quite sufficient (while the latter is unparalleled and requires further justification). As we have seen (see the CL section above, stem pa-ra-a+, etc. 'chase, drive away'), *x between consonants becomes a in Luwian languages, e.g. HL tu-wa/i-tara/i- 'daughter', Lyc. khair- id. (: IE *dhugxtér-); thus the protoform *dēmx-ti would lautgesetzlich give Luw. /damati/, and there is no need to posit any other proto-stems.

- 9.a. PES₂(PES)-tara/i-pi-(i-)+
 'tread upon', 'trespass' (?)
 b. (PES₂.PES-)tara/i-pa+ id.

prs. sg. 3 (a) "PES₂"-tara/i-pi-ra/i Tūnp I, line 3

(b) tara/i-pa-à-ti Karahöyük, line 11

prt. sg. 3 (b) PES₂.PES-tara/i-pa-ta₅ Carchemish A 6, line 4

imp. sg. 3 (a) PES₂.PES-tara/i-pi-i-tu Carchemish A 2, line 5

PES₂.PES-tara/i-pi-tu-u ibid. line 6

PES₂.PES-pi-tu Şirzi, line 4

"PES₂PES"-tara/i-pi-ru-u-à Kayseri, line 5

participle (b) PES₂.PES-pa-mi-na Şirzi, line 4

The proper name (?) tara/i-pa-i-mi-i-sa Assur letter a, 2 (participle, sg.nom.comm.) may or may not belong to the same paradigm (see Hawkins 1975 : 136: "Tarpamis: perhaps a PN; otherwise "the TARPA-ed man".")

The relation of the stems (a) and (b) is problematic. One possibility is that stem (b) is a consonant stem (viz. /TarP/- or the like) and stem (a) is a *ye-stem based on it; cf. e.g. stem 3 above, where the correlation, identical to the Hittite, is "consonant stem (forme de fondation) : *ye-stem (forme fondée)". Another possibility is that stem (b) continues an *=a-ye-stem, i.e. *ye-stem based on an a-stem noun; on this subclass of the *ye-class in Hittite, see the summary of Chapter II. But, while the first possibility is supported by morphological parallels in HL and in Hittite, the second is little more than a conjecture (the participle tara/i-pa-i-mi-i-sa q.v. above being the strongest piece of evidence in its favor; the noun which occurs in the phrase "CRUX"-tara/i-pa CRUS-i Aleppo II A 6 "transgresses" (?) could be either a consonant or an a-stem).

CL has tar-pi-(i-)+ 'trample' (?) comparable with the HL stem (a) as well as the deverbative tar-pa-at-t+ which could be derived from either *tarp- or *tarpa- (< *tarpa-ye-?) (HL stem (b)); see attestations in Laroche 1959 : 93. Thus, CL does not contribute anything to solving this morphological problem. In any case, there is no need to posit a simple thematic prototype for stem (b).

Oettinger 1979 : 569 adduces HL "tarpi-i-/tarpa-i- 'sich aufhalten [? A.L.]" as an example of "Mischflexion zwischen I 2 d [=my =a-ye-subclass] und I 2 c [= my =C-ye-subclass]".

10. AUDIRE-(ma-)-(ti-)(i-)+ 'hear'

The stem was identified by Hawkins (1975 : 151 f.). Its attestations are as follows:

prs. sg. 3 AUDIRE-ti-ti Carchemish A 32, line 5

prt. sg. 1 AUDIRE-ha Carchemish A 6, line 3

3 AUDIRE-ti-i-ta ibid. line 2 (twice); line 3

participle AUDIRE-ma-ti-mi-i-sa ibid. line 1

AUDIRE-ti-mi-sa, Bohqa, line 1

AUDIRE-mi-sa Maraş I, line 4

To these must be added AUDIRE-ta-ra/i-ru Carchemish A 11 c, line 5 (end) and AUDIRE-ta-à-ra/i-ru Assur letter g, line 1, which are difficult to interpret. The latter is plausibly interpreted as a rhotacized 2nd person pl. imperative (see Morpurgo 1980 : 91 ff. where this interpretation is proposed). With regard to the former, Morpurgo 1980 : 92 footnote 12 suggests that "the two r-syllables of the ending may perhaps point to a middle form". To propose a more specific solution, I would suggest that the form is perhaps middle 3rd person pl. imperative, which would fit the context: á-va/i za-à-zi DEUS-ni-i-zi AUDIRE-ta-ra/i-ru 'and let these gods be heard' (if the form is mediopassive) or

'and let these gods hear for themselves' ("obey"?) (if the form is mediopassive). This interpretation would require an emendation, namely that the oblique stroke ra be read after AUDIRE and not after ia (assuming that the stonemason made a mistake). Morphologically, the form would be a rhotacized version of *tummaTa(n)taru (where the capital T shows the dental to undergo rhotacization; for the reading of the stem, cf. CL tu-u-ua-na-a-ta-i-i- 'hear' in the CL section of this chapter; for the ending, cf. CL [Laroche 1959 : 142] and Hitt. -nitaru). If these interpretations are correct, then the shape of the stem required by the two problematic forms is tumata-* (not tumati-* required by most of the attestations); cf. Morpurgo 1980 : 92 footnote 12, with a brief discussion of "stem hesitations" in HL and CL.

11. ("X")tu-pi-(i-)+ 'strike, incidere'

prs. sg. 1 tu-pi-wa/i Karatepe lxiv 349

3 "X"-tu-pi-ti-i Kayseri, line 3

tu-pi-i-ra/i Sultanhan (base), line 13

Cf. the CL stem du-(u-)ni+, etc. id. in section II above and Hitt. tu-pi-i+, etc. 'caedere' (?) (I. 79). See also the next section.

12. LITUUS-u-ni+ 'know'⁹²

⁹² The transliteration here is LITUUS-u-ni- (in agreement with Hawkins 1980) rather than u+LITUUS-ni- as in Hawkins

The stem is discussed in Hawkins 1975 : 131 (No.14) and esp. 150 (Appendix 2). Attestations:

prs. sg. 3 LITUUS-u-ni-ti Assur letter g, line 4
 prt. sg. 1 LITUUS-u-ni-ha Carchemish A 15 b, line 4
 participle LITUUS(-)u-ni-mi-sa Palanga, line 3

The stem serves as the base for the causative LITUUS-u-na-au⁺ 'cause to know, teach' (Carchemish A 15 b, 4: LITUUS-u-na-au-ta prt. sg. 3; for the context, see Hawkins 1975 : 150 f.)

In addition to these, there are a number of stems that are not sufficiently well attested to be directly useful for my purposes but should nonetheless be mentioned because of their relation to thematic stems of the other Anatolian languages. These include the following:

VIA-(ha-ra/i-)wa/i-ni-(i-)⁺ 'send'. Attestations: prs. sg. 2 VIA-ha-ra/i-wa/i-ni-sa Assur letter d 2; VIA-wa/i-ni-si Assur letter f 4; prt. sg. 3 (or 2? on this latter possibility, see Morpurgo 1980 : 103) VIA-wa/i-ni-ta Assur letter a 3; f 4; imperative sg. 2 VIA-ha-ra/i-wa/i-ni Assur letter d 2 (twice), 3 (twice), g 3, 4 (twice); et passim in Assur letters; VIA-wa/i-ni-i Assur letter g 3, 4. Compare

1975. See Hawkins 1980 for the uses of LITUUS.

this stem with CL (hapax) har-wa-an-ni-it-ta XXXV 89, 16 (Laroche 1959 : 43). Although the third person sg., crucial for determining the conjugation type of the stem, is not attested, chances are the stem belongs to the *wi*-type because of its denominative derivation (cf. HL "VIA"-wa/i-na Karatepe xxxiv 180 'road'; CL KASKAL ^{HI.A} - wa-an-za pl.acc.comm. XXXV 107 III 14; originally an *n*-stem?).

ARHA (LEGERE) li-sa/saa⁺ 'take away, remove'. This stem (newly identified here, as far as I know) depends on the identification of the sign (Meriggi) 127.5. Prt. sg. 1 ARHA li-sa-ha appears in Gūrūn B, line 4, in a context where the meaning 'remove' seems likely: (4) MONS-na ha-
ra/i(-)REX? MONS-na-na mu-zi-na-à ARHA li-sa-ha wa/i-mu-à x
x -li-na zi(-)Y Z (5) x x wa/i-à URBS-mi-ni SOLIUM-nu-wa/i-
ha (Y, Z: unidentified signs): 'I removed [something]...
(5)and established [it?] in the city'. Prs. sg. 3 ARHA
42.1(=a variant of the MANUS sign) li-127.5-ti occurs below
in the same text (line 6), in the protasis of a punitive
formula (viz. 'if someone removes this X'): za-pa-wa/i Y-
za-ra/i-sa REL-i-sa (6) ARHA 42.1-li-127.5-ti pa-ti-pa-wa/i-
à MAGNUS.DEUS.TONITRUS MAGNUS.DEUS hi-pa-Z-sas MAGNUS.DEUS
SARMA IRA(-)sa-tu-à 'if someone takes away /removes [...],
then the great Thundergod, the great god H. (and) the great
god Sarma will be wroth toward him'. The same form, minus
logogram 42.1, appears in Širzi, in an almost identical

formulaic context: za-pa-wa/l (4) x x -pa? x PES₂-PES-pa-
mi-na REL-sa ARHA li-127.5-ti. Thus, on the basis of the
parallelism of li-sa- // li-127.5-, I propose that 127.5 be
read as sa. If so, then we have two forms of this stem,
viz. prs. sg. 3 -li-sa-ti and prt. sg. 1 li-sa-ha. The
stem could be compared with the Hittite (MH*, LH) stems
li-(l-)ša-l+ (mi-conj.), li-eš-š+ 'pick, remove'
(attestations and literature see in Oettinger 1979 : 206);
LEGERE would thus be an appropriate Latin label for 42.1.

Now on the interpretation of this stem. The cognate
Hittite root should be the starting point. The two Hittite
stems, namely the root stem li-eš-š+ (infinitive li-eš-šu-
wa-an-zi MH*? XXX 15 + Vs.1, 7, 17) and the =a-ye-stem
li-(l-)ša-l+ (the other attestations) point toward possible
interpretations of the HL stem either as an athematic (root)
stem (whether actually athematic, i.e. /lis/- inevitably
concealed by the inadequate writing system [or by our
inadequate understanding of it], or thematicized /lisa/-
[due to e.g. resegmentation of 3. pl. *lis-anti as *lisa-
nti]), or as an =a-ye-stem (?-ye-denominative to *lisa-
'removal' or the like?). Paucity of the usable data as well
as the problematic root vocalism in the Hittite comparanda
(original l? original g? if the latter, then how is one to
explain the unexpected correspondence of the HL l instead of
the expected g to the Hitt. g?) make further speculation
unwarranted. What is clear, however, is that there is no
need to posit a simple thematic prototype for this HL stem.

"PANIS"=ma-li-ri-i+ 'to honey'. The only attestation of this stem is in the passive participle "PANIS"=ma-li-ri-i-mi-sá (sg. nom. comm.) Maras I, lion, line 3. The stem can be interpreted as a ye-denominative to the consonant stem *malit- 'honey' (cf. CL ma-al-li-(i)-i+ id. [Laroche 1959 : 66], Hitt. mi-li-it XXX 36 II 1, Palaic ma-li-i+; cf. Gk. mélit- id., Goth. milli, etc.). The stem was identified by Anna Morpurgo Davies (Morpurgo 1982 : 250 footnote 18: "Another instance of an etymological -i- which is rhotacized...", etc.).

"CULTER"=pa-ra/i-tu-ni-(i)-+ 'sever'. The stem, with its two attestations ("CULTER"=pa-ra/i-tu-ni-tu-u and "CULTER"=pa-ra/i-tu-ni-i-tú, both imperative sg. 3, in Carchemish A 11 c, line 4), is discussed in Hawkins 1975 : 143. There is not enough information to decide what conjugation type it belongs to. However, in view of its denominative appearance, it is quite likely to belong to the wi-type (-ye-denominative to a -war : -un- stem?).

pa-sá-REL+ 'neglect'(?). The only attestation of this stem (pa-sá-REL-i pres. sg. 3 Sultanhan, line 5) shows it to belong to the Luwian counterpart of the hhi-conjugation (see also Morpurgo 1979 : 585 [list]). The stem is apparently cognate with Hitt. pa-aš-ku-i-i+ 'to neglect' (this was suggested by Gillian R. Hart, apud Hawkins 1975 : 119

footnote 9, where the Hittite stem is given as paškuwai-). See Chapter II, class I stem 34, for Hittite attestations and discussion. The disagreement between Hittite and HL with regard to the conjugation type is difficult to explain, unless one assumes that the HL attestation contains scribal error (possibly, incomplete for *pa-sà-REL-i-ti).

pa-sa-ia+ 'throw away'(?). The only attestation of this stem pa-sa-ia-tu-u-a imperative sg. or pl. 3, in a list of punitive actions to be undertaken by various deities against the potential violator) does not allow one to determine the conjugation type of this stem in HL. The stem is apparently related to Hitt. pí-eš-ši-(i-(a-))i+, etc. 'throw away' (I. 14), a compound of the preverb pí-(a-)+ 'away, forth' with the stem +š-ši-(a-)i+ (mi-conj.), see discussion in the mentioned lemma in Chapter II. A discussion of the possible etymon for the two stems can be found in Chapter IV.

MALEDICERE-tā/ta-tara/i-ia+ 'curse'. The stem is attested as follows: imperative sg. 3 MALEDICERE-tā-tara/i-ia-tu Carchemish A 3, line 3; Til-Barsip A, line 9; participle MALEDICERE-ta-tara/i-ia-mi-sa Carchemish A 3, line 4(end). The attestations are not sufficient for determining with certainty the conjugation type of the stem. The /a/-variant of the suffix is generalized for the

singular (if the relevant forms are indeed sg., which is not absolutely certain). Cf. the CL deverbative ta-(a-)ta-ri- la-(am-)ma-an in the CL section above, with discussion.

wa/i-mi-LITUUS+ 'find'. First identified by Hawkins (1975 : 135). Attestations: prs. sg. 2 wa/i-mi-LITUUS-si; prt. sg. 1 wa/i-mi-LITUUS-ha Carchemish A 15 b, line 5; Maraş VIII, line 3. As suggested by Hawkins (loc.cit.), the stem appears to be cognate with Hitt. ú-a-mi-(a-)i+, etc. 'find' (I. 21).

3.4 LYCIAN

⁹³ Lycian texts are published in Kalinka 1901 and Friedrich 1932 (the latter being a fuller transliterated edition, with better readings than Kalinka's); an important recently (1973) discovered Lycian text, viz. the Lycian-Greek-Aramaic trilingual, is published, with discussion in Carruba 1977 (with a parallel translation), Laroche 1979 (with ample commentaries and translation) and Neumann 1979 (as N 320, together with other texts found since 1901). The current state of publication and interpretation of Lycian texts is discussed in the introductory section of Eichner 1983. There is as yet no up-to-date grammar of Lycian; Neumann 1969 (compiled in 1963) is the only more or less complete (and in many respects obsolete) grammatical sketch of the language. A dictionary ("Glossar des Lykischen") is now being prepared by G. Neumann (see Neumann 1979 : 7). Important points of the Lycian verb morphology have been discussed in Heubeck 1981 (where 3rd person plural stem forms and endings of vocalic stems are for the first time identified with some certainty); some discussion of Lycian vocalic stems, based on Heubeck's results, is found in Morpurgo 1982 : 266-8. The transliteration of the Lycian alphabet employed here is that used in Neumann 1969 : 373, except that I use the Roman z instead of the

Lycian⁹³ apparently did not preserve any traces of the hhi-conjugation as a separate series (cf. CL and HL that did): stems cognate with hhi-verbs of the earlier Anatolian have the ending -i in the third person sg. prs., e.g. piḫiti 'will give' N 320.⁹⁴ 18-19 (redupl. of pi(i)- 'give' in piḫāḫ 'they gave' 57.4, piḫatu acc. sg. 'gift' 57.5 [on the interpretation of which see Heubeck 1981 : 164 with footnote 23, lit.]; cf. Hitt. pa-a-i 'gives', HL pi-ia-i id. Babylon stele, line 6; etc.), xuwati 'follows' 80.2, N 320.11 (cf. Hitt. hu-wa-a-i 'runs, moves'), tuwati 'places' (cf. HL PONERE-MI-tu-wa/i-i id. Maras VII A and elsewhere, often), uḫate 'brought' (prt. sg. 3) N 331.1, 313 m (cf. HL u-pa-i Sultanhan base, 11). These Lycian stems clearly fall outside the scope of this dissertation and will not be considered further.

The Lycian verb stems that can with some certainty be said to represent vocalic stems relevant to the discussion are listed below. Only samples of their attestations are given; complete lists of attestations will be found in Neumann's "Glossar des Lykischen" which, it is hoped, will soon appear.

Greek khi.

⁹⁴ The numbers following attestations are those of Lycian texts in Kalinka 1901 (the same numeration is preserved in Friedrich 1932) and Neumann 1979; the latter are preceded by the capital N. Text numbers are followed by numbers of lines (e.g.: 87.2 = Kalinka 1901/Friedrich 1932, text No. 87, line 2; N 320.18 = Neumann 1979, text No. 320, line 18).

1. a/a- : ai- 'do, make'

prs. sg. 3 (-)adi 59.2 (mei-j-adi
[Heubeck 1981 : 163])
91.3, 118.2, N 314a.3

edi 56.3 (?)

pl. 3 aiti 44c.17 (Heubeck 1981 : 163)

prt. sg. 1 agā 149b.13

3 -adē 52.1 (mē n-adē
Heubeck 1981 : 163;
other exx. ibid.)

pl. 3 (-)aitē N 320.9.30
N 320.22 (sewajaitē)
N 320.7 (maitē)
N 320.9 (sēnnaitē)
(on these complexes,
see Heubeck 1981 : 162 f.)

The stem is clearly cognate with the CL and HL verb
'make' (see CL and HL sections).

2. kumezi- : kumezei- 'sacrifice, officiate'

prs. sg. 3 komezidi N 320.26.29

pl. kumezeiti 149.11, etc.

infinitive kumezeine 150.9

For a full list of attestations, see Laroche 1979 : 108

f. For the distinction between sg. and pl. forms, see
Heubeck 1981 : 165 and 168. The stem is likely to be a
denominative of the same stem on which the form kumaziia
acc. sg. is built; whether the latter is a noun meaning

'sanctuary' or an adjective meaning 'holy' ('sacerdotal') depends on the interpretation of the syntagma kumezi lē:99ē N 320.7 on which now see Eichner 1983 : 59-62 (with a discussion of the morphology of the verb kumezi-, etc.). This derivational scenario seems to me more likely than the one that derives kumezi- : kumezei- directly from the noun kumaza 'priest' (49; acc. sg. kumazu N 320.9 : Gk. hierēa [line 8 of the Greek version of the trilingual, q.v. in Neumann 1979 : 45 f.], dat. sg. kumazi N 320.36 : Gk. hierai [line 30]), cf. Laroche 1979 : 109 and Morpurgo 1982 : 268. An argument against the direct derivation is the denominative xssaθrapaza- 'take over as satrap' (not *xssaθrapazi- or the like), q.v. in lemma 5 below.

3. prñawa- 'build'

prs. sg. 3 prñawati 109.6, 111.6
 prt. sg. 1 prñawaxā 40c.8
 3 prñawate 29.1; passim, often
 prñawatē 8.1; passim, often
 prñawetē 13.1 (hapax)
 pl. 3 prñawātē 6.1
 prñewātē 12.1 (hapax)

A noun prñawa* is also attested (acc. sg. prñawā 14.1, etc. passim, prñawu 39.1, etc. passim). Quite possibly, the verb is a *ye-denominative based on the noun.

Cf. HL (DOMUS.) CRUX-pa-ra/i-na-wa+ 'be in service' in the HL section above (lemma 6).

4. tubi- : tubei- 'strike'

prs. sg. 3 tubid1 44d.12 (Lyc.B), 80.3, 83.15
93.3, 102.3, 139.4, N 314b.4

pl. tubeit1 88.5, 118.3, 135.2, N 317.4

The stem is clearly related to CL tu-(i-)pi+, etc.
'strike', HL ("X") tu-pi-(i-)+ id. and Hitt. tu-pi-i+, etc.
id. See the relevant sections.

5. xssaθrapaza- 'take over as satrap'

prt. sg. 3 xssaθrapazate N 320.1

Heubeck 1981 : 158: "Trans. Verbum im temporalen Nebensatz; wörtlich etwa: 'er hatte (Lykien) als Satrap übernommen'. Formal (0-ate) und syntaktisch eindeutig 3.Sg.Prät." The verb governs an object in the accusative (viz. acc. sg. trmian: the Greek version is syntactically different from the Lycian:

āka:trmian:xssaθrapazate:pigesere:katalah:tideimi: 'when

Pigesere son of Katamla took Lycia over as satrap' : Gk.

apai Lukias xadrapēs egenato Pixōdaros Hekatomnō huos 'when Pixōdaros son of Hekatomnōs became satrap of Lycia').

The stem is based on a derivative of the noun xssadrapa 40d.1, etc. 'satrap'. The derivative's suffix is

reminiscent of the suffix in kumaza (: kuma 'sacred'), see lemma 2 above; also asaxlaza*, title of a functionary corresponding to Gk. epimelētēs 'caretaker, manager'; other examples and discussion see in Laroche 1979 : 98 f. The relation of =(a)za to =(a)zi (as in kumezi-, q.v. in lemma 2, and prānazi : Gk. epikēfēs [bilingual 6.2 : Gk. 6.5], cf. the HL stem DOMUS-na-zi+ 'to construct' in the HL section, lemma 6) is not clear. Laroche 1979 : 99: "Il est, en principe, possible que ce soient les deux faces d'un seul morphème, selon les caprices de l'harmonisation: nom. -aza; acc. -azu; dat. -azi -ezi." (On the suffix(es), cf. also Neumann 1969 : 380 with lit.). The conditions under which vowel harmony (assimilation) works in Lycian need to be further investigated (see Neumann 1969 : 376 on "Vokalharmonie" [a brief mention of the problem]).

In addition to these five stems, the stem tidei- should be mentioned here. It occurs in the originally participial stem tideimi 'son' (passim) 'nursed [one]', 'nursling', evidently cognate with CL ti-ta-i-(im-)me-iš 'nursling' q.v. in the CL section above.

Some of the stems that can be identified as verbal (and potentially thematic) are too uncertain to be of use here. These include tli- : talai- 'pay'???⁹⁵ (attestations: pres.

⁹⁵ On the meaning and etymology of this stem, now see Oettinger 1976 : 106 footnote 11 (where Oettinger

sg. 3 tīlidi 109.6, 111.3.4.5, 131.3, prs. pl. 3 tīleiti 102.2-3), (p)puwa- 'be written'??? (in N 320.23 seems to correspond to Gk. engégraphai; also occurs in 83.7 and 12-13, q.v. in the version edited by Laroche in Laroche 1979 : 71) possibly belonging to the same paradigm as pu- 'write'??? (attestations: Arbinas II line 3 apud Laroche loc.cit., prt. sg. 3 pudē; prt. sg. 3 pudē 78.5 and 87.4 [both preceded by ipñ, a preverb], prt. pl. 3 puñtē 114.2 [preceded by apñ of which ipñ is apparently a variant]),⁹⁶ xba- : xbai- (prt.pl.3 xbaitē in the trilingual N 320.14 corresponds to Gk. katērgasante; see discussions in Laroche 1979 : 68, who interprets the verb as "arroser, irriguer", and in Heubeck 1981 : 165 f. which also see for the attestations), xīia- : xītai- (see attestations and discussion in Heubeck 1981 : 169 ff.)

compares it with Hitt. tattaluški- "loskaufen" and German zahlen; the etymology is not compelling as the contexts of the verb are fairly obscure). Gusmani translates the stem as 'pay' (same as Oettinger) (e.g. in Gusmani 1979 : 134 footnote 21); Neumann 1969 : 393 has "wird erlegen" for tīlidi.

⁹⁶ For detailed discussions, see Laroche 1979 : 71 f. and Heubeck 1981 : 167 f., where Heubeck says inter alia: "Auch die bisherigen Erörterungen...haben noch nicht alle Probleme klären können. Rein formal scheint ein Paradigma puwati 3.Sg.Präs., -pudē (vielleicht *puwedē; ...)3.Sg.Prät., puñtē 3.Pl.Prät. nicht ausgeschlossen."

3.5 LYDIAN

In the very small Lydian⁹⁷ corpus where so much is still poorly understood, I could find but a few items of use for my present purposes. Among them, the stem vic- 'build' (prt. sg. 1 vicz 11.2, 22.1) which also appears as -vici- in the compound davici- 'to construct' (prt. sg./pl. 3 daviciil 13.7) seems to be the most certain in that its meaning is known. Since the letter q (= ↑ in the Lydian alphabet) represents a (voiced?) dental (see Gusmani 1964 : 32 f., with lit., and esp. Heubeck 1959 : 51-8 and Shevoroshkin 1967 : 23), the stem may be cognate with Hitt. ú-s-te-(i=)+, etc. 'build' (q.v. in Chapter II, class XII. 3); so e.g. Heubeck 1959 : 53, Gusmani 1964 : 225, Oettinger 1978 : 83 passim. The Lydian stem should be set up as vici-; as Oettinger plausibly suggests, "Prät.Sg.1 vicz zeigt, dass vor -z- der Stammauslautvokal i ebenso wie beim (Pro-)nomen geschwunden ist; Nom.Sg. ēm-i-ā 'mein' : Akk. ēm-z."

⁹⁷ Most Lydian texts are published, in transliteration, in Gusmani 1964 which also contains a grammatical sketch and lexicon of the language. Other grammars of Lydian are Heubeck 1969 (written in 1963, with a 1969 Nachtrag containing additional references) and Shevoroshkin 1967. Also useful for its discussions of the Lydian writing system and points of grammar is Heubeck 1959. Recent finds of Lydian inscriptions are published in Gusmani 1975 (in transliteration). Numbers after attested Lydian forms in this section refer to the texts published in Gusmani 1964.

Other possibly thematic verb stems include fānani- 'perform' (?) [meaning uncertain; possibly analyzable as a compound of the preverbs f(a)- and ān- with the stem -ani- which may be cognate with Hitt. a-ni-(a-)i⁺, etc. 'do, perform' (I. 1); Pal. a-ni-(a-)i⁺, etc. id.; CL a-(a-)an-ni-(i-)⁺ (q.v. above in this chapter); attested in the prt. sg./pl. 3 fānanil 15.2, see Gusmani 1964 : 124], ānrā- 'to order' [prt. sg./pl. 3(?) ānrāt; attestations and discussion see in Gusmani 1964 : 73; the form, possibly cognate with Hitt. ha-an-da/ta-(a-)i⁺ 'set in order, determine' q.v. in Chapter II (IV. 17), may in my view be an inherited prs. plural 3, from *handainti < *handayVnti (where V is either a or a)], fakorfi- 'damage' or the like [prs. sg./pl. 3 fakorfid 11.11; see discussion in Gusmani 1964 : 120, with lit.; analyzable as fa- (preverb) -korfi- possibly cognate with Hitt. kar-ni-i-i-i⁺, etc. 'raise'; 'perform (a service)' (I. 29), fakatvāmi- 'accede', 'entgegenkommen' (?) [prs. sg./pl. 3 fakatvāmid 22.14, perhaps analyzable as fa-kat- (preverbs) -vāmi- cognate with Hitt. ū-a-mi-(a-)i⁺, etc. 'find' and HL wa/i-mi-LITUUS⁺ id., see Gusmani 1964 : 119 and Oettinger 1979 : 81 footnote 30 where the Lydian stem, as if it were problem-free, is used to corroborate the reading of the HL].

All of these stems, in light of their Hittite (et al.) cognates, have to be interpreted as continuations of *-ye- stems. For further discussion of ylci- 'build', see Chapter IV.

3.6 SUMMARY

Most of the stems surveyed in this chapter are erstwhile *-ye-stems corresponding to several preliminary classes of Hittite. Thus, Hitt. class I (=C-ye-) a-ni-(a-)i+ 'perform' (primary) is matched by Palaic a-ni-(a-)i+ id., CL a-(a-)an-ni-(i-)+ id., Lyd. -ani- (?); Hitt. u-a-mi-(a-)i+ 'find' (primary) is matched by HL wa/i-mi-LITUUS+ id., Lyd. -vami- (?); Hitt. ar-ši-(i-)e-(i=)+ 'flow, run' (deverbative) is matched by CL a-ar-ši-is-a+ id., Hitt. ha-az-zi-e-i+ 'strike (repeatedly)' based on ha-at-t+/ha-ad-d+ 'strike (once)' is matched exactly by HL ha-ti-(i-)+/ha-ra/i-i+ based on HL ha-t+; denominative CL a-ta/da-ri-l(i=)+ 'feed' corresponds to Hitt. e-it-ri-e+* id. Hitt. class IV (=a-ye-) tar-ma-(a-)e/i+ 'peg down' based on tar-ma- 'peg' is matched by CL tar-mi+/tar-ma-i+ 'peg down', CL šap-pa-a+ 'peel' corresponds to Hitt. ši-ip-pa-i+ id.⁹⁸

⁹⁸ For a recent discussion of *-aye-denominatives in CL, see Morpurgo 1982 : 267 f. (esp. footnote 44). Morpurgo Davies's emphasis is on the place of accent and length, because she sees in them potential factors in the innovation she sets out to explain, viz. that some of the i-endings in Luwian are voiced (and rhotacized in HL) with some stems (while remaining voiceless with other stems). As far as the shape of the stem final in CL *-aye-stems, there are not enough data to determine with certainty why *-ye- was generalized in some stems (as apparently in tar-mi-/tar-ma-i-) and *-ya- in others (as in ma-ar-ša+); so Morpurgo 1982 : 268. Keeping in mind that the data are very scant indeed, I nevertheless cannot refrain from observing, in anticipation of the results stated in Chapter IV (but cf. the summary to Chapter II), that stems whose stem-final vowels continue an earlier *-e(-)ye-, such as ma-ar-ša+ : Hitt. mar-še-e-i+ < *marše-ye-, u-wa-ta-a+ : Hitt. u-wa-te-(i=)+ < *wad-eye-, wa-as-ša-a+ : Hitt. wa-as-še-i+ < *was-eye-, have /a/ as their stem final, while denominatives in *-a-

Hittite class V (-/ske/-) stems seem to be matched by CL $\check{s}a-$ $\check{s}a-(a=)$ stems such as $\check{s}a-a\check{s}-\check{s}a+$ 'lie down' (Hitt. $\check{s}a-a\check{s}-ki-$ $a+$ id.), $\check{s}a-(ah-)\check{s}a-ni-i\check{s}/a\check{s}-\check{s}a-(a=)$ 'to soil, defoul'.

Some vocalic stems go back to consonantal; such are CL $na-na-a+$ 'see', HL LITUUS- $na+$ id. (from $*nanax^{-99}$), CL $na-ra-a+$ 'chase' (: Hitt. $n\check{a}r-h+$ id.), HL $ta-ma+$ 'build' (< $*damx-$ or $*dmax-$, see the lemma in section 3). The verb 'go, be on one's way' with its compounds 'come' and 'go forth/away' (the latter only in Hitt.), q.v. in the relevant lemmata, is originally a root stem. Hittite class VII - VIII stems (characterized by stem-final $*-ni-$: $*-na-$) are possibly matched by Palaic $\check{s}u-\acute{u}-na-a+$ 'throw in' (: Hitt. $\check{s}u-\acute{u}-ni-a-i+$ id., a later transfer into the $*-ye$ -class [?]) and HL LITUUS- $u-ni+$ 'know' (cf. its caus. LITUUS- $u-na-nu+$ 'teach'; on etymology of the base stem in connection with Hitt. $u-u+$ (hhi-conj.) : $a-u\check{s}+$ (mi-conj.) 'see' and on the

$ye-$ such as $li-la-i+$ (to $li-la-$), $tar-mi+/tar-ma-i+$ (to $tarma-$), $ti-ta-i-i+$ (to $tita-$) have their stem finals in /ai/, etc. This leads me to conclude, very tentatively in view of the uncertain data, that y disappeared in the environment $*e_e$ in Proto-Anatolian (cf. Hittite), or in any case in Luwian before $*e$ coincided with a there (if it ever did phonetically and not just graphically, for the want of a better way to render e.g. an open a , closer to Hittite a than to Hittite \check{a}); thus, $*-eye-$ and $*-aye-$ were kept distinct in CL.

⁹⁹ Starke 1980 : 147: " $na-ah_2-ti...$ (dorisches $mn\check{a}ma...$)" (cf. the same in Oettinger 1979 : 447). See also Morpurgo 1982 : 261 with footnote 39 (the same etymology; the footnote: "Starke does not discuss the possibility of a proto-form $*m\check{a}nH_2(a)ti...$ presumably because he gives weight to the scriptio plena in $na-na-a-ti$ and to the contrast between the simple $-n-$ of this form and the $-nn-$ of the reduplicated form.")

origin of the *-ni- : *-na-class in general, see Chapter IV).

CL ma-ar-ša+ 'be fraudulent' corresponding to Hitt. mar-ša-a+ id., CL wa-aš-ša-a+ 'clothe' : Hitt. wa-aš-še-i+ id., CL ú-wa-ta-a+ : Hitt. ú-wa-ta-(i=)+ 'lead/bring', and Lyd. yici- : Hitt. ú-a-ta-(i=)+ 'build' are discussed in Chapter IV.

Chapter IV

CONCLUSIONS

In the two preceding chapters, I have undertaken a stem by stem investigation of possibly thematic vocalic stems of Anatolian. In what follows, I shall present an overview of these stems, discuss the diachronic and comparative explanations advanced for them by my predecessors (where relevant); and propose my own when a satisfactory previous explanation could not be found.

In practical terms of a historical linguist, I consider an explanation satisfactory if it is consistent with other reasonable explanations of the data and if it manages to account for its explanandum with a minimal number of new unattested entities. To explain a linguistic object, in the same terms, is to find causes of its contemporary state, which amounts to specifying the object's preceding states and establishing relations between these preceding states and the contemporary state.

I begin my overview with a discussion of the Anatolian vocalic verb stems which belong to the possibly thematic stems descriptively but may be explained as originally athematic. Such are apparently the stems belonging to the preliminary classes VII and VIII of Hittite, brought

together as the *-ni- : *-na- class (see the summary to Chapter II), viz. hu-ul-li-i+ : hu-(u-ul-)la-(a=)+ / hu-(u-)ul-li-la-(a=)+ 'combat, defeat' (II) VII. 1¹⁰⁰ āu-ul-li-(i=)+ : āu-ul-la-(a=)+ / āu-ul-li-la-a+ 'confront aggressively' (II) VII. 2, tu/du-wa-ar-ni-(i=)+ : tu/du-wa-ar-na-(a=)+ / tu-wa-ar-ni-la-a+ 'pierce, break (into)' (II) VIII. 2 (also hur-ni-a-i+ : hur-na+ / hur-ni-la+ 'sprinkle, water' (II) VIII. 1 and possibly zi-in-ni-i+ : zi-in-na-a+ 'finish, make ready' (II) VIII. 3).¹⁰¹

It is convenient to begin the discussion with Hitt. tu/du-wa-ar-ni-i+, etc. 'pierce, break (into)'. In view of the evidence of the forms du-wa-ar-na-an-zi (pl. 3) and tu-wa-ar-na-zi (sg. 3, analogic, see the lemma and the reference there), the stem cannot be a *-yé-denominative ~~pace~~ Eichner 1973 : 75, which is possible, although not necessary, in the case of the CL cognate la-(u-)wa-ar-ni-(i=)+ 'break' discussed below. The IEP imperfective class which the Hittite stem resembles is the *-né- : *-n- infixing class (see Szemerényi 1980 : 250 ff., with lit., for the current views on these in IE; on this class in Hittite, see Oettinger 1979 : 135 ff. with lit.).¹⁰² N.

¹⁰⁰ Roman numeral II in parentheses refers to the chapter where the paradigm appears. The Roman numeral in uppercase letters (always after (II)) indicates Hittite stem class number.

¹⁰¹ The forms in +i-la-a+, etc. are secondary; see discussion in the relevant entries.

¹⁰² Carl Marstrand was the first to recognize this stem as an "n-present": "Que l'hittite aussi ait connu des

Oettinger rightly explains the stem as originally an "n-Infix-Präsens *dhurāh₁-ti zu *dhuerh₁- (ai. dhvri 'verletzen, beschädigen' (1979 : 151)).¹⁰³ The CL stem la-(u-)wa-ar-ri-(i=) 'break, pierce' (III) 2. 17, if related to the Hittite, may be a *-ye-stem, as Oettinger suggests ("lawarri- < *dh₁(a)rh₁-ia-", 1979 : 151).

Hitt. hur-ni-a-i+, etc., 'sprinkle, water' (II) VIII. 1 and zi-in-ni-i+, etc., 'finish' (II) VIII. 3 are likewise quite plausibly explained as erstwhile *-né- : *-n- infixing imperfectives (Oettinger 1979 : 151 f.). The former, as Oettinger loc.cit. points out, can be based on the root *xwerx'- (Pokorny 1959 : 80 f. "ager-"; in addition to Gk. ἄναυρος 'torrent' mentioned by Oettinger ibid. one could adduce Hom. αὔρα 'sea breeze' and perhaps Lith. vir-ti 'cook in water, boil' < *xw₂x'--); the stem would then continue pre-PA *xw₂-né-x'- : *xw₂-n-x'- (on *Xw₂ yielding Hitt. (h)uR-, see Eichner 1973 : 73 f. and Lehrman 1985). Etymologically, zi-in-ni-i+ is even more problematic (see Oettinger 1979 : 151 f.). It is, however, almost certainly based on the root found in Hittite zi/zá-a-(i=) 'be prepared/cooked'; see Oettinger's zila- (1979 : 515) for attestations.

verbes de ce type ["type sanskr. prnāti, armén. dnem ... a côté d'un plus ancien prnāti", in Marstrander's own words -- A.L.], c'est ce qui est indiqué par du-wa-ar-ni-iz-zi, qui n'est guère un verbe dérivé par ja." (Marstrander 1919 : 76).

¹⁰³ The connection of the root of tu/du-wa-ar-ni-i+ with Ved. dhvri was made by Goetze (1954 : 403).

The alternation -ni- : -na- in the paradigms of these stems, with some forms pointing toward the generalization of the latter (e.g. prs. sg. 3 tu-wa-ar-na-zi beside du-wa-ar-ni-(iz-)zi) is paralleled by the stems of the provisional class VII, especially the copiously attested hu-ul-li-i+, etc. 'combat, defeat' (II) VII. 1. Both class VIII and class VII stems show later transfers to the provisional class I (mostly *-ye- stems to roots and consonant stems, see below). The evident parallelism of the two provisional classes in Hittite led me to regroup them into one class (see the summary to Chapter II). There is also good comparative evidence which shows that the stem hu-ul-li-i+, classified by Oettinger (1979 : 261 ff.) as simple thematic descriptively and explained by him as such historically, continues a *-né- infixing formation. Oettinger (1979 : 264) takes the stem back to "*h₂ulh₂-á-ti (für *h₂ulh₂-á-ti)". This is one of his two examples of the simple thematic type with the root in the zero grade and the accent on the thematic vowel (the iudáti type). Oettinger's explanation runs into difficulties. The rule which, in Oettinger's view, describes the assimilation of the putative root-final *x to the preceding *l, is stated as follows: "ṽRh₂V > ṽRRV" (see his paragraph 482). This presupposes a retraction of the accent, for which Oettinger gives no parallels or evidence (and I do not know of any). The very presence of the root-final "*h₂" in the posited "*h₂ulh₂-

éti" depends on Oettinger's claim that $*h_2ulh_2-é-ti$ is based on the same root as that of the root stem walh- 'strike'.¹⁰⁴ This claim involves him in several auxiliary hypotheses, one of which is the need to assume dissimilation of the sequence h---h in an earlier stage of walh-. Hittite walh- cannot be proved to have had an initial $*x$. Even more problematic is the need to suppose that Hittite inherited (or created) two stems from the same root, differing only as thematic vs. athematic, and then kept both, but with semantic differentiation.

An attractive explanation for Hitt. hu-ul-li-i+ (suggested to me by W. Cowgill) is based on comparison with Hom. ὀλλύμι 'I slay/destroy', midd. aor. sg. 3 ὀλετο 'was slain/destroyed'. The root aorist (as well as other formations such as ὀλε-τήρ 'slayer/destroyer') suggests that the IEP root was $*x^w\acute{a}lx'_{-}$ (ὀλε- < $*x^w\acute{a}lx'_{-}$). The present ὀλλύμι < $*ol-nū-mi$ is possibly a replacement of the inherited $*ol-nāmi$ < $*x^wl_{-}nē-x'_{-}mi$ (see e.g. Rix 1976 : 210).¹⁰⁵ Thus, Oettinger's problematic explanation is not the only one possible and Hitt. hu-ul-li-iz-zi may well be a continuation of $*x^wl_{-}nē-x'_{-}ti$.¹⁰⁶

¹⁰⁴ Oettinger 1979 : 264: "Prät. Sg. 3 walhta ist m.E. aus $*h_2ualh_{-}t$ (Vz. Aor. Inj. h_2uēlh_{-}t) dissimiliert. Lat. volnus 'Wunde' steht semantisch nahe und weist durch Unterbleiben der Assimilation (tollō 'ich hebe auf' < $*tolnō$) auf $*volanos$ < $*h_2uelah_{-}nos$ ".

¹⁰⁵ "Bei Wurzel auf $ldg. -e_1- -e_3-$ im Gr. $-nu-$ statt $*-ne-$ $*-no-$: ὀλλύμι ὀμ-nu-mi für $*a_1l-nē-a_1-$ $*a_1m-nā-a_1-$ (cf. $*a_1ala_1-$ $*a_1ama_1-$ in Aor. olá-s-al omó-s-al).

Middle forms such as prt. sg. 3 hu-ul-la-at-ta-ti,
 imper. sg. 3 hu-ul-la-at-ta-ru, active plurals such as prs.
 sg. 3 hu-ul-la-az-zi, tu-wa-ar-na-zi are then explained as
 based on the expected forms with the infix in the zero
 grade, viz. *--n-x'-C-- (*Cx'C > Hitt. CaC; see also Eichner
 1973 : 55).

A vast majority of the genuinely thematic stems must be
 explained as containing the suffix *-ye- : *-ya- (: PIEP
 *-ye- : *-yo-; see on these Szemerényi 1980 : 254 ff. with
 lit.) used to form primary and secondary (both deverbative
 and denominative) stems.¹⁰⁷

The primary *-ye- : *-ya- stems of Anatolian (i.e.
 those built to roots not attested as separate stems in
 Anatolian) are as follows:

¹⁰⁶ A phonological implication of this explanation of the
 VII and VIII class stems is that PIEP *-ex'- is matched
 by Hittite -i- under certain conditions which are not
 entirely clear (cf. e.g. Hitt. medium tantum a-as+ 'sit'
 corresponding to PIEP *(x')ex's- 'sit' [:Ved. as-ta
 'sits', Hom. hēs-tai id.] where PIEP *-ex'- is matched
 by Hitt. -e-). Is it possible that Old Hittite had, in
 addition to /e/ and /i/, also a phoneme /ə/ (: PIEP *ex'
 and perhaps *ey), which the Hittite writing system could
 not handle adequately? This question will have to remain
 unanswered for the time being.

¹⁰⁷ Their profusion in Hittite was recognized already by
 Marstrand (1919 : 78: "Les formations indo-
 européennes du présent en ie / io eurent un
 développement particulièrement fort en hittite. Il va
 donc sans dire que l'hittite a connu tant déverbatif que
 dénominatif, même si à l'heure actuelle nous ne sommes
 pas encore en état de les distinguer l'un de l'autre".

Hitt. a-ni-a-(i=)+ : a-ni-ia-(a=)+ 'act, perform, work (the soil)' (II) I. 1, Palaic a-ni-i+ / a-ni-e-i+ : a-ni-(i-)ia- 'do, work' 3. 1. 1, CL a-(a-)an-ni-(i-)+ : a-ni-(a-)ia-(a=)+ 'do, perform' 3. 2. 3, possibly also Lyd. an-i- 3. 5. The Hittite causative an-na-nu- 'train, drill', based on the same root, shows that the root perhaps ended in *x'.¹⁰⁸

a-ri-ia-(a=)+ 'ascertain through an oracle' (II) I. 2. The alternant a-ri-a+ is attested only in -ske-formations (see lemma), a-ri-ia-(a=)+ being generalized for prs. sg. 3 a-ri-ia-zi (MH*). On the possible etymon, see Oettinger 1979 : 345 (with lit.)

ha-ri-a+ : ha-ri-ia-a+ 'bury' (II) I. 3 (with discussion). The reduplicative -ye-stem ha-ah-ha-ri-ia- 'to rake' (see the same lemma) is apparently also based on this stem (for the semantics, cf. Russian za-kopat' 'bury': pro-kopat' / raz-kopat' 'to rake'). For the reduplicative type of deverbatives differing from their bases in Aktionsart, cf. Luw. ta/da-(a-)ia-(a-)ri-ia-(a=)+ 'curse' ← *'talk (badly)' to Hitt. ta-ri-ia-a+ 'invoke, appeal' (itself based on ta-i(r)+ : tar- 'say' q.v. below), Hitt. ti-it-ti-ia- 'place (around)' to ti- (hhi-conjugation) 'place', la-lu-uk-ki-i+ 'glimmer' to luk- (medium tantum) 'be light'

¹⁰⁸ Possibly an-na-nu- < PA *anx'-nu-. Oettinger's connection of this stem's root with that of Lat. onus (1979 : 345: "an(n)ie- 'leisten'... möglicherweise *h₁n₁-i_é zu *h₁ón₁-es- (lat. onus 'Last')", is possible but not compelling.

(discussed below). The root of ha-ri-e⁺ may be cognate with IEP *xérx^w- 'plow' (Gk. αρόο 'plow', etc., i.e. ha-ri-e⁺ would come from pre-PA *xrx^w-yé-.

i-i⁺ / i-e-(i=)⁺ / i-a-(a=)⁺ : (i-)ia-(a=)⁺ 'make/do'
 (II) I. 4, CL. a-a/i-ia-(a=)⁺ : a-(a=)⁺ id. 3. 2. 1, HL.
á-ia and á-a id. 3. 3. 1, Lyc. a/a= : ai id. 3. 4. 1.
 This Hittite stem is graphically identical to Hitt. i-e-i⁺
 / i-a-a⁺ : i-ia-(a=)⁺ (medium tantum) 'go, be on one's way'
 which is attested only in Hittite [(II) I. 5].

Oettinger takes Hitt. ia and Luwian *aya id. back to pre-PA (his IE) simple thematic "*h₁é-i-a-" (1979 : 349; see also Morpurgo 1982 : 268 for a similar opinion of Anna Morpurgo Davies). This, however, is not the only possible explanation of the problematic Hittite stem. As the correspondence of Hitt. lu-uk-ki-i⁺ : lu-uk-ka⁺ 'set alight' and wa-aš-ša-i⁺ : wa-aš-ša-a⁺ 'clothe' to PIEP *lowk-éye- : *lowk-éyo- 'light'(tr.) and *wos-éye- : *wos-éyo- 'clothe', as well as some others, seem to show (q.v. below), the PIEP sequences *éye and *éyo are matched in Hittite by /e/ and /a/ respectively. If so, then Hitt. i-a-i⁺ cannot be a continuation of "*h₁é-i-a-", etc., which would result in Hitt. *e-, etc. On the face of it, Hitt. i-a-i⁺, etc., looks like a root i- (zero grade of *(x')éy-?) plus the suffix *-yé- : -yé-.¹⁰⁹ Luwian a/aya remains opaque. This problem deserves further investigation (see

¹⁰⁹ For 'go' = 'do', cf. e.g. Nez Perce. I owe this example to W. Cowgill's personal communication.

1983
 Lehrman¹ [forthcoming]). Here I will only emphasize that one is in no way forced to see in Hitt. ia-i+, etc. or in Luw. a-(ia-)+, etc. a simple thematic present.

pi-(i-(a-))i+, etc. 'send away' (II) I. 6 and u-i-a-i+, etc. 'send hither' (II) I. 7, whatever their etyma,¹¹⁰ do not have to be regarded as simple thematic.

Other primary *-ye-stems (most of which are non-controversially *-ye-verbs) include ši 'a-i+, etc. 'throw, shoot' with its compounds pi-aš-ši-(i-(a-))i+, etc. 'throw away' (II) I. 14 and u-uš-ši-i+, etc. 'pull up (a curtain)' (from *'throw hither'?; the semantics depends on the technology of the procedure) (II) I. 15 (for discussion, see Oettinger 1979 : 347 f. with lit.; ta-(a-)i-i+, etc. 'steal' (II) I. 18,¹¹¹ which, whatever its origin, is certainly not a simple thematic stem; šu-wa-i-i+, etc. 'look (after)' (II) I. 17, the etymology of which remains obscure; ti-i((a-)i=)+, etc. 'stand (up), place oneself' (II) I. 20, which has been explained by Watkins (1969 : 57) as continuing IE *(s)tx-(i)ye- to root *stex 'stand' (see also

¹¹⁰ Possibly, compounds of the preverbs pi-(e-)+ 'away' and u- 'hither' with a stem cognate with Hom. hīēmi from *yi-yex¹-mi (so Oettinger 1979 : 348; on hīēmi see also Rix 1976 : 203)? The etymology is by no means compelling.

¹¹¹ The preservation of the intervocalic y in this stem is possibly explained by the stem's genetic relation with PIE *(s)tex-ye- (see Watkins 1975 : 371 and Oettinger 1979 : 397, pace Jasanoff 1977 : 187 f. who proposes the etymon *tox-eye-, the outcome of which in Hittite would be *tahhai- or the like).

Oettinger 1979 : 350 with lit.)¹¹² ú-e-mi-(a-)i+ 'find' (II) I. 21, HL wani- id. 3. 3. 20 and possibly Lyd. -vāni- id. 3. 5. < PA *wemye- (the further etymologizing of this stem as a compound of ú- 'hither' with the root *em- 'take of e.g. Lat. emō 'get', which goes back to Hrozný,¹¹³ is dubious in view of the HL cognate: one would expect Luwian *awani-, cf. HL awi- 'come' : Hitt. ú-e-i+, etc. id.;¹¹⁴ and some others.

The function of Anatolian *-ye-deverbatives to root stems, not previously noticed, as far as I know, by anyone, is to form lexically idiosyncratic iteratives to semelfactives. This function of the suffix *-ye- is evident in Hitt. ha-az-zi-e-i+, etc. 'strike, pluck, play (a musical instrument)' (II) I. 27 based on Hitt. ha-at-t+ (medium tantum) 'hit, chop', cf. HL hati-/hari- (< *hat-ye-) 'strike, write' 3. 3. 3 based on hat- 'smite, destroy' (I reconstruct PA *xat-ye- : *xat-ya- based on *xat-); Hitt. ia-ri-ia-a+ (medium tantum) 'invoke, appeal (for oneself)' (II) I. 35 based on Hitt. tar+ 'say',¹¹⁵ Hitt. ú-e-ri-i+,

¹¹² Cf. already Pedersen 1938 : 112: "In der Bedeutung 'hintreten, sich stellen' ist die Wurzel *sta- zu einem -liq-Stamm (nach der -m-Konjugation) weitergebildet worden".

¹¹³ Apud Pedersen 1938 : 82 footnote 1.

¹¹⁴ Note also the recent proposal by Seebold (1983 : 43) that *wemye- < *g^wem-ye-.

¹¹⁵ Cf. the *-ye-stem with C and HL tatarva- 'curse', a reduplicated stem to tarva-* (for the reduplication to a *-ye-stem, with a difference in Aktionsart, cf. Hitt. ha-ah-ha-ri-ia+ 'rake' to ha-ri-e+, etc., discussed

etc. 'speak, invoke' (II) I. 36 (cf. Hom. airō from *wer-yo--) based on the root stem attested in Hittite -wa-ar-, etc. 'quoth' and in Palaic ū-e-lr-ti 'says'; and (if deverbative) za-ah-hi-(e-)i+, etc. 'flight' (II) I. 84, possibly based on za-ah-h+ 'strike'. The same aspect-like (but lexical, not grammatical) distinction may well be the *raison d'être* of the pairs ar-ši-(i-)e-(i=)+, etc. 'flow, run, pour (intr.)' (II) I. 26 based on ar-aš+ / ar-š+ (mi-conjugation) 'flow, run, hurry' (cf. the Vedic root rs 'rush',¹¹⁶ hu-it-ti-(i=)+, etc. 'pull, draw' (II) I. 28 based on hu-e-iz+ (see the lemma); kar-pi-(i-(e-))i+, etc. 'raise, perform (a service)' (II) I. 29 (with the possible Lydian cognate -karfi- 3. 5. from *karp-(i)ye-) based on kar-ap+, kar-aš-ši-i-(e-)i+, etc. 'cut' (II) I. 30 based on kar-aš+ / kar-š+ (the hapax OH** kar-aš-še-iz-zi pres. sg. 3 is dealt with below); ma-al-ki-ia-a+ 'unravel' (II) I. 31 based on ma-la-ak+, pār-ki-ia-a+ 'raise, lift' (II) I. 32 based on pār-ak+, apparently cognate with IEP *bhrgh- 'high', cf. Arm. harir 'high', etc. (see also Oettinger 1979 : 356); pār-ši-(ia-)a- 'break (bread)' (II) I. 33 based on pār-aš+ / pār-š+, pa-aš-ku-i-i+ 'neglect' (II) I. 34 (: HL pa-sà-hya/i+ id.? 3. 3. 17) based on pa-aš-ku(=v=)+, and a few others.¹¹⁷

above).

¹¹⁶ Note that in Vedic, this root forms simple thematic presents, whereas in Hittite, we have a -ya-deverbative.

¹¹⁷ It may be noted, à propos the Hittite spellings of stem

The atelicizing function of the PA suffix **-ye-: *-ya-* in these stems is similar to, but quite different from, the imperfectivizing function of the IEP suffix **-ye-*. In IEP, the suffix is used as a grammatical means of forming imperfective stems to perfective roots, cf. e.g. **g^wém-* 'have gone (to), come' (inception and result of going; e.g. Ved. aor. sg. 3 *a-gan* < **e g^wem-t*) : **g^wm-yé-* 'be coming, be on one's way (to)' (e.g. Gk. *παίνομαι* 'I am coming', Lat. *ueniō* < **g^wm-yo-*, and the like.¹¹⁸ In Anatolian, the distinction between root stems and their **-ye-*-derivatives is that of Aktionsart: it is lexical, not grammatical (compare the function of the infix **-ne-* in Hittite *hunink-* 'injure' to the root stem *huk-* : *huk-* 'slay',¹¹⁹ which is to change the Aktionsart of the root in a rather unpredictable way, with the purely grammatical, predictably aspect-changing function of the imperfectivizing infix **-ne-* in IEP).¹²⁰ Compared with Anatolian, IEP has a rather neatly constructed system of juxtaposed stems differing not in their lexical meaning, but in the single noeme of aspect. The IEP situation with imperfective (present) forming suffixes (cf.

finals in *kar-ní-(l-(a)-l⁺* and the like, that in **-ye-*-stems to bases ending in CC (mainly RC and, in the case of *pa-aš-ku-*, SC), the extra *l* sign after the root evidently indicates a Sievers variant, viz. [iye] for [ye].

¹¹⁸ For the semantics of the correlation, cf. Russian *poiti*, *priti* : *idti*.

¹¹⁹ See e.g. Oettinger 1979 : 101 f.

¹²⁰ See e.g. Szemerényi 1980 : 250 ff. with lit.

also the perfectivizing *-s- of the aorist, just as neatly performing a single grammatical rôle) is just the kind that seems to me clearly a result of analogical spread: basically derivational suffixes with limited combinatorial properties come to be used, through analogy, with a growing number of roots, and a relatively neat system of predictable aspectual contrasts is built up. This scenario seems to me more convincing than its opposite, namely the one that ~~assumes~~ the loss of the IE aspect system by Anatolian, e.g. Eichner 1975 : 81 ff. If the distinction of mere aspect between two stems is lost, then how would it be retrieved to result in a lexical (semantic) difference between them? The two stems would become synonymous, and one of them would disappear, giving way to the other; or, they would coexist, in the same meaning, perhaps as dialectal or register variants; or, the erstwhile imperfective stem would be associated with and generalized for the tense in which it was typically used, namely the present and the erstwhile perfective stem would be generalized as the preterite stem. These are the developments found in IEP languages that lost the PIEP distribution of aspectual stems (e.g. Germanic, Italic, Baltic). This subject merits special investigation which I hope to undertake elsewhere, as it is outside the scope of this dissertation.

Denominative *-ye- : *-ya- stems are built to a variety of nominal stems, both consonantal and vocalic. The former

include Hitt. ap-pa-ta-ri-i+, etc. 'seize, take as deposit (on a loan)' (II) I. 39, ši-it-ta-ri-i+, etc. 'seal as purchased' (II) I. 75 (to deverbatives in -atar), lā-kar-ra-an-ni-a+, etc. 'pierce, make holes' (II) I. 54, tāk-ša-an/at-ni-i+, etc. 'level, smooth out' (II) I. 77 (to oblique stems of -atar deverbatives),¹²¹ ku-u-ru-ri-e-i+, etc. 'be hostile' (II) I. 44,¹²² še-hu-ri-a-i+ 'urinate' (II) I. 73 (to nouns in -ur / -war : IEP *-wṛ,¹²³ HL "CULTER"=pa+ra/i-tu-ni-(i-)+ 'sever' 3. 3. 16 (possibly to oblique stem in -un of the cognates of PIEP *-wṛ); ha-ap-pa-ri-e+/i+ 'give, turn over (to)' (II) I. 41, na-ah-ša-ri-(ia-)a+ 'be afraid' (II) I. 62, nu-un-tar-ri-(a-)i+ 'hurry' (II) I. 65, pa-an-ga-ri-ia-(a=)+ 'be copious, increase' (II) I. 66, wa-ag-za/ga-ri-ia-(a=)+ 'deprive' (II) I. 82 (to r-stems), ud-da-ni-ia-a+ 'proclaim' (II) I. 81 (to r:n-stem ut-tar), ku-uš-ša-ni-(i-a-)i+, etc. 'rent, lease, hire' (II) I. 45, lam-ni-i+ / lam-ma-ni-i-a+, etc. 'call, name' (II) I. 46, CL ša-(ah-)ha-ni-i/g+* 'soil, dirty' 3. 2. 27, HL VIA=(ha+ra/i-)wa/i-ni-(i-)+ 'send' 3. 3. 13 (to n-stems); ka-ru-(ū-)uš-ši-ia-(a=)+ 'be silent, hide' (II) I. 57, na-ak-ku-uš-ši-g+ 'be ritually impure' (II) I. 64, te-ik-ku-uš-

¹²¹ The lack of assimilation *in > Hitt. nn = Luw. in, on which see e.g. (Friedrich) HE¹ : 34 and 185, shows Luwian influence.

¹²² A -ye-stem, pace Watkins 1973 : 76 f.; see discussion in the lemma (esp. footnote 46).

¹²³ šehur 'urine' : IEP *sex'-wṛ to *sex'- 'throw', cf. mehur < *mex'-wṛ, Cowgill 1979 : 27 footnote 8, or : IEP *sēy-wṛ to *sēy-, cf. ghu 'come!' < *ey-aw 'go hither!'

āi-e-i+ 'show oneself, appear' (II) I. 78,¹²⁺ ha-liš-āi-
ia+, etc. 'to frame, plate, overlay' (II) I. 40 (to ha-li-
iš-ā+ 'frame' or the like; HL "PANIS"-ma-li-ri-i+ 'to
honey' 3. 3. 15 (to *malit- 'honey', cf. CL mallit- id.,
Hitt. milit- id. : IEP *melit-). These Anatolian
denominatives are paralleled in IEP by *-ye-denominatives
such as Ved. namas-vā- 'revere' (to nāmas 'reverence'),
Goth. namnian 'to name' (to namo 'name') : Gk. onomaíno 'I
name' (to ónoma 'name'), cf. Hitt. lam-ni-i+, etc. 'call,
name' to lāman 'name'.

The vocalic stems to which Anatolian -ye:-ya-
denominatives were built include i-stems, y-stems, a-stems
with the suffix in the a-grade (: IEP *o-grade [typically
transitive]), and a-stems with the suffix in the a-grade
(typically intransitive). Among -ye:-ya- denominatives to
i-stems, the following are most certain: hu-la-a-li-a+,
etc. 'enwrap' (II) I. 42 (to hulāli- 'roller, spindle'), hu-
ur-tal-li-(a-)i+, etc. 'mix up, confound' (II) I. 43 (to
hurtalli- 'adversary' ← *'confuser, deceiver' or the like),
nār-ku-i-a-i+, etc. 'cleanse' (II) I. 47 (to narkui-

¹²⁺ These three stems are apparently derived from
deverbative nominal formations with the suffix -us-,
zero grade of *-wos- which serves in IEP as perfect
participles; na-ak-ku-uš-ā+ is built on the root of na-
ak-ki-a-(i=)+ 'be heavy/difficult' (II) I. 63, te-ik-ku-
uš-ā+ on the root of da-ak-k+ (hhi-conjugation) 'be
similar, correspond to' cognate with the root of Lat.
docēre (Oettinger 1979 : 427), dacet 'it is
appropriate', etc.). J. Schindler (apud Watkins 1982 :
10) takes te-ik-ku-uš-ā+ back to IE *dek^ws- (Av. daxā-
'teach').

'clean'), cf. Palaic 3. 1. 5, CL 3. 2. 23; tū-(u-)ri-(a=)i+, etc. 'yoke, harness' (to tūri- 'spear, shaft, pole'; but see footnote 48, Chapter II, for the possibility that the verb stem is primary), ū-a-ši-i+, etc. 'graze, pasture' (II) I. 49 (to waši- 'pasture'). Among -ye:-ya-denominatives also possibly belong ša-a-ki-i+ 'reveal' (II) I. 71 (perhaps to šagai- c. 'sign') and za-ah-hi-(a=)i+, etc. 'to fight' (II) I. 84 (possibly to zahhāi- c. 'battle', unless deverbative to za-ah-h+ 'strike (a blow)', cf. above). Their putative nominal bases are i-stems of the type cognate with the hysterokinetic i-stem type of PIEP attested in e.g. Skt. sākhā 'comrade', acc. sg. sākhāvam, instr. sg. sākhvā and Gk. Sapphō, gen. Sapphōus.

The subclass of *-ye:-*-ya-denominatives to y-stems has been established only recently (Oettinger 1979 : 330 ff.).¹²⁵ These include ha-aš-šu-u-a-i+, etc. 'be king' (II) II. 1¹²⁶ (to ha-aš-šu-u+ c. 'king'), kap-pu-(u-)a/i+, etc.

¹²⁵ I am generally in agreement with Oettinger as far as the interpretation of Hittite verbs with stem-final =ua+ : =uya+ as *-ye-denominatives, except in two cases, namely his stem "paškua- 'reinigen'" which, as my data show, is based on an i-stem (q.v. above and in the relevant lemma), and his "paškua- 'vernachlässigen' (Nomen *pašku- unbelegt)", which is, as my more complete data indicate, a deverbative -ye-stem (see above and the relevant lemma).

¹²⁶ Whether C. Watkins is right or wrong in regarding this stem as an example of the denominative *-ex'-stative is immaterial for my present purpose: in neither case is there any need to explain this stem, or other preliminary class II stems, as simple thematic. In my view, however, the overall patterning of Hittite verb stem derivation makes the explanation of the stem in question (as well as of the other putative

'count, reckon, consider' (II) II. 2, šar-ku-e-l+, etc. 'put on footwear' (II) II. 3 (to šarku- 'high, elevated' → *"hoher Schuh" acc. to Neumann and Oettinger 1979 : 335 footnote 159), ša-ru-u-e-l+, etc. 'plunder' (II) II. 4 (to šaru- 'booty'), hu-iš-ú-e-l+, etc. 'be alive' (II) III. 2 (to hušū- 'live, fresh, raw').¹²⁷

Anatolian *-ye-denominatives to y-stems are paralleled in IEP, as a type, by Ved. -va-denominatives to y-stems, e.g. śatru-vā- 'act inimically' (to śatru- 'enemy'), Lat. statuō (to status).

Apparently it was Götze (1928 : 97) who first showed that Hittite stems in =a-(a-)e/l+: =a-(a-)+ are properly a subclass of the -ye:-ya- class of verb stems. The prelaryngealist interpretation of this class as "-āye-" factitives of the type found in e.g. Lat. domāre, which goes back to Pedersen 1938 : 136 (repeated in Kronasser 1966 : 468 ff.) has to be rejected. Hittite =a-(a-)e/l+: =a-(a-)+ stems are satisfactorily explained as *-ye-denominative (strictly desubstantial) factitives to thematic nouns with the thematic-vowel suffix in the a (: PIEP *o) grade (cf. the Hittite strictly deadjectival ahh- factitives to thematic stems, on which see Oettinger 1979 :

*-ex'-statives in Hittite) as a *-ye-denominative quite sufficient.

¹²⁷ For a different interpretation (as an *-ex'-stative) and derivation (from OH huš(u)want- 'alive'), see Watkins 1982 part I. However this may be, the stem is not simple thematic.

454 ff.), which contrast functionally with Hittite (and other Anatolian) *-ye-denominatives to thematic nouns with the suffix in the *a* grade (on these see below).

Anatolian *-ye: *-ya- denominatives to *a*-stem nouns with the suffix in the *a* grade include Hitt. ir-ha-(a-)i+ : ir-ha-(a-)a+ 'delimit' (II) IV. 3 (from *irha-ya- : *irha-ya-, with *y disappearing intervocally) based on irha- c. 'border, limit', li-la-a-i+ : li-la-(a-)a+ 'conciliate, pacify' (II) IV. 6 (to lila- c. 'conciliation, pacification') : CL li-la-i+ : li-la-a+ 'absolve' 3. 2. 18, par-ša-(a-)i+, etc. 'crumble' (tr.) (II) IV. 8 (to parša- 'bread crumb'), pa-tal-ha-a+ 'to fetter, tether' (II) IV. 9 (to padalha- c. 'fetter, ankle-cuff'), pid-da-(a-)i+ 'give (grants/allotments of land)' (II) IV. 10 (to pi-a-it-ta- n. 'grant, allotment (of land)'), dam-ma/mi-iš-ha-(a-)i+, etc. 'oppress violently' (II) IV. 12 (to dammašha- c. 'violence, subjugation'), tar-na-(a-)a/i+, etc. 'to affix, peg down' (II) IV. 13 (to tarna- 'peg', cf. Hom. térma 'goal mark (in a race)', Lat. terminus) : CL tar-mi+, etc. id. 3. 2. 33, a-ru-wa-a+, etc. 'bow, supplicate' (II) IV. 16 (to *arwa- 'supplication',¹²⁸ ha-an-da/ta-(a-)i+, etc. 'set in order, determine (through an oracle)' (II) IV. 17 (to *hanta- 'order' or the like) : CL ha-an-da-a+ 'set in order,

¹²⁸ Oettinger's assumption that this denominative is built on *arwa- < *ar-ya 'Gebet' = gr. *arwa (1979 : 365) is not necessary since the existence of nouns in -a < *-ex cognate with IEP feminines in *-ex cannot be proved for Anatolian.

prepare' 3. 2. 8 : Lyd. ānre- id.? 3. 5., ha-at-
ra-(a-)e/l+, etc. 'write, appoint' (II) IV. 18 (to *hatra-
 based on ha-at-it+ 'strikes', q.v. above), etc.

This class of Anatolian *-ye-denominatives can be directly compared with desubstantival factitives such as Hom. purgōō 'fortify' (to púrgos 'fortification') which no longer need be regarded as a Greek innovation; compare also Goth. sweraiþ 'honors' (to *-o-stem swer-s 'heavy') and Ved. ya.jñā-yá- 'make sacrifices' which may well continue the same transitive *-o-yé-type. Oettinger (1979 : 357 f.) assumes that "der Themavokal ē des Stammausgangs der thematischen Nomina bei ja-Ableitungen spätestens im Urhethitischen durch die Ablautvariante a (< g) ersetzt wurde". Oettinger further compares these Hittite denominatives with Greek factitives in -ōō, apparently regarding the two formations, however, as parallel independent innovations (although he does not state this explicitly). In this connection, he mentions the Greek differentiation between the mostly intransitive -áoō (< *-e-yo--) denominative type and the always transitive (factitive) -óō (< *-o-yo--) denominative type, "vgl. oknéō 'zögere' gegenüber doulóō 'versklave' (Nomina óknoσ, douλoσ)" (Oettinger 1979 : 358). He then notes: "Auffälligerweise sind auch im Hethitischen die Denominative auf ja- überwiegend transitiv, diejenigen auf ja- (uamja- Klasse, ta.jja- Klasse [both subsumed in my provisional class

I, see Chapter II], kappug-Klasse) überwiegend intransitiv" (ibid.). I believe that Oettinger could have made an even better case for the formal and functional parallelism (indeed identity) of the two *-ye--derivative types in Anatolian and Greek, had he not misclassified several crucial stems. These stems include ar-ša-ne-a+, etc. 'be jealous, envy' (II) IX. 1, uš-ne-a+, etc. 'be trader, trade' (II) IX. 2, pa-ap-ri-i+ : pa-ap-ra-a+ 'be impure, act profanely' (II) X. 3, mar-še-a-i+ : mar-ša-a+ 'be fraudulent' (II) XI. 2 : CL ma-ar-ša+ id. 3. 2. 20 and possibly ú-wa-ri-ta-i+ : wa-ri-ta-a+ 'be afraid' (II) XII. 4 and ta-an-na-at-ta-i+ 'be empty' (II) XII. 5. Oettinger erroneously classifies ar-ša-ne-a+ as "aršanje-", in disregard of the OH evidence (see (II) IX. 1 for attestations and discussion). He also normalizes mar-še-a-i+ as "maršje-" for no apparent reason and without discussion (see (II) XI. 2). pa-ap-ri-i+, etc., to Oettinger, is simple thematic (1979 : 282 ff.), and so denominative origin, to him, is ruled out; he analyzes the stem as "pa-pr-e-", explaining this odd formation (unacceptably, to my mind) in the following way: "Die Aktionsart könnte auf ein mit i redupliziertes, duratives Präsens (vgl. uridg. *sī-zd-a-ti 'sitzt'...) mit an die Wurzelsilbe angeglichenem Reduplikationsvokal weisen" (1979 : 284). The fact that this "reduplicated simple thematic" stem is unparalleled in Hittite is taken to indicate its

archaicity,¹²⁹ instead of making the explanation suspect.¹³⁰

Watkins's explanations of pa-ap-ri-i+, etc., mar-ša-e-i+, etc., and ia-an-na-at-ta-i+ (as well as of some other stems such as ha-aš-šu-u-e-i+ 'be king' and ku-u-ru-ri-e-i+ 'be hostile', on which see above) as *-ex'-statives are not necessary, and other explanations are possible and indeed desirable, if they help avoid unnecessary multiplication of explanantia.

One must start with explanatory options given by what is known about Indo-European Proper; one would hardly explain anything by positing *ad hoc* formations unknown in IEP. OH attestations leave no doubt that ar-ša-ne-e+, etc. is *not* a -ye-stem to a consonant-final *arsan-.¹³¹ Nor would it make any sense to call this stem "simple thematic": the shape of the root (: IEP * r_h Xson-? *orXsn-? *orXson-? * r_h Xsn-?) makes the label a misnomer when applied to the stem in question. The same holds, as we have seen, for pa-ap-ri-i+, etc. 'be impure'. The stem mar-ša-e-i+, etc. (CL ma-ar-

¹²⁹ "Diesem reduplizierten, einfach thematischen Verbum ist infolge seiner Isoliertheit im Hethitischen einiges Alter zuzutrauen" (loc.cit.)

¹³⁰ On the other stems listed above, see the relevant lemmata.

¹³¹ Watkins 1982: "OH/OS (la-e) ar-ša-ne-e-ši '(do not) be jealous'... This stative [to him, an *-ex'-stative -- A.L.] appears to be built on an adjectival derivative *aršana- < *ph₁as-no- parallel to those seen in YAv. aršiant- (Y.52.2) and Ved. īrṣyant- (TS 2.3.5.1) as well as īrṣyá- (AV, JB) and the substantival īrṣyā- (AV, MS)." (cf. Oettinger 1979 : 355: "aršanja- 'beneiden' [ist] eher von einem athem. Nomen abgeleitet (*ph₁son-jé-...)").

ša⁺) 'be fraudulent' can, in principle, be interpreted as simple thematic, because its root structure (mars- : IEP *mr̥s- or *mors-) permits such an interpretation. If simple thematic, it would belong to the tudāti-type, viz. PIEP *mr̥s-é- : *mr̥s-ó-, or to the simple thematic type with the root in the o grade. The existence of the latter type in PIEP is, however, dubious paca Hiersche 1963: most of the examples for *o grade presents are liable to be innovations of individual languages (see also Szemerényi 1980 : 248). Possibly, mar-ša-e-i⁺ is just such an innovation in Hittite (*m̥ors-e- from *m̥ers-e- under the influence of the initial labial, see Szemerényi loc.cit. with lit.; the same could apply to wa-aš-ša-i⁺, etc. 'clothe, dress' : CL wa-aš-ša-a⁺ id., q.v. below, from *wós-e¹³² from *wés-e-; cf. also lu-uk-ki-i⁺ : lu-uk-ka⁺ 'set alight' < *léwk-e- according to Hoffmann 1968). The trouble with this explanation is that the posited simple thematic stem *m̥ers-e- would be isolated, both in Hittite and IEP: active simple thematic transitive stems *wés-e and *léwk-e-, with which *m̥ers-e- would form a class, are not attested in IEP. Hoffmann's *léwk-e-ti (op.cit.) is based entirely on a face-value interpretation of the Hittite lu-uk-ki-iz-zi and is not supported by IEP attestations (the middle Ved. rócate does not in itself provide evidence for an old active *rócati (< *léwkati) which appears later in Sanskrit). Oettinger's *wós-e-ti (<

¹³² So Oettinger 1979 : 306 with reference to Hiersche 1963; see in more detail below.

*wés-e-ti?) is even more dubious since neither *wós-e-ti nor *wés-e-ti 'clothes, dresses' can be reconstructed for PIEP. Further, if Ved. mṛṣ 'forget, neglect' is cognate with the root of the Hittite stem, it is noteworthy that it has a root aorist (midd. sg. 2 mṛṣthās RV iii, 33. 8) and a matching *-ye-present (e.g. midd. pl. 3 ná mṛṣvante RV vi, 67. 7 'they are not remiss'), while Sanskrit marṣati (found only in Grammarians) is a later remake.

Beside the verb stem mar-ṣe-e-i+, etc., 'be fraudulent', Hittite has an a-stem adjective, marṣa- 'fraudulent, unfit'. Given the intransitive meaning of the stem mar-ṣe-e-i+ and the already mentioned Greek intransitive *-ye-denominatives to thematic nouns with the suffix in the a-grade (oknéō 'I hesitate' to óknos 'hesitation', philéō 'am friendly' to phílos 'friend(ly), dear', cf. also Ved. deva-yá- 'be godly, pious' < *deywe-yé-), I explain the stem in question as a *-ye-denominative to the thematic marṣ-a- with the suffix in the a-grade, namely mar-ṣe-e-i+ < *marse-ye- : marṣa- < *marse-ya-. Perhaps the OH plana writing mar-ṣe-e-i+ reflects disyllabic pronunciation [ee] soon after the disappearance of the intervocalic *y. The same may well apply to the plana spelling of OH ar-ṣa-ne-e-ši (see lemma), the stem of which I likewise explain as a *-ye-denominative to arṣana-*, a roman agentis in -ana- (: IEP *-ono- and *-eno-) or a verbal adjective in -na- (see footnote 131). The nominal base of

uś-na-e+, etc. < *uśne-ye- 'be trader, trade' may be a verbal adjective *uśna- or a syncopated nomen agentis *uś-ana- 'trader' to the root of uś- (hhi-conj.) 'buy' in the zero grade, cf. the same root in the full grade in Ved. vasná- n. 'price' < *wes-no- or *wos-no-, Lat. uēnum, uēnus 'sale'. pa-ap-ri-i+, etc., may be a denominative of pa-ap-ra+ 'impure' (perhaps cognate with IEP *bher- 'brown' [Pokorny 1959 : 136] 'filth-colored' → 'impure') and thus from *PaPre-ye-, etc. ta-an-na-at-te-i+ 'be empty' *Tannate-ye- to the attested adjective Tannata- 'empty'. The stem ú-wa-ri-te-i+, etc. 'be afraid' was listed by Eichner (1975 : 88) among the alleged compounds with PIEP *dhex'- 'place' (on the other items in Eichner's list, see below). This explanation, however, is not the only one possible. The stem in question may well be explained as a *-ye-denominative to a thematic nominal stem, perhaps a formation with a suffix akin to Lat. -ido- in timidus 'afraid' (to timeō 'fear'), fūmidus 'smoky' (to fūmus 'smoke'), etc., to the root found also in Lat. uereor 'am in awe, afraid of'. Oettinger's explanation of this stem, based on Eichner's list (viz. "...Dat.-Lok. *ueri eines Wurzelnomens der Bedeutung 'Verehrung, Scheu', und *dheh- 'festsetzen'; also ursprünglich wohl transitiv *'zur Verehrung setzen'"¹³³ Oettinger 1979 : 127), is possible but hardly compelling. In any case, it is not a simple thematic

¹³³ My question: how did the transitive become intransitive?

stem.

This discussion brings me to the deverbative transitives lu-uk-ki-l+ : lu-uk-ka+, etc. 'set alight' (II) VI. 1 (based on lu-uk+ midd. 'be light'), wa-aš-še-l+ : wa-aš-ša-a+, etc. 'clothe, dress' (II) XI. 1 (based on wa-aš+ midd. 'wear, have on') : CL wa-aš-ša-a+ id. (III) 2. 39 and a number of other transitive stems which may be deverbative (including the rest of "Elchner's list" mentioned above, viz. ní-e-hu-te-(l=)+ : ní-e-hu-da-a+ 'bring/lead over there' (II) XII. 1, ú-wa-te-(l=)+ : ú-wa-ta-da-a+ 'bring/lead over here' (II) XII. 2 : CL ú-wa-ta-a+ id. 3. 2. 38 and ú-e-te-(l=)+ : ú-e-da-a+, etc. 'build' (II) XII. 3 : Lyd. ylci- id. 3. 5.; iš-pár-ri-l+ : iš-pár-ra-a+ 'tread (on), trample' (II) X. 1 and šar-ri-(a-)l+ : šar-ra-a+ 'divide, cross over; transgress, break (an oath)' (II) X. 2.

Hitt. wa-aš-še-l+, etc. 'clothe, dress' is a transitive built to the medium tantum wa-aš+ 'wear, have on'. The correlation of the two stems, the former an -a:-a- active transitive with the root in the a-grade and the latter a root middle in the a-grade, is conspicuously matched in IEP by Ved. vās-āva-ti 'clothes, dresses' : vās-te 'has on, wears' where the former continues an active transitive with the root in the *o-grade and the latter, a root stem medium tantum with the root in the *e-grade (PIEP *wos-éye-ti : *wés-to--). Based on this correlation,

Eichner (1970) proved that Hittite wa-aš-še-i+, etc. is cognate with (in his terms, continues) PIEP *wos-éye-; this explanation of wa-aš-še-i+ is thus well motivated through comparison with IEP.¹³⁴

Hitt. lu-uk-ki-i+ : lu-uk-ka+, etc. 'set alight' [(II) VI with discussion], also a transitive active built to a medium tantum, lu-uk+ 'be light', must then be explained in the same way, namely as a transitive *-eye- : *-eya-stem, cognate morpheme by morpheme with PIEP *lowk-éye- : *lowk-éyo- (cf. Ved. rocáyati, YAv. raocalisiti). Hitt. lu-uk-ta (midd. prs. sg. 3) may correspond to PIEP *l^wek-to- (cf. *wés-to- above), or to PIEP *luk-tó- (so Hoffmann 1968 : 217 f.): for my purposes this is of no importance. On midd. lu-uk-ka-ta which is not identical to lu-uk-ta (pace Hoffmann 1968 : 218) and belongs to the paradigm of lu-uk-ki-i+, etc., see discussion in the lemma.¹³⁵

The Hittite =ta-(i=)+ : =ta/da-(a=)+ verbs ((II) XII) have been explained either as simple thematic (Pedersen 1938 : 131, Benveniste 1962 : 38 f., Risch 1965 : 240 f.) or as

¹³⁴ Cf. Oettinger's interpretation of the stem as a simple thematic *wós-e-ti, discussed above; his view is motivated not by the data but by the unsound view that pre-Anatolian *-eye-transitives are continued in the Hittite hhi-conjugation, which is stated in Eichner 1975 : 97 f. (Oettinger 1979 : 304 ff.), in contradiction to Eichner 1970.

¹³⁵ As regards the explanation of wa-aš-še-i+, etc. as an *-éye-transitive, W. Cowgill and C. Watkins agree (independently) with Eichner 1969, but as regards lu-uk-ki-i+, etc. they differ from both Hoffmann 1968 and Eichner 1969 in recognizing also this latter as an *-éye-transitive.

compounds of various preverbs with the root *dhex'- 'place' (Sturtevant 1951 : 121, Watkins 1969 : 69 with lit., Eichner 1975 : 88 f., Oettinger 1979 : 125 ff.). The latter view is suspect because of ad hoc preverbs and a particle, needed to account for the otherwise opaque phonetic chunks before the putative continuation of *dhex'-: thus, according to Watkins loc.cit.: "uwa- [in ú-wa-te-i+ -- A.L.] enthält eine zweisilbige Variante von u 'her', vgl. Skt. áya : lat. au-, aksl. u, oder es gibt u + eine Partikel oder ein verlorenes Präverb a wieder, vgl. vielleicht Skt. ā". pí-a-hu-te-i+ contains pa- 'thither' "+hu, die in a-hu 'komm'... und med. Impv. 2. Sg. -hu-t enthaltene Partikel" (cf. also the more elaborate versions of the particle and the lost preverb in Oettinger 1979 : 125 ff. and 129 f., with lit.; a different interpretation of a-hu see above). A synchronic analysis of pí-a-hu-te-i+ and ú-wa-te-i+ ((II) XII. 1 and 2) yields the uncompounded stem /wade/-: /wade/'lead/bring' which, in light of what has been said about wa-aš-ša-i+ and lu-uk-ki-i+ above is likely to continue a pre-PA *wedh-éye-, viz. an *-éye-transitive to the root *wedh-, the original meaning of which, namely 'go', is perhaps preserved in Old Irish, e.g. prs. sg. 3 fa(i)díd 'goes', prt. pl. 3 ro-fádatar Wb. 29c13 (Thurneysen 1946 : 429): *wedh-éye- 'lead', i.e. 'make go' is, then, the regular transitive (causative) to *wedh- 'go'. In any case, Hittite /wade/* cannot be taken as evidence for a simple thematic *wedh-e- in Anatolian.

The etymon of ú-a-te-i+, etc. 'build' (Lyd. vici- id.) remains problematic, but it need not be interpreted as simple thematic (and, in any case, not as "*h₁, ~~uē-dheh₁-~~", cf. Oettinger 1979 : 130 with footnote 85). The root vowel e (i in the participial stem in OH XXXVI 108 Vs. 6, 8) may continue an earlier *ay < *oy; the root /ved/- (< *wayd-) could be cognate with PIEP *weyd- 'bend, twine, weave' apparently found in Hom. hídnōmai 'am bent' < *wid-no-yo- 'bend' to a deverbative *wid-nō- 'bent', cf. possibly Lat. uīdulus 'wicker basket', Latv. vīdināt 'to plait, twine, weave' (see Pokorny 1959 : 1124; but Risch 1974 : 330: "hídnōthē (Etym.?)"). The stem in question may then be a continuation of an earlier *woyd-éye- : *woyd-éyo-. For the technologically conditioned modification of 'weave' to 'build', cf. perhaps Goth. waddius 'wall' < PIEP *woyX-u-s to *wayX- 'plait, weave' (Ved. vyávati 'envelops', past passive participle vī-tá-, Lith. vý-ti 'wind, twine', OCS viti id.) or German Wand 'wall' to PIEP *wendh- 'wind, weave' (e.g. Pokorny 1959 : 1148).

For Hittite lā-pár-ri-i+, etc. 'tread (on), trample' (II) X. 1, Oettinger (1979 : 270 and 314) reconstructs simple thematic *sprx'-é-, comparing the stem directly with Ved. sphuráti 'kicks' (a tudáti-class [6th class] present). It is very likely, however, that Ved. sphuráti is due to remodeling of an original root present. It is conspicuous that among the sat-roots that form their presents with zero

suffix in Vedic, there are none ending in rⁱ. The correspondence of Hittite root stem tar-ab⁺zi 'overcomes' (see Göttinger 1979 : 220 f. for the attested forms) to Ved. 6th class present tirāti (alongside simple thematic tāratī, possibly a subjunctive in origin) 'crosses, passes over' is particularly telling. One would expect in Vedic a root present sg. 3 *tāriti < *térx^(w)-ti (Hitt. tar-ab-zi), cf. e.g. āniti (to anⁱ 'breathe') < *xénx'-ti, pl. 2 *tīr-tha < *trx^(w)-t(x')é, 3 tir-ānti (attested) < *trx^(w)-énti. The actually attested 6th class stem is due to elimination of the diversity of stems within the paradigm, poorly motivated in Vedic terms, via generalization of the resegmented tirā-nti - tir-ānti. The 6th class present sphurāti (to sphrⁱ) may well be explained as arisen in the same fashion (*sphāri-ti < *spérx'-ti, sphūr-tha < *sprx'-t(x')é, sphur-ānti < *sprx'-énti → *sphurā-nti, with the uniform sphurā- replacing the inherited stem variants). A similar development is known to have taken place in the case of act. pres. sg. 3 ksiyāti 'dwells in' (Atharvaveda, etc.) which in RV corresponds to the root present ksāti : ksiyānti (see e.g. Renou 1925 : 310 for this case).

Consequently, Ved. sphurāti cannot be used to explain the morphology of Hitt. lā-pār-ri-iz-zi, etc. Their roots, however, are undoubtedly cognate (cf. also Lat. spernit 'despises' ← *spr-né-x'-ti). Hitt. lā-pār-ri-l⁺, etc. could go back to *sprx'-éye-, etc.

In connection with this stem, I must mention Oettinger's interpretation of Hitt. šū-ú-i+ / šū-ú-i-a-i+ : šū-ka-a+ 'reject, expel, cast off' (II) III. 1 as a simple thematic stem with the root in the zero grade and the accent on the suffix, which he directly compares with Vedic suvāti 'impels' set-root sū), positing PIE age for the tudāti-class (1979 : 314). It is quite likely, however, that suvāti is a Vedic innovation (cf. root middle sūtá, act. sau-ti [Brāhmaṇas]) arisen in a way similar to ksivāti and tirāti. Moreover, the plene spelling with ú in the root of the Hittite stem makes Oettinger's interpretation of it as suvá- ("< *suh₁é-") unlikely. It is much more likely that, as the plene indicates, the accent was on the root.¹³⁶

Hitt. šar-ri-(a-)-i+ : šar-ra-a+ 'divide, cross over; break (an oath)' (II) X. 2 (Oettinger's "einfach thematisch šarra-", on which see lemma in my Chapter II) does not have an etymology page Oettinger 1979 : 288 ff., but may also be regarded as continuing an *-éye-transitive (so also Eichner 1974 : 157 *apud* Oettinger 1979 : 290 footnote 62). In any case, Oettinger's interpretation of the stem as simple thematic in origin does not impose itself.

Thus, the main question which I have tried to answer in this dissertation, namely whether Anatolian had a cognate counterpart of the morphological class of simple thematic

¹³⁶ The Hittite stem may well be explained as a *-ye-stem to a root *séwx'- 'push' or the like, cf. possibly Russ. sov-á-ti (< *sewH-aH--) 'shove, stuff', prs. su-ió-t 'shoves' (< *séwH-ye-ti)?

presents of Indo-European Proper, appears to have a negative answer. As we have seen, Anatolian has good correspondences to the PIEP formations with the thematic suffixes *-ye-: *-yo- and transitives (causatives) in *-éye-: *-éyo- (not to mention athematic root stems and athematic stems with the infix *-né-: *-n-; on these, see Oettinger 1979 and some discussion in this chapter). However, Anatolian has no cognate counterpart of the IEP simple thematic suffix *-e-, as in e.g. IEP *xég'-e-ti 'drives' > Ved. ájati : Gk. ágei : Lat. agit : OIr. agid : Arm. acē : Toch.B āsām, alternating with *-o- as in PIEP *xég'-o-nti > Ved. ájanti : Gk. ágausi : Lat. agunt, etc. Moreover, Anatolian has hardly any of the roots that can be reconstructed for PIEP as originally forming simple thematic presents, such as *xeg'- 'lead, drive', *tres- 'tremble' > Ved. trásati : Gk. iréai, *dheg^w- 'burn' > Ved. dáhati : OCS žezetŭ - *dežetŭ : Lith. dąga, *pek^w- 'cook' > Ved. pácati : Lat. coquit : OCS pečatŭ : Lith. kąpa, *pet- 'fly' > Ved. pátati : Gk. pétetai : Lat. patit), *yebh- 'fuck' > Ved. yábhati : Russ. jablót, *weg^h- 'transport' > Ved. yáhati : Lat. vehit : OCS vazatŭ : Lith. yėža, *sek^w- 'follow' > Ved. sácate : Gk. hápetai : Lat. sequitur : Goth. saiþiþ 'sees' : OIr. seabithir : Lith. sėka, *seg^h- 'hold' > Ved. sáhate : Gk. ákhei, *tyeg^w- 'shrink from' > Ved. tvájati : Gk. sébetai, *bheg^w- 'flee' Gk. > phébatat : OCS běžetŭ : Lith. bėga, *leg- 'gather' > Gk. légei : Lat. legit, *med- 'measure' >

Gk. médetai : Goth. mitiþ, *nes- 'return' > Ved. násate :
 Gk. náetai : Goth. maian, *mesg- 'immerse' > Ved. máijati
 : Lat. margit, *k^wel(X)- 'circulate' > Ved. cáratī : Gk.
pálatai : Lat. colit, *plew- 'move in water' > Ved. právata
 : Gk. pláai : Lat. pluit 'rains'?, *dhew- 'run' > Ved.
dháyata : Gk. tháai, *srew- 'flow' > Ved. srávati : Gk.
rháai, *ews- 'sing' > Ved. śrati : Gk. heúei : Lat. ūrit,
 *perd- 'fart' > Skt. pardata : Gk. pérdetai, *lewðh- 'grow' >
 Ved. ródhati : Goth. liudiþ, *wert- 'turn' > Ved. yártata
 : OLat. uortit : Goth. wairþiþ, *serp- 'creep' > Ved.
sárpai : Gk. hárpai : Lat. serpit, *bheydh- 'trust' > Gk.
paíthai 'persuades' : Lat. fīdit : Goth. beidiþ 'waits',
 *welk- 'pull' > Gk. hálkai : OCS ylěcetŭ : Lith. veika,
 *g'hewX- 'call' > Ved. háyata : OCS zovatŭ.

Two Anatolian roots, the IEP cognates of which build simple thematic presents, have athematic inflection: PIEP *ers- > Ved. árṣati 'flows' : Gk. érrei 'goes away', but Hitt. athem. ar-raš-zi 'flows, runs' (see above). PIEP *xwes- 'stay, dwell' Ved. yásati : Goth. wisþ, but Hitt. athem. hweš- (mi-conj.) 'live, dwell' (see attested forms in Oettinger 1979 : 91). In the absence of simple thematic stems in Anatolian, one has to infer that it is PIEP that innovated in the case of these two roots and that Hittite preserves an older state.

It is hardly possible to explain this situation as a loss by Anatolian of an entire morpholexical class. An

alternative is to suppose that PIEP innovated by creating a new morpholexical class of the simple thematic imperfectives (and the subjunctive, formally identical with the simple thematic stem type [Risch 1965 : 236 f.] and also wanting in Anatolian, which indirectly confirms the original functional identity of these two formations in PIEP).

H. Pedersen's paraphrase of Mansion 1937 in the introduction to his Hittitisch und die andere indoeuropäische Sprachen (1938 : 12) is well worth recalling at this point: "...nur gemeinsame Neuerungen der zehn lebendigen [indoeuropäischen] Sprachzweige [können] sie dem Hittitischen gegenüber als eine Einheit charakterisieren." The morpholexical class of simple thematic presents of PIEP is one such shared innovation; qualifying it as "significant" does not seem to be an impressionistic overstatement.

This means that the Indo-Anatolian (or Indo-Hittite, to use the well-known term) hypothesis of the genetic relationship of Anatolian and IEP, namely the one that infers, on the basis of the mentioned principle of "shared innovations", that Proto-Anatolian is a "sister" to Proto-Indo-European and that both are "daughters" to an ancestral language of the two (Proto-Indo-Anatolian or Proto-Indo-Hittite), receives a new argument in its favor.

A discussion of the various arguments pro and contra the Indo-Anatolian (Indo-Hittite) hypothesis as well as an

account of the origin of the simple thematic (and subjunctive) formation of Indo-European are outside the scope of this dissertation as initially defined, and so will not be attempted here.

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ABBREVIATIONS

ABoT	Ankara Arkeoloji Müzesinde Bulunan Boğazköy Tabletleri. K. Balkan. Istanbul 1948.
AOS	American Oriental Series.
AnSt	Anatolian Studies.
BiOr	Bibliotheca Orientalis.
BSL	Bulletin de la Société de Linguistique de Paris.
BSOAS	Bulletin of the School of Oriental and African Studies.
DanskeVid	Det Kongelige Danske Videnskabernes Selskab, historisk-filologiske Meddelelser.
Erg.1	J. Friedrich. Hethitisches Wörterbuch, 1. Ergänzungsheft. Heidelberg 1957.
Erg.2	2. Ergänzungsheft. Heidelberg 1961.
Erg.3	3. Ergänzungsheft. Heidelberg 1966.
Fs Bonfante	Scritti in onore di Giuliano Bonfante. Brescia 1976.
Fs Laroche	Florilegium Anatolicum. Mélanges offerts à Emmanuel Laroche. Paris 1979.
Fs Szemerényi	Studies in Diachronic, Synchronic and Typological Linguistics. Festschrift for Oswald Szemerényi on the Occasion of His 65th Birthday. Bela Brogyanyi. Amsterdam 1979.
FuW	Flexion und Wortbildung: Akten der V. Fachtagung der Indogermanischen Gesellschaft, Regensburg, 9.-14. September 1973. Herausgegeben von Helmut Rix. Wiesbaden 1975.
HAB	F. Sommer, A. Falkenstein. Die hethitisch-akkadische Bilingue des Hattušili I (Labarna II). München 1938.

- HD The Hittite Dictionary.
H. Güterbock and H. Hoffner. Chicago 1980 -
- HE² J. Friedrich. Hethitisches Elementarbuch.
1. Teil. Kurzgefasste Grammatik. 2. Auflage.
Heidelberg 1960.
- HG J. Friedrich. Die hethitischen Gesetze:
Transkription, Übersetzung, sprachliche
Erläuterungen und vollständiges
Wörterverzeichnis. Leiden 1959.
- HO Handbuch der Orientalistik,
Abteilung I, Band II, Abschnitt 1/2,
Lieferung 2: Altkleinasiatische Sprachen.
Leiden/Köln 1969.
- HT Hittite Texts in the Cuneiform Characters
from Tablets in the British Museum.
L. King. London 1920.
- HuI Hethitisch und Indogermanisch. IES 25.
Ed. E. Neu and W. Meid.
- HW¹ J. Friedrich. Hethitisches Wörterbuch:
kurzgefasste kritische Sammlung der
Deutungen hethitischer Wörter.
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- HW² A. Kammenhuber. Hethitisches Wörterbuch.
Zweite, völlig neubearbeitete Auflage auf der
Grundlage der edierten hethitischen Texte.
Heidelberg 1975 -
- IBoT Istanbul Arkeoloji Müzelerinde Bulunan
Boğazköy Tabletlerinden Seçme
Metinler. I-III. H. Bozkurt, M. Çiğ,
H. G. Güterbock. Istanbul 1944, 1947, 1954.
- IBS Innsbrucker Beiträge zur Sprachwissenschaft.
- IF Indogermanische Forschungen.
- InGr Incunabula Graeca.
- JAOS Journal of the American Oriental Society.
- KBo Keilschrifttexte aus Boghazköi. Berlin.
- Krat Kratylos.
- KUB Keilschrifturkunden aus Boghazköi. Berlin.
- KZ (Kuhns) Zeitschrift für Vergleichende

Sprachforschung.

- MDOG Mitteilungen der Deutschen Orientgesellschaft.
- MIO Mitteilungen des Instituts für
Orientforschung.
- MSS Münchener Studien zur Sprachwissenschaft.
- Mat Maşat-Höyük'te Keşfedilen Çivi
Yazılı Hitit Tabletleri. S. Alp.
Istanbul 1978.
- MVAeG Mitteilungen der Vorderasiatisch-Agyptischen
Gesellschaft.
- NF Neue Folge.
- NHAI Nederlands Historisch-Archaeologisch
Instituut.
- RHA Revue Hittite et Asianique.
- SMEA Studi Micenei ed Egeo-Anatolici.
- StBoT Studien zu den Boğazköy-Texten.
Wiesbaden.
- TPS Transactions of the Philological Society.
- Tunnawi A. Goetze and E. Sturtevant.
The Hittite Ritual of Tunnawi.
AOS 14.
- VBoT Verstreute Boghazköi-Texte.
A. Götzke. Marburg 1930.
- ZA Zeitschrift für Assyriologie
und vorderasiatische Archäologie.

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Verbal Aspect. Ann Arbor: Edwards Brothers.

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Ms. (pre-publication copy), to appear in Fs Hoffmann.