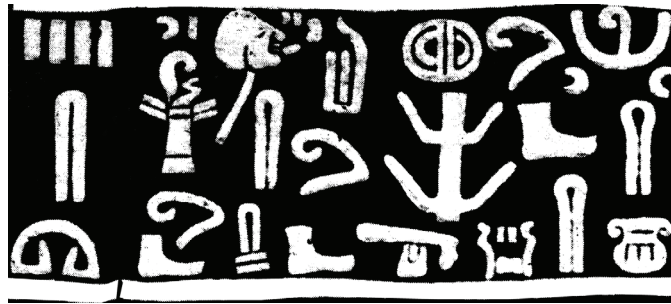


ipamati kistamati pari tumatimis
LUWIAN AND HITTITE STUDIES
PRESENTED TO J. DAVID HAWKINS
ON THE OCCASION OF HIS 70TH BIRTHDAY

ITAMAR SINGER

Editor



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John David Hawkins

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("OCCIDENS") *i-pa-ma-ti-i* (DEUS.ORIENS) *ki-sá-ta-ma-ti-i* PRAE-ia AUDIRE+MI-*ma-ti-mi-i-sa*
"Far famed to West and East" (KARKAMIŠ A 6, 1; Yariri)

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PREFACE

John David Hawkins was born on September 11th 1940 in Exmouth, Devon, as the eldest of the three children of John Alexander Sneyd Hawkins and Audrey Joan Spencer. His parents had met and married in India, where John Hawkins served as an officer in the Royal Artillery, and came back to England shortly before David's birth. In 1948, John Hawkins, who had studied at Cambridge, bought a farm in Devon where David was brought up. It was an old and distinguished family which had a multiplicity of interests both cultural and practical. David's friends were impressed by the casual and tolerant atmosphere which prevailed at home. In the Hawkins household there was no snobbishness or insularity; all sorts of people mingled and the vagaries of the British upper classes were looked at with affectionate irony. These qualities have been perpetuated by David, as anyone who has known him even briefly can readily confirm. Cats were a great source of amusement in the family and David expanded on his father's eccentric way of talking to them. Probably David's first linguistic achievement was the composition of the *Official Cat Phonology*, which is still put to use when stray cats occasionally visit his village house. There was no television in the Hawkins home, so reading aloud in the evenings in front of a roaring fire was the norm, preferably Dickens, Tolkien and Agatha Christie. The latter was a not-too-distant neighbour and David used to visit her and her husband Sir Max Mallowan, the renowned Mesopotamian archaeologist, from time to time. Could these visits have sparked his first interest in the ancient Near East?

David was educated at a local private school, Upcott House, and at the age of 13 he went to Bradfield College, Berkshire, a renowned school with a good tradition of Greek and Latin teaching. He excelled in his studies and took an active part in the school plays, especially Greek drama, for which Bradfield was famous. One of his teachers was the classicist David Raeburn, who authored a number of translations of the classics and books on the performance of classical plays. David has remained in touch with him ever since.

From 1958 David studied, on a state scholarship, Classics and Philosophy (*Literae Humaniores* or 'Greats') at University College, Oxford. He was lucky in his tutors: A.E. (Freddie) Wells for classical languages and literature, George Cawkwell for ancient history and P.F. Strawson and G. Paul for philosophy. His natural inclination was clearly for the linguistic and textual subjects and he finished that part of the course (*Honour Moderations*) with a First. He received his BA in 1962 and his MA in 1965.

From 1962 he worked for a postgraduate diploma in Western Asiatic Archaeology at the Institute of Archaeology in London. He studied archaeology with Seton Lloyd, history with Peggy Drower, Ancient Hebrew with Raphael Loewe and Akkadian with Harry Saggs and Donald Wiseman. He obtained his diploma with distinction in 1964 and won the Gordon Child Prize. By this time he had already switched his interests from Classics to the Ancient Near East, apparently under the strong impression left on him by the Gilgamesh Epic.

In 1964 he became a Research Fellow in Akkadian at the School of Oriental and African Studies, University of London, and then remained in the Near and Middle East Department where he taught until his retirement in 2005. In 1993 he was appointed to a personal chair in Ancient Anatolian Languages. He also contributed courses in archaeology to the Institute of Archaeology where he became an Honorary Visiting Professor.

In 1993 David was elected a Fellow of the British Academy, and in 1998 a Foreign Member of the American Philosophical Society. Most recently (2009) his old Oxford college, University College, made him an Honorary Fellow. He served as the honorary secretary of the British School of Archaeology in Iraq from 1976 to 1986 and edited its journal *Iraq* from 1970 to 1995. Concomitantly he sat on the council and on the executive committees of the British School of Archaeology at Ankara.

In the 1960s David started to go regularly from London to Oxford to study Hittite with Oliver R. Gurney and there got involved in a seminar on the so-called Hieroglyphic Hittite inscriptions led by Leonard Palmer and attended, among others, by Anna Morpurgo Davies and Jill Hart; this is the subject on which he eventually focused and which he revolutionized. His friendship and scientific cooperation with Morpurgo Davies continues to play an important role in his life. In the country cottage at Minster Lovell near Oxford, which he shares with his life partner, Geoff Ryman, a well known writer, she and countless other friends and colleagues are always welcome for a good chat on professional matters and a hearty drink and meal. David's culinary capacities are only surpassed by his scholarship, and as a devoted gardener he proudly makes use of his self-grown freshly picked vegetables in his perfect cuisine, which puts pay to the myth that there is no independent British cooking.

From 1965 onwards David traveled regularly to Turkey, Syria and Iraq in order to inspect Hieroglyphic monuments in museums and open-air sites. He immediately realized how inaccurate and incomplete the available drawings and publications were and consequently initiated an ambitious project of copying and obtaining good photographs of the entire corpus of inscriptions. This Sisyphean enterprise was crowned by the publication in 2000 of the three parts of his monumental *Corpus of Hieroglyphic Luwian Inscriptions, Vol. I, The Iron Age Inscriptions*, exactly a hundred years after the pioneering enterprise of L. Messerschmidt's *Corpus Inscriptionum Hettitarum*. He also played an instrumental role in the definitive publication of the Hieroglyphic text of the Karatepe bilingual by Halet Çambel as *Volume II* of the Corpus. A third volume in preparation will include *Addenda* to the Iron Age material, the Empire period inscriptions, and a general Signary, Glossary and Grammar of Hieroglyphic Luwian.

David's enormous black briefcase containing the full documentation for the Corpus travelled with him everywhere and miraculously has never been lost or damaged even in dire situations (see H. Gonnet's contribution to this volume). His idiosyncratic handwriting and neat hand copies can be traced back to two of his greatest talents, drawing and close scrutiny: 1. From his early days he developed an interest in political cartoons and for a while even contemplated turning this skill into a profession. 2. His talent for drawing is enhanced by a remarkable ability to notice even the minutest details and changes in other peoples' appearance or outfit. Many a detail in an inscription or on a seal that went unnoticed by others has immediately been detected and recorded by David. His spectacular decipherment of the Karabel inscription, a western Anatolian monument which was previously visited by countless travellers and specialists, may serve as a notable example. He never gets tired of inspecting a worn down inscription in different lighting conditions, not even the hopeless Nişantaş rock in Boğazköy which he is about to publish shortly.

In tandem with his strenuous efforts to produce an accurate documentation of the Hieroglyphic materials, David is one of the greatest contributors to Anatolian philology, history and culture. Suffice it to mention here, as notable examples, the new interpretation of four wrongly deciphered signs in the early 1970s (in collaboration with Anna Morpurgo Davies and Günter Neumann) which brought about the elucidation of the language and the (re)unification of Cuneiform Luwian and Hieroglyphic Hittite (now Hieroglyphic Luwian); the discovery in 1975 of the signs for the negatives which had been confused with the relatives and which suddenly made sense of countless texts; the demonstration in the 1980s of

the continuity of the royal house of Bronze Age Carchemish in the Iron Age genealogy at Malatya; the decipherment of the inscription at the sacred pool complex at Boğazköy in 1995 and its Underworld connections; the refinement of western Anatolian geography in 1998 through the identification of the figure depicted at Karabel as a king of Mira. Recently he has been working on the spectacular discovery of the Aleppo citadel inscriptions and their far-reaching historical implications. As anyone who has collaborated with David will readily confirm, he is a most generous colleague always ready to offer his expertise and cooperate in publication projects, e.g., his recent involvement in the publication of the enormous glyptic corpus from Nişantepe in Boğazköy.

As a token of our long friendship, I hope that this Festschrift presented to David by his students and friends, will serve as an appropriate tribute to this incomparable individual and scholar. A parallel Festschrift with non-Anatolian articles appears in the journal *Iraq* 2010, edited by Dominique Collon and Andrew George. I wish to express my gratitude to several persons who have provided assistance in the preparation of this volume: Sanna Aro, Natalia Bolatti-Guzzo, Donald Easton, Shirley Gassner, Graciela Gestoso-Singer, Sivan Kedar, Anna Morpurgo Davies, Denzil Verey and Mark Weeden.

The Institute of Archaeology of Tel Aviv University is congratulated for exceptionally accepting this volume in its Monograph Series. This book was published with the support of the Israel Science Foundation.

ABBREVIATIONS

| | |
|-----------|---|
| ABoT | <i>Ankara Arkeoloji Müzesinde Bulunan Boğazköy Tabletleri</i> . Istanbul 1948 |
| AHw | W. von Soden, <i>Akkadisches Handwörterbuch</i> . Wiesbaden 1958-1981 |
| Bo | Unpublished Boğazköy text (inventory number) |
| CAD | <i>Chicago Assyrian Dictionary</i> . Chicago Oriental Institute 1956 ff. |
| CHD | <i>Chicago Hittite Dictionary</i> . Chicago Oriental Institute 1980 ff. |
| CHLI 1 | J.D. Hawkins, <i>Corpus of Hieroglyphic Luwian Inscriptions Vol. 1: Inscriptions of the Iron Age</i> . Berlin/New York 2000 |
| CL, CLuw. | Cuneiform Luwian |
| CLL | H.C. Melchert, <i>Cuneiform Luvian Lexicon</i> . Chapel Hill 1993 |
| CTH | E. Laroche, <i>Catalogue des Textes Hittites</i> . Paris 1971 |
| HED | J. Puhvel, <i>Hittite Etymological Dictionary</i> . Berlin/New York/Amsterdam 1984 ff. |
| HEG | J. Tischler, <i>Hethitisches Etymologisches Glossar</i> . Innsbruck 1977 ff. |
| Hit. | Hittite |
| HKM | S. Alp, <i>Hethitische Keilschrifttafeln aus Maşat-Höyük</i> . Ankara 1991 |
| HL, HLuw | Hieroglyphic Luwian |
| Hur. | Hurrian |
| HW | J. Friedrich, <i>J. Hethitisches Wörterbuch</i> . Heidelberg 1952-1966 |
| HW2 | J. Friedrich and A. Kammenhuber, <i>Hethitisches Wörterbuch</i> , 2nd ed. Heidelberg 1975 ff. |
| HZL | C. Rüster and E. Neu, <i>Hethitisches Zeichenlexikon</i> . Wiesbaden 1989 |
| IBoT | <i>Istanbul Arkeoloji Müzelerinde Bulunan Boğazköy Tabletleri</i> . Istanbul/Ankara |
| IE | Indo-European |
| KBo | <i>Keilschrifttexte aus Boghazköi</i> . Berlin |
| KUB | <i>Keilschrifturkunden aus Boghazköi</i> . Berlin |
| Lyc. | Lycian |
| RIA | <i>Reallexikon der Assyriologie und vorderasiatischen Archäologie</i> . Berlin |
| RS | Ras Shamra/Ugarit texts (inventory number) |
| SBo I-II | H.G. Güterbock, <i>Siegel aus Boğazköy I-II</i> , Berlin 1940, 1942 |
| VBoT | A. Götze, <i>Verstreute Boghazköi-Texte</i> . Marburg 1930 |

PUBLICATIONS BY J. DAVID HAWKINS

Compiled by Sanna Aro and Natalia Bolatti-Guzzo

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- 2000.** *Corpus of Hieroglyphic Luwian Inscriptions I: Inscriptions of the Iron Age*, Volumes 1-3. Berlin - New York.

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THE LUWIAN DEMONSTRATIVES OF PLACE AND MANNER¹

Petra M. Goedegebuure

Chicago

That David Hawkins has contributed much to Hieroglyphic Luwian studies is an understatement. One does not often encounter a scholar who almost single-handedly has made a whole discipline accessible to his colleagues. The result is evident: the field of Hieroglyphic Luwian has witnessed an upsurge in publications that could never have occurred without David Hawkins's work. I hope that my contribution here is a proper demonstration of my gratitude towards the honorand.

1. RHOTACISM IN HIEROGLYPHIC LUWIAN

Elisabeth Rieken (2008a) has shown that the dental of the signs L 100 (*ta*) and L 29 (*tá*) is unvoiced, whereas the dental of L 41 (*tà*) is voiced (and therefore in this article transliterated as *da*). By contrast, the regular syllabary (Hawkins 2000:29, Table 3) only contains one sign for *ti* (L 90). This means that Rieken's achievement cannot be duplicated; only rhotacism of intervocalic /d/ will help decide which dental hides behind *ti*. In this article I will concentrate on the demonstrative forms of *za-* "this (one)" and *apa-* "that (one)" that contain *ti*, attested both rhotacised and non-rhotacised in inscriptions from the end of the Hittite Empire period until the end of the Iron Age Luwian city-states. It has been claimed that rhotacism starts already very early, and since this might have a bearing on the forms under investigation, I will first address the issue of the onset of this phenomenon.

Rhotacism of intervocalic /d/ is attested for the nominal ablative-instrumental ending *-ati*, the third person singular verbal endings, a few sentence initial enclitics, and some lexical items (Morpurgo Davies 1982/83:249f.). The texts from each Luwian (city-)state with the earliest attestations of this phenomenon are:

- Maraş: MARAŞ 1 (late 9th century BCE). Rhotacism is attested in the lexeme ("PANIS")*ma-li-ri+i-mi-i-sá* < /mallidimis/ (§ 1i) and with one ablative-instrumental ((("IUSTITIA"))*tara/i-wa/i-na+ra/i*, § 7), otherwise intervocalic /d/ is preserved;
- Malatya: ŞIRZI (early-mid 8th century BCE). Rhotacism is attested in one lexeme ((*464) *ha+ra/i-ma* in § 6, attested as ((*464) *ha-da-ma* in KARKAMIŞ A2+3 § 11) and the enclitic pronoun /-ada/ (*á-pa-ti-pa-wa/i+ra/i-ta* § 6), otherwise intervocalic /d/ is preserved;
- Tabal: ÇİFTLİK (mid 8th century BCE), with only ("EDERE")*á-ru-na* (§ 16), otherwise intervocalic /d/ is preserved;
- Cilicia: KARATEPE (early 7th century BCE). Besides the regular forms with /d/, rhotacism is attested with the ablative-instrumental /-adi/, the enclitic pronoun /-ada/, the verb ending /-di/, and a few lexemes;

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- Karkamiš: KARKAMIŠ A6 (late 9th-early 8th century BCE). Rhotacism is attested in the enclitic pronoun /-ada/ (*zi-pa-wa/i+ra/i* § 5, *wa/i-ara/i* § 26), otherwise intervocalic /d/ is preserved;
- Hama: SHEIZAR (date unclear: 900-700 BCE). Rhotacism is only attested in the ablative-instrumental **a-mi-ia+ra/i* (§ 2).
- Aššur: AŠŠUR letters (late 8th century BCE); many instances of rhotacism in lexemes, the ablative-instrumental, the enclitic pronoun /-ada/, the verb ending /-di/.

The earliest attestations of rhotacism are found in MARAŞ 1 and KARKAMIŠ A6, at the end of the 9th century BCE. That this date is probably also the *terminus post quem* can be deduced from the fact that in none of the (city-)states with inscriptions from as early as the late 12th century BCE, —Karkamiš, Tabal, Malatya and Maraş,— rhotacism is attested before that date. It is therefore not surprising that the Tell Ahmar texts are absent from the list. All Tell Ahmar inscriptions but one, ARSLANTAŞ (8th century BCE), belong to the late 10th-early 9th century BCE, so rhotacism is not yet expected to occur. Most inscriptions from Hama hover around the mid-9th century (between 860-830 BCE), none of which show rhotacism. Only SHEIZAR, of uncertain date, shows it once.

Also absent from the list are the inscriptions from Commagene, Amuq and Aleppo. Almost all texts² fall within the appropriate time frame, but none of them shows rhotacism even though there is ample evidence for intervocalic /d/ (see for example BOYBEYPINARI, MALPINAR, TELL TAYINAT 2). The absence of rhotacism points at a dialectal difference (*contra* Plöchl 2003:25): there seems to be a dialectal continuum stretching from the Aleppo-Amuq area along the western borders of Karkamiš towards Commagene to the north of Karkamiš. The missing link is Sam'al. It will be interesting to see whether the inscriptions that will possibly be uncovered in the excavations of the Oriental Institute of the University of Chicago at Zincirli show rhotacism or not.

The well-attested rhotacism of intervocalic /l/ (Melchert 2003:180) should be kept separate, for now. This type of rhotacism starts much earlier, perhaps already in the Empire period. One regularly adduced case of early rhotacism of intervocalic /d/ is the personal name *Astuwaramanza-*, attested as a genitive singular *á-sa-tu-wa/i+ra/i-ma-za-si* in MARAŞ 8 § 1 (1000-950 BCE, Hawkins 2000:253)³, with rhotacism of the element *-atamanza* “name” (Melchert 2003:172, Plöchl 2003:25). However, †*ataman-* is always spelled with *ta₄* or *ta₅* and, as we know now, these two signs stand for *lá* and *là* (see Rieken and Yakubovich, this volume). The name *Astuwaramanza-* is therefore derived from *Astuwalamanza*⁴. Another alleged case of early dental rhotacism is *á-pa-ara/i* in MARAŞ 4 § 15 (mid-9th century BCE), which I now read as /*apari*/ “afterwards” (see section 4).

The Cuneiform Luwian attestation *tiwariya-* “of the Sun(-god)” (Melchert 1993:229) or “(im Ritual verwendete Pflanze)” (Plöchl 2003:25) seems to alternate with *tiwaliya-* “of the Sun(-god)” (Melchert 1993:229). It is therefore impossible to determine whether the rhotacised form derives directly from **tiwadiya-* (Melchert 2003:173) or from *tiwaliya-* < **tiwadiya-*, as suggested by Melchert (2003:181) and Plöchl (2003:25).

The occurrence of [t]u-pi+ra/i in the 12th (?) century BCE inscription BURUNKAYA § 3? (Hawkins 2000:438) is admittedly a problem. If it is taken as the verb /*tubiri*/ < /*tubidi*/⁵ “he will/shall strike/

2. The exceptions are BABYLON 1 (late 10th-early 9th century BCE, from Aleppo) and TELL TAYINAT 1 (probably mid-9th century BCE, Amuq).
3. Another instance of /l/ rhotacism in MARAŞ 8 is the verb *ARHA MALLEUS-x+ra/i-i* “he will erase” in § 12 instead of *MALLEUS-la-i* as in for example BOROWSKI 3 § 10 (Hawkins 2000: 255).
4. Attested as *ᵐá-sa-tu-wa/i-la-ma-za-* in KARKAMIŠ A27u l. 2, as *ᵐá-sa-tú-wa/i-lá-ma-za-* in KELEKLİ § 1, KARKAMIŠ A11a § 1, and as *ᵐá-sa-tú-wa/i-là-ma-za-* in KARKAMIŠ A11b+c § 1.
5. On the use of the verb *tupi-* in curse formulae, see Reichardt (1998:120).

smite” (Hawkins 2000:442, Melchert 2003:172) or /tubira/ < /tubida/ “he smote” (Hawkins 2000:442), we have to accept /d/-rhotacism already for this very early period, but we also have to accept that this phenomenon then completely disappears (or becomes unattested), only to resurface in the late 9th-early 8th century BCE. An alternative solution is to analyze [t]u-pi+ra/i as a 3rd person singular medio-passive /tubiri/ < /tubiyari/ “he will/shall be smitten”, with syncope of /-iya-/. Though most curse and blessing formulae contain an active verb form, we sometimes find a medio-passive, as in EMİRGAZI altars § 12 (Hawkins 1995:88) and KARKAMIŞ A2+3 § 24 (Hawkins 2000:110).

To conclude, there is no conclusive evidence for /d/-rhotacism before the end of the 9th century BCE.

2. THE DEMONSTRATIVE ADVERB ZATI/ZARI “HERE, THUS”

It seems to be generally accepted that *zati*, the dative-locative singular of the proximal demonstrative *za-* “this”, can be used as a locational deictic adverb “here” (Plöchl 2003:70, 84; Payne 2004:27) and as an adverb of manner “thus” (Plöchl 2003:70, 84). In addition, this form is sometimes rhotacised as *zari* (Plöchl 2003:69, 70; Kloekhorst 2008:191). A review of all occurrences of *zati* and *zari*, however, shows that these two forms occur in syntactically different environments. Figure 1 presents a chronological overview of the occurrences of *zati*, *zari* and the dative-locative plural *zata(n)za* and *zatiya(n)za*⁶ as drawn from Bunnens 2006 (TELL AHMAR 6), Hawkins 2000, Tekoğlu & Lemaire 2000 (ÇINEKÖY), with the addition of the 2nd millennium Hieroglyphic Luwian texts as presented in Hawkins 1995. Appendix 1 lists each separate attestation.

FIGURE 1 - ZATI / ZATAZA / ZATIAZA / ZARI IN HIEROGLYPHIC LUWIAN

| Period | Pronoun/Adjective | | Adverb | |
|--|--|----------------------------|--|---|
| | dat.sg. | dat.pl. | | |
| Tudhaliya IV | <i>zi/a-ti-i(a)</i> (1) | <i>zi/a-tá-zi/a</i> (1) | ∅ | ∅ |
| Suppiluliuma II | ∅ | ∅ | <i>zi/a+a-ti</i> (1) | ∅ |
| Mid 12th century BCE | <i>zi/a-ti</i> (2) | ∅ | ∅ | ∅ |
| 10th-mid 9th century BCE | <i>za(-a)-ti-i</i> (5) <i>za(-a)-ti</i> (10) | <i>za(-a)-ti-ia-za</i> (7) | ∅ | ∅ |
| Late 9th- beginning 8th century BCE | <i>za(-a)-ti-i</i> (2) <i>za(-a)-ti</i> (6) <i>zá-ti-i</i> (1) | <i>za-ti-ia-za</i> (1) | <i>za-ti</i> (4) <i>zá-ti</i> (1) | ∅ |
| Mid-end 8th century BCE | <i>za-ti-i</i> (3) <i>za-ti</i> (7) <i>zi/a-ti</i> (1) | <i>za-ti-za</i> (1) | <i>za-ti-i</i> (1) <i>za-ti</i> (4) | <i>za-ri+i</i> (5) <i>za+ra/i-i</i> (1) <i>zi/a-ara/i</i> (1) |
| Beginning 7th century BCE | <i>za-ti</i> (2) | ∅ | ∅ | <i>za-ri+i</i> (1) |
| Totals | 40 | 10 | 11 | 8 |

6. The dative plural *zatiya(n)za* is not directly built on the stem *za-*, but on a derived adjective *zatiya-* (Carruba 1982:41f., Melchert 2003:190).

The table shows that only the adverb may be rhotacised, whereas the secured attestations of the dative-locative singular and plural never show rhotacism. This distribution points at a voiceless dental for the dative-locative singular and plural and at a voiced dental for the adverb.⁷ In sections 5 and 6 I will refine this suggestion and provide evidence from Cuneiform Luwian.

That this distribution is not simply a matter of coincidence is shown by those texts where rhotacism and non-rhotacism occur side by side. In SULTANHAN and BOHÇA the proximal adverb always shows rhotacism ((1)-(4)). The dative-locative singular on the other hand is consistently written with a dental (5)-(6).

- 1 | (“VITIS”) *wa/i-ia-ni-sa-pa-wa/i-‘* | **za-ri+i** || *sa-na-wa/i-ia-ta-‘*
“And the vine was good **here**.” (SULTANHAN § 7, mid-8th century BCE; Hawkins 2000:466)
- 2 | *wa/i-ta* | *á-pa-sa-ha* | *á-pa-sa-za* | *sa-na-wa/i-ia-za* | **za-ri+i** | *a-ta* | LITUUS.LITUUS-*na-i*
“He too shall behold his benefit(s) **here**.” (SULTANHAN § 18, mid-8th century BCE; Hawkins 2000:466)
- 3 | *wa/i-ta* | (DEUS)TONITRUS-*hu-ti* | **za-ri+i** | (BONUS)*wa/i-su-wa/i-i*
“**Here** I am good to Tarhunza.” (BOHÇA § 2, late 8th century BCE; Hawkins 2000:479. Probably similar BOHÇA § 4)
- 4 | *wa/i-mu* | **za-ri+i** | *sà-ma-ia* || (“ANIMAL.BESTIA”) *HWI-sa₃+ra/i* | *pi-pa-sa-ia*
“**Here** he grants to me beasts for shooting/shot beasts.” (BOHÇA § 5, late 8th century BCE; Hawkins 2000:479, with commentary on pp. 479-480)
- 5 | *a-wa/i* | **za-ti-i** | *tu-wa/i+ra/i-si-i* | MALUS-*za* | REL-*sa* | *á-pa+ra/i-ta* | *á-sa₃-za-i*
“He who hereafter shall utter evil **against this vineyard**,” (SULTANHAN § 34, mid-8th century BCE; Hawkins 2000:467)
- 6 | *a²-wa/i* | **za-ti-i** | ”TERRA”-*sa-REL+ra/i-i* | **za-ti-i** | LOCUS-*là/i⁸-ti-i* 1 x CENTUM (ANIMAL) GAZELLA *la-ha* “UNUS”-*ta* | REL-*za*
“(Indeed Runtiya did not help (them) at all as he helps me,) because I took 100 gazelles **in this territory, in this place** (all) at one time.” (BOHÇA § 13, late 8th century BCE; Hawkins 2000:479 “since (?) in this territory, in this place, I took 100 gazelles ...”, with commentary on p. 480)

In the next example the intervocalic /d/ of the dative-locative singular of *wanid-* “stele” is rhotacised but the accompanying dative-locative singular *zati* is not:

- 7 | **za-ti-pa-wa/i** (STELE)*wa/i-ni-ri+i⁹* REL-*sà* (“CORNU”) *tara/i-pi-wa/i* CRUS-*i*
“He who stands *tarpi-* **against this stele**,” (TİLSEVET § 6, 8th century BCE; Hawkins 2000:179).

7. The only exception could be KÜRTÜL § 3. This clause reads *wa/i-ma-sa DOMUS²-ni²-i za-ri²+i á-wa/i²-ti*, and is translated by Hawkins (2000:272) as “and for me he will come to **this house**”. Even though the proximal demonstrative adjective is usually preposed to its noun, we may not exclude the possibility that KÜRTÜL § 3 contains postposed adjectival *za-*. However, assuming that the readings proposed by Hawkins are correct, I would like to suggest an alternative translation “and he will come **here** to my house”. This ambiguity requires that I exclude this example from the discussion. Anticipating the results of this study however, the evidence from Cuneiform Luwian shows that the dative-locative indeed contains a /t/, not /d/, thus preventing rhotacism.

8. For this new reading of the sign L 172 instead of *ta₃*, see Rieken and Yakubovich, this volume..

9. Also see *za-ti* STELE-*ri+i* in CEKKE § 22 and [*za*]-*ti-pa-wa/i* STELE-*ni-ri+i* in KARKAMIŠ A5a § 12.

Finally, there is one case where *zari* is used as an adverb of manner “in this (following) way, thus” (Plöchl 2003:70):

- 8 | *|a-wa/i za-ri+i |á-sa₃-za-ia*
 “and he proclaims **thus**¹⁰ (: I shall make the gates my own, and I shall incise my name for myself)”
 (KARATEPE § LXVIII, early 7th century BCE; Hawkins 2000:57)

3. THE DEMONSTRATIVE ADVERB *ZITI/ZIRI* “HERE”

There are two cases where the proximal locative adverb appears as *ziti* and *ziri*:

- 9 | *|za-ia-pa-wa/i DOMUS-na zi-ti*
 “(But when *I* shall go away into the presence of the gods by the justice of Tuwati,) these *houses*¹¹ (shall still be) **here**.” (KULULU 1 § 16, mid-8th century BCE; Hawkins 2000:443, with commentary on p. 444)
- 10 | [...]x |(SCALPRUM) [*k*]u-ta-sa₃+ra/i-zi |**zi-ri+i** pa-sa-na LO[CUS]-lá/i¹²-ti [ARHA] || REL-sa
 “MALLEUS”-i
 “He who shall efface [these] [o]rthostats **here** in their place,” (KARKAMIŠ A27e fragm. 2 § 4, mid-8th century BCE; Hawkins 2000:166, who translates *zi-ri+i* as “this”, but also suggests “here” (p. 167))

The uncertainty that exists around the correct syntactic analysis of *ziri* in (10) as noted by Hawkins (2000:167) can now be resolved. Whether the forms *ziti* and *ziri* are true variant forms for *zati* and *zari* respectively (see section 5), or mistakes (Plöchl 2003:69), the rhotacism in KARKAMIŠ A27e fragm. 2 § 4 shows that *ziri* is not the dative-locative singular, but the adverb (*pace* Hawkins 2000:166 and Plöchl 2003:69).

4. THE DEMONSTRATIVE ADVERB *APATI/APARI* “THERE” AND THE TEMPORAL ADVERB POST-*RI/APARI* “AFTERWARDS”

The adverb *zati/zari* “here” is used to indicate that the event or situation expressed by its host clause takes place near the deictic centre. By contrast, the adverb *apati/apari* “there” (Plöchl 2003:70, 84; Payne 2004:27) either refers to a location at a certain distance from the deictic centre (11) or is used anaphorically (12). In the latter case it is not clear where the craft-houses built by king Astirus were located, so the distance to the deictic centre remains unknown:

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10. Because the Phoenician text does not switch from a third person narrative to a first person reported speech, there is no Phoenician clause that could correspond to this Hieroglyphic Luwian phrase (Hawkins 2000:66). However, for comparison we might adduce the statue of the Storm-God, with PhSt/C IV 17 *wy'mr* “and says, (I will make another statue and put my own name on it)” (Çambel 1999:66f.). In Phoenician, reported speech is either introduced by means of *l'mr*, the infinitive of *'mr* “speak, say”, or it is not introduced at all, as in PhSt/C IV 17 (Krahmalkov 2001:287). In the Anatolian languages on the other hand, reported speech is in the majority of cases introduced by a form of the proximal demonstrative pronoun, be it the nominative-accusative neuter sg. *kī* (Hittite) or *za* (Luwian, see KARATEPE § LXII), or the adverb of manner *kiššan* (Hittite), or *za-ri+i* as in the current example.
11. As I have tried to indicate with italics, the subjects of § 15 and § 16 are contrastive. This contrast is expressed by means of the use of the accented first person pronoun *amu* in initial position in § 15 (*á-mu-pa-wa/i*) and the use of the enclitic conjunction *-pa* in § 15 and § 16. On the contrastive value of *-pa* see Melchert (2003:209) and Plöchl (2003: 93).
12. For this new reading of the sign L 319 instead of *ta₄*, see Rieken-Yakubovich, this volume.

- 11 REL-*pa*¹³-*wa/i* |*á-TANA-wa/i-ni-zi*(URBS) |*zi-da*¹⁴ |*á-pa-ti-i* (*a-pa-ri+i* in Ho.) INFRA-*ta* |(SOLIUM)*i-sà-nú-wa/i-ha*
 “(And I settled them¹⁵ down towards the east, on my frontiers). For sure/So!, I next settled the Adanaweans down **there** (i.e., in the west).” (KARATEPE § XXXI (Hu.), early 7th century BCE; Hawkins 2000:52)
- 12 |*a-wa/i* |*za-na* |*HALPA-pa*||-|*wa/i-ni-sá* |(DEUS)TONITRUS-*hu-za á-pa-ti* |(SOLIUM+*MI*)*i-sà-nu-ha*
 “(While King Astirus was building himself *craft*-houses), I seated this Halabean Tarhunza **over there**.” (KÖRKÜN § 5, late 9th century BCE; Hawkins 2000:172)

The adverb *apati* only occurs in the examples just cited and possibly in BULGARMADEN § 7, which either contains *pa-ti-i* “there” or an unexplained *pa+ra/i-ti-i* (Hawkins 2000:524). The rhotacised form is only attested in KARATEPE § XXXI (Ho.). On the other hand, not one of the 34 instances of the dative-locative singular *apati* and plural *apata(n)za* shows rhotacism (see Figure 2). This was already noted by Hajnal (1995:116 n. 125)¹⁶.

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13. For the isolation of REL-*(i)-pa* /*kwipa*/ as a separate lexeme that serves to bring the truth-value of the proposition in Focus, see Goedegebuure 1998. For an improved taxonomy of this lexeme as an asseverative adverb “indeed, in fact, certainly, really, why so it is!, for sure, so!” and its etymology see Melchert 2002. However, I cannot follow Melchert in his analysis of a couple of instances of REL-*i-pa* as the subordinating conjunction REL-*i* /*kwi*/ followed by the particle *-pa*. Although I fully agree with his understanding of KARATEPE § XXXI as describing the re-settlement technique of exchanging conquered peoples (2002:227), his translation of REL-*i-pa* as “while (on the other hand)” seems merely to convey a contrast. While it is true that temporal “while” may be used in English in the sense of contrasting “whereas”, there is no evidence that REL-*i* ever went through a sequence ‘temporal “when, as” > temporal “while” > contrasting “while” meaning “whereas”’. The only cases where Melchert uses this translation (KARATEPE § XI, XXXI and SULTANHAN § 13) are better served with REL-*ipa* as the unitary adverb. I never claimed that this adverb somehow reinforces or emphasizes the contents of the preceding clause (*contra* Melchert 2002:227). On the contrary, REL-*ipa* only has scope over its host clause, emphasizing the truth-value of its propositional content. As a result, the REL-*ipa* clause indeed also serves a discourse purpose: in KARATEPE it usually appears at the end of a sequence of content-wise related clauses, marking a climax. The adverb REL-*ipa* highlights the major achievement in each discourse unit, or marks that which is most wished for. This works both for KARATEPE § XXXI, KARATEPE § XI (as Van den Hout shows in this volume) and SULTANHAN § 13-15 (“Tarhunzas really (REL-*pa*) granted these aids to Sarwatiwara, Wasusarma’s servant: much *rain* will come down from the sky, while *corn-stem(s)* will come up from the earth, and the vine”).

Besides the unlikely shift in semantics from temporal “when, as” to contrasting “while, whereas”, initial REL-*i* with contrastive *-pa* seems also to have changed its syntactic status from subordinating to coordinating conjunction, as I infer from Melchert’s translations. Not coincidentally, the only instance of truly fronted REL-*i(-pa)* ->REL-*i* (=pa) in TOPADA § 37 (which I indeed overlooked), is clearly a subordinating conjunction (“But/while in the case he is a lesser person (let them punish him thus)”, Melchert 2002:228). Clear subordination is notably absent in the clauses discussed by Melchert. To conclude, there are semantic and syntactic reasons to reject Melchert’s rejection of unitary REL-*ipa* in the clauses mentioned above. The only instance of possibly subordinating REL-*i* is KARATEPE § XL, where it is matched in Phoenician by the subordinating conjunction *ky*. This conjunction is usually taken as causal “because”. Recently however, the use of the cognate particle *ky* in Hebrew has been the subject of a monograph by Follingstad 2001. Follingstad (2001:42ff.) describes how the causal function of *ky* is highly controversial. The real function of the particle *ky* is that it serves as an *assertive polar Focus particle*, especially in adversative and in certain asseverative, causal and temporal uses (2001:568): the particle is used to strengthen an assertion because the speaker/narrator expects that his assertion *might* not be accepted easily, assuming that the reader/hearer has some other expectations. This comes very close to the use of REL-*ipa* as an asseverative adverb “certainly, verily, indeed” focusing on the truth of its proposition. I therefore also read this adverb in KARATEPE § XL.

14. The adverb *zi-da*, formerly *zi-tà*, is a hyper-corrected writing of *zila* “next, subsequently, thereupon” (Rieken, 2008a; Rieken and Yakubovich, this volume). For further discussion of *zila* see Hawkins (1995:37).
15. “Them” refers to the inhabitants of the once hostile fortresses in the west, now conquered by Azatiwada.
16. His remark is to my knowledge overlooked by everyone including myself. I only came across this reference when finishing this paper.

FIGURE 2 - APATI / APATANZA / APARI IN HIEROGLYPHIC LUWIAN

| Period | Pronoun/adjective | | Adverb | |
|----------------------------------|--|-------------------------------------|----------------------|----------------------|
| | dat. sg. | dat. pl. | | |
| Suppiluliuma II | * <i>a-pa-ti</i> (1) | ∅ | ∅ | ∅ |
| Late 12th century BCE | * <i>a-pa-ti</i> (2) | ∅ | ∅ | ∅ |
| 10th - mid 9th century BCE | * <i>a-pa-ti</i> (6) * <i>a-pa-ti-i</i> (4) <i>pa-ti</i> (1) <i>pa-ti-i</i> (1) | * <i>a-pa-tá-za</i> (2) | ∅ | ∅ |
| Late 9th - early 8th century BCE | <i>á-pa-ti</i> (3) <i>pa-ti</i> (3) | ∅ | <i>á-pa-ti</i> (1) | ∅ |
| Mid - end 8th century BCE | <i>á-pa-ti</i> (6) <i>pa-ti</i> (2) | <i>á-[pa]-tá-za_x</i> (1) | ∅ | ∅ |
| Early 7th century BCE | ∅ | <i>á-pa-ta-za</i> (2) | <i>á-pa-ti-i</i> (1) | <i>a-pa-ri+i</i> (1) |
| Totals | 29 | 5 | 2 | 1 |

As noted in section 1, Rieken (2008a) has shown that the dental of the signs *ta* and *tá* is unvoiced, whereas the dental of the sign *tà* is voiced. The consistent spelling of the dative-locative plural of *apa-* with the signs *tá* or *ta* shows that its dental was /t/, further supporting the claim that the dental of the dative-locative singular of *apa-* is also /t/. The single instance of the rhotacised form of the adverb on the other hand proves that the adverb *apati* contained a /d/. Therefore, the pattern discerned for *zati* “to this (one)”, and *zati/zari* “here, thus” is not disrupted.

The following example, MARAŞ 4 § 15, contains *á-pa-ara/i*. As the rhotacised variant of *apati* “thus” (so Hawkins 2000:258) this form is problematic because the date of this inscription, the mid-9th century BCE, seems to be somewhat too early for rhotacism of intervocalic dental stops (see section 1), but it could of course be the first example. The issue is avoided if we take *á-pa-ara/i* as /*apari*/ “afterwards”, already attested as **a-pa+ra/i* in the Empire period (Hawkins 2003:160, EMİRGAZİ § 3 (ed. Hawkins 1995:88f.))¹⁷:

- 13 |*wa/i-mi-i* |*á-mi-na* (“VAS”) *á-tara/i-i-na* ***á-pa-ara/i*** |*BONUS-li-ia-nu-wa/i-ha*
 “([When(?)] I captured the city Iluwasi, I cut off the feet of the men, whereas I made the children eunuchs for us.) **Afterwards** I exalted my image for myself” (MARAŞ 4 § 15, mid-9th century BCE; versus Hawkins’ “and **thereby** I exalted my image for myself.” (2000:257))

There are a few texts that seem to contain the local adverb *pari* “forth”¹⁸. This adverb is usually written PRAE-*i*, but presumably it also occurs in full syllabic writing in KARKAMIŞ A1a § 7 (|*pa+ra/i*-(*ha-*’)), 10 (|*pa+ra/i-i*-(*ha-*’)) and § 16 (|*pa+ra/i-i*-’)) (Hawkins 2000:88-89). What casts doubts on these readings is, first of all, that in this text the sign L 450 = *a* is regularly used as the ‘initial-a-final’ (for this phenomenon see Hawkins 2003:159ff.), but secondly, that in the same text we also find the logographic

17. The adverb *apari* is the syllabic writing of POST+*ra/i* in TOPADA § 16 (Hawkins 2000:453), if that attestation is real. Otherwise, read POST+*ra/i-ti* /*aparanti*/ (Hawkins 2000:457) and compare this form with Cuneiform Luwian *apparant(i)*- “future” (Melchert 1993:22). For the related adverb POST+*ra/i-ta* = *á-pa+ra/i-ta* /*aparanta*/ “hereafter”, see Plöchl (2003:84).

18. For *pari* as “forth” see Melchert (2004a:372 with n. 10), instead of “before, in front of” (as *per* Plöchl (2003:79)).

writing PRAE-*i* (§§ 19, 20). In view of these two observations, I propose to reanalyze these forms as *apari* “afterwards”, which perhaps fits each context even better than *pari* “forth”:

- 14 |(*349)á-la-ta-ha-na-ha-wa/i(URBS) |ARHA |DELERE-nú-wa/i-ha
 |*a-wa/i-tú |*a-pa+ra/i-i-ha (SCALPRUM.CAPERÉ₂)u-pa-ní-na |(CAPERÉ₂)u-pa-ha
 |9-za-ha-wa/i-tú |pi-ia-ha
 “And I completely destroyed the city Alatahana. **Afterwards** I brought the *spoils* to him as well, and I gave him a ninth (share)” (KARKAMIŠ A1a § 9-11, 10th century BCE; *pace* Hawkins’ “and before him I brought a *trophy*” (2000:88), and Melchert’s “and I brought forth the *spoils* to him” (2004a:372). KARKAMIŠ A1a § 7 occurs in a similar context)
- 15 [...]na-si-ha-wa/i-ta (DEUS)TONITRUS-za-na |*a-pa+ra/i-i SUPER+ra/i-a (SOLIUM+MI)i-sà-nú-wa/i-ha
 “And **afterwards** I seated Tarhunzas of the [...]na above” (KARKAMIŠ A1a § 16, 10th century BCE; Hawkins (2000:88): “and Tarhunzas of the [...]NA I seated up in front”)

5. THE HIEROGLYPHIC LUWIAN DATIVE-LOCATIVE SINGULAR ENDING *-ATI* AND THE ADVERBIAL ABLATIVE-INSTRUMENTAL ON *-ATI/-ARI*, *-ITI/-IRI*

The pronominal dative-locative singular on *-ati* is sometimes considered formally identical to the (pro) nominal ablative-instrumental on *-ati /-adi/* (Morpurgo Davies 1980:135; Plöchl 2003:70). Starting at the end of the 9th century BCE (see section 1), the intervocalic voiced dental stop /d/ could be rhotacised. One should therefore expect rhotacism in the dative-locative *-ati* given the assumed identity with the ablative-instrumental, but the consistent lack thereof now shows that the formal identity of these two endings cannot be upheld. Only the adverbial forms on *-ati* share their rhotacism with the nominal ablative-instrumental *-ati*.

Elsewhere I showed how Hieroglyphic Luwian *zin* and *apin* filled the ablative-instrumental slots in the paradigms of the demonstratives *za-* “this (one)” and *apa-* “that (one)” (Goedegebuure 2007). I suggested that the ending *-(i)n* derived from an adverbial PIE ending **(i)m*¹⁹, and that the inclusion of this ending in the pronominal paradigm still left room for vestigial remains of an originally pronominal ablative-instrumental *-ati*, as recognized by Melchert (2003:191 n. 19) in REL-*a-ti* (BOYBEYPINARI 2 § 4a-b). At that time I was not yet aware of the distribution presented in this paper, but the results now fully confirm the equation of the adverbial ending *-ati/-ari* with the expected ablative-instrumental ending *-ati*.

The fact that we are dealing with the ablative-instrumental ending *-ati* in the adverb may also explain the rare variant *ziti/ziri* (see section 3). Because the nominal ablative-instrumental is also attested as *-iti*²⁰, we do not need to treat *ziti/ziri* as a mistake for *zati/zari* (*pace* Hawkins & Morpurgo Davies 1986:81; Plöchl 2003:69, 85).

I did not separately discuss the Hieroglyphic Luwian relative because the relative adverb of place REL(-*i*)-*ta-(na)* /kwita(n)/²¹ “where” is different from both the dative-locative singular REL(-*a*)-*ti(-i)* /kwati/²²,

19. Olav Hackstein (pers.comm.) kindly showed me that the PIE adverbial ending **-m* as discussed by Dunkel (1997:69ff.) is not necessarily an instrumental but could also be a frozen accusative.

20. That not only *-i*-stems are attested with *-iti* < *-iyati*, show forms like DEUS-*ni-ti* in KARKAMIŠ A23 § 1. For *-iya* > *-i-*, see Plöchl (2003:20).

21. With *-n* only attested in KARATEPE (REL-*ta-na* in Hu. § XX, REL-*i-ta-na* in Ho. § XX, Hu. § XXXIV). For REL-*i-ta*, see for example KARKAMIŠ A1a § 5, BABYLON 1 § 8.

22. See for example KARKAMIŠ A11 b-c § 7 (late 10th-early 9th c., REL-*a-ti-i* (ANNUS)u-*si-i*), KARKAMIŠ A6 § 25 (late 9th-early 8th c., REL-*ti-i-ha* REX-*ti*), KULULU 1 § 14 (mid-8th c., REL-*ti-i-ha*).

which is never found rhotacised, and the relative adverb/conjunction of manner /kwari/²³ “just as, how”, attested as REL+*ra/i* in BOHÇA § 8 and 12, and as REL-*ri+i* in KARATEPE § LXXV (Hu.). Ideally we would like to have a non-rhotacised form of the adverb, but the only candidate occurs in an opaque context that allows both an adverbial reading as a conjunction “how”²⁴ or a pronominal ablative-instrumental reading²⁵. Nevertheless, nothing contradicts the earlier findings.

To conclude, due to the consistent absence of rhotacism in the dative-locatives *zati*, *apati* and REL-*ati* we can now definitively determine the phonemic value of the dental stop as /t/ (*pace* Kloekhorst 2008:191, 426, 489; Melchert 2003:190, 191). This is further supported by the orthography of the dative-locative plurals *zataza* /tʰatantʰs/, *apataza* /abatantʰs/ and REL-*taza* /kwatantʰs/ (REL-*tá-zi/a* in EMİRGAZİ altars § 19) with either -*ta-* or -*tá-*. The adverbial ablatives *zati* and *apati* on the other hand must contain a /d/. Still, we only have indirect evidence for a /t/ in the dative-locative singular *before* the mid-8th century BCE.

6. THE CUNEIFORM LUWIAN EVIDENCE

In order to shed more light on the phonological shape of the dentals in the pre-mid 8th century BCE dative-locative singular and the adverbs we need to turn to Cuneiform Luwian. The well-known series of correspondences (see Morpurgo-Davies 1982/83)

- 16 unvoiced /t/: CunLuw. -*tt-* : HierLuw. -*t-* : Lyc. -*t-*;
 inherited and secondary /d/: CunLuw. -*t-*, HierLuw. -*t-* and -*r-*, Lyc. -*d-*.

lead to the predictions, first, that Hieroglyphic Luwian non-rhotacising /t/ of the dative-locative singular and plural should be matched by geminate -*tt-* in the corresponding Cuneiform Luwian forms, and secondly, that Hieroglyphic Luwian /d/ in the adverbial formations should correspond with single -*t-* in Cuneiform Luwian. I expect the following forms for Cuneiform Luwian, disregarding vowel length and accent placement:

FIGURE 3 - THE PREDICTED DATIVE-LOCATIVES SINGULAR AND ADVERBS OF *ZA-*, *APA-* AND *KU-* IN CUNEIFORM LUWIAN

| | <i>Dative-locative singular pronoun/adjective</i> | <i>Adverb</i> |
|-------------|---|----------------------------------|
| <i>apa-</i> | * <i>apatti</i> / <i>abati</i> / | * <i>apati</i> / <i>abadi</i> / |
| <i>za-</i> | * <i>zatti</i> / <i>tʰati</i> / | * <i>zati</i> / <i>tʰadi</i> / |
| <i>ku-</i> | * <i>kuwatti</i> / <i>kwati</i> / | * <i>kuwati</i> / <i>kwadi</i> / |

The dative-locative singular *apatti* (see Melchert 1993:20, Hajnal 1995:116 n. 125) is attested in a relatively well preserved context in KBo 9.141 i 15 (MS, translit. Starke 1985:126f.), where we find *a-pát-ti a-a-ri-i* “at that time”. The other possible but not certain attestation of *apatti* occurs in broken context:] *a-pa-a-at-ti a-a-an-n[i(-)* (MS, KBo 29.56:3, translit. Starke 1985:391).

The adverb *apati(n)* “thus, in that manner, like that” is according to Melchert (1993:22) also the dative-locative singular of *apa-*, without taking into account that the dental of *apati(n)* is never a geminate

23. This late form must be kept separate from the 2nd millennium temporal conjunction REL-*ra/i* “when” (Plöchl 2003:88f.).

24. BOYBEYPINARI 2 § 4a-b (*a-wa/i LITUUS+na-ti-sa hu-pi-da-ta-da-ti-wa/i REL-a-ti sà-ka-tá-li-sà-wa/i*). Hawkins (2000:336) translates these lines as “You do see (??), how I shall SAKATALISA- with/from the HUPITATATA-(?)”.

25. Melchert (2003:191 n. 19): “Do you see with what *hupitatata-* I am *saka(n)tali-ing*?”.

as opposed to the unvoiced dental of the true dative-locative *apatti* (see Van den Hout 1995:136 n. 106). The phonological shape of the dental in the adverb *apati(n)* is therefore /d/, strengthening the claim that the demonstrative adverbs in Luwian displayed the ablative-instrumental ending. The Cuneiform Luwian evidence has the additional benefit that the semantics of the adverb *apati(n)* are fully compatible with the ablative-instrumental. One of the functions of the adverbial ablatives and instrumentals is to denote *manner* (Melchert 1977:219, 303, 368, 374f., 418). This gives us “thus, so, in this/that way” for the demonstrative adverbial ablative-instrumentals. When these adverbs are paired with adverbs of manner in subordinate clauses, we arrive at the familiar correlative construction of comparison “just as/how” ... thus/so/like that” (Melchert 2003:207)²⁶:

17 ⁴ zam=pa=ku=wa DUMU-nin wallindu ⁵ šannaindu pa=wa=an=tar ānni ⁶ tītani dūwandu pa=aš pūwa ⁷ [ku-w]a-ti²⁷ āšta nanun=ha=aš a-pa-ti²⁸ āšdu

“But furthermore let them lift this child (and) hold (it) upside down, let them place him at (his) mother’s breast.” **As** she was formerly, **so** let her be also now! (MS, KUB 35.103 iii 4-7, translit. Starke 1985:222, ed. Beckman 1983:228 (with references to older literature), ed. Starke 1990:551)

The adverb *apati(n)* is consistently written without plene *a*, and in only two cases out of eleven the *-i* is written plene (counts are based on Melchert 1993:22). Of the two forms of the dative-locative singular, one shows plene *a*, and neither one has plene *-i*. Distinguishing short from long vowels in these two words was phonemically not necessary: the different treatment of the dentals kept the two forms apart. This of course does not exclude the phonetic reality of long vowels, especially since accented short vowels in both closed and open syllables are lengthened in Luwian (Melchert 1994:247, 261). Assuming that the accent fell on the root-final vowel, we may represent the dative-locative sg. *apatti/apātti* as /abá:ti/ and the adverbial ablative *apati(n)/apatī(n)* as /abá:di(:)n/ (or /abadí(:)n/?)

The evidence for the demonstrative *za-* “this (one)” is difficult to evaluate. Most occurrences of *za-(a)-ti-i* occur in broken context²⁹ or are almost fully restored³⁰, thus preventing any syntactic analysis. The only case where a non-restored *za-a-ti-i* occurs in context is in KUB 32.8+5 iv 22 (17), and in the parallel KUB 35.14 i 9 (18). The meaning of the passage allows for two different analyses for *zātī*, as dative-locative (option a.) and adverb of manner (option b.):

18 ²¹ [kui]š=du=r³¹ aduwa[l (?)]piya<tti?> a=du=tta ²² [ta]niminzi DINGIR.MEŠ-z[(i) ...]x šarra **za-a-ti-i** ²³ [(p)]ūwandu a=ata=tar za[nta] tarmaindu URUDU-yati ²⁴ [tar]mati
Whoever give<s> evi[l (?)] to him,

26. Hittite has taken a different path with respect to both the conjunction and the resumption in sentences of comparison. Instead of the relative stem we find *mahhan* in the subordinate clause, and instead of the ablative-instrumental *apēz* we find the manner adverb *apeniššan* (older *apiniššan*).

27. The restoration *kuwati* is based on the parallel line KUB 35.102 iv 6 (indirect join to KUB 35.103).

28. The parallel line KUB 35.102 iv 7 has [a-pa-t]i-in.

29. We find *za-a-ti-i* in KUB 35.16 iii 10’ with duplicate KUB 35.17 iii 6’; *za-ti-i* in KUB 35.59 (+) KBo 29.13 ii 9’; *za-a-ti[-* in KUB 35.85:3’; possibly belonging here *za-t[-i-* in KBo 8.17: 1’.

30. The dative-locative phrase *za-a[-ti-i] pâr-ni* in KUB 35.54 iii 23, so restored by Starke (1985:69) and Melchert (1993:274), could as well be read as *za-a[-aš-ti] pâr-ni*, with *zāšta/i-* “this (very)” (Melchert 1993:281), or with the not (yet) attested *za-a[-at-ti(-i)]*. The same is of course possible for [za-a-ti-]i’ DUMU-ni in KUB 35.88 ii 11.

31. Following Melchert (2001:39) instead of Starke (1985:120), who reads [tar-mi-i]š-.

a. let [a]ll the gods pound [something] upon **this one** for him³²,

b. let [a]ll the gods pound [something] upon him **in this (following) way**:

let them nail it down (*zanta*)³³ by means of a bronze [p]eg. (NS, KUB 32.8+5 iv 21-24, with duplicate KUB 35.117 iv 1'-5', translit. Starke 1985:120, partial ed. Starke 1990:379 (with *šarra zātī* “auf diesem”))

19 ⁷ [ku]iš=tar mal[haššaššan EN-ya (āddu)wā(l)] ⁸ ānnīti a=du[(=tta D)INGIR.MEŠ-inzi]

⁹ [ša]rra **za-a-ti-i** [(pūwa)nd(u a=ttar zanta)] ¹⁰ [I]āīmman [tarmaindu URUDU-(ya)ti tarma(ti)]

[Wh]oever performs (some) e[vi] on the rit[ual patron], may the g[ods] pound [.....] upon him **in this way**: [may they nail] down by means of [a bronze peg] that which was taken. (KUB 35.14 i 7-10, dupl. KBo 29.9 obv. 10'-12', translit. Starke 1985:123-124)

I prefer option b., for the following two reasons. First, and most importantly, option a. would present the only instance known to me of the demonstrative *za-* as a resumptive *anaphoric* pronoun. In all instances with reasonably clear context, *za-* refers to an entity that is present in the speech situation, that is, *za-* is a *deictic* demonstrative. By definition *za-* should not refer to an unspecific evildoer as mentioned in line 21 (18) or line 7 (19). Secondly, option a. requires that the dative-locative *-du* “to him” functions as a *dativus commodi*. While this is not impossible, divine actions like those described here are always on behalf of someone, so *-du* seems to be redundant³⁴.

As a result, there is no evidence left for a dative-locative *zati*. This role is probably assumed by *zāšti*, dative-locative singular of *zāšta/i-* “this (very)” (Melchert 1993:281).

In view of the differences in orthography one also needs to switch the analysis of Cuneiform Luwian *kuwatti* as the old ablative-instrumental of the interrogative stem “from which/whom” (Melchert 1993:118, Plöchl 2003:71) and Cuneiform Luwian *kuwati(n)* as the old dative-locative singular (Melchert 1993:117). With Van den Hout (1995:136 n. 106), adverbial *kuwati(n)* “how, just as” runs parallel to *apati(n)* “thus, like that, so” instead of being a dative-locative “for/to whom” (see (16)). The only reliable attestation of *kuwatti* in KUB 9.31 ii 31 (with duplicate HT 1 ii 7) is most likely a dative-locative singular:

20 ³⁰ uraz<zaš> ⁴UTU-az tatinzi DINGIR.MEŠ-inzi ³¹ ⁴É.A-aš=ha parnanza=ta **ku-wa-at-ti** anda hūinai³² lalanti pā uzaš adaritan

O great Sun-god, fatherly gods and Ea: **for whom** do they take (that which is) *anda hūinai*-ed to the houses (= temples?)? Now, feed yourselves! (NS, KUB 9.31 ii 30-32, translit. Starke 1985:53)

The other two attestations of *kuwatti*, KUB 35.54 ii 2 and 3, are without context. Again the dative-locative singular is without plene writing of the final *-i*. That means that there is no evidence left for a long final *-i* in secured pronominal dative-locatives since this was based on *apatī* (Melchert 1994:241, 265) and *zātī* (Melchert 2003:190-191). On the other hand, the adverbial formations once in a while do show plene *-i* in the final syllable. Besides from *apatī(n)* and *zātī/zatī* we also have two instances of *kuwatīn* on a total of 14 (Melchert 1993:117). For Hajnal (1995:116 n. 125) this points at a final accent, so perhaps we are witnessing an accent shift from the penultimate to the ultimate syllable? The ending

32. Reichardt (1998:80) rejects the connection of *puwai-* with *puššai-*, but see now CHD P/3:368f. The required accusative-object is most likely found in the break. The local adverb *šarra* either governs the dative sg. *-du* “him” (option b.) or the demonstrative *zātī* (option a.). Admittedly such a construction is not otherwise attested for *puwai-*, but this verb is that sparsely found that I cannot assume that CHD P/3:368f. covers all syntactic environments possible for this verb.

33. I will discuss *zanda* “down” elsewhere (Goedegebuure, forthcoming).

34. The only issue with option b. is that the position of the place word *šarra* “upon” is slightly odd.

-atin in the adverbs may be explained as stacking of the ablative ending *-in* attested in Hieroglyphic Luwian onto the ablative ending *-ati*.

The attested forms are listed in Figure 4. Comparison with Figure 3 shows that all predictions were realized with the exception of the dative-locative of *za-*. It seems that we only have *zašti* instead of the expected form **zatti*:

FIGURE 4: THE ATTESTED DATIVE-LOCATIVES SINGULAR AND ADVERBS OF *ZA-*, *APA-* AND *KU-* IN CUNEIFORM LUWIAN

| | <i>Dative-locative singular pronoun/adjective</i> ³⁵ | <i>Adverb</i> |
|-------------|---|--|
| <i>apa-</i> | apatti, apātti /abá:ti/ | apati(n) /abádi(n)/, apatī(n) /abadí:(n)(?)/ |
| <i>za-</i> | (zāšti /tʰá:sti/) | zatī /tʰadí:/, zātī /tʰá:di(?)/ |
| <i>ku-</i> | kuwatti /kwá:ti/ | kuwati(n), kuwāti(n) /kwá:di(n)/, kuwatīn /kwadī:(n)(?)/ |

7. CONNECTING THE EVIDENCE

Turning to the other Anatolian languages, we have to compare the Hittite dative-locatives singular *kēti*/*kēdi*³⁶, possibly *apēti* and *kuiti*³⁷ and Lycian *tdi*³⁸ with the Cuneiform Luwian dative-locatives *apatti* and *kuwatti* and the Hieroglyphic Luwian forms /tʰati/, /abati/ and /kwati/, whereas Lydian falls outside the equation with the dative-locative singular ending *-λ*.

The Lycian dative-locative *tdi* seems at first sight to present counter-evidence to the /t/ of Common Luwian, because the set of correspondences mentioned in (16) (CunLuw. *-tt-* : HierLuw. *-t-* : Lyc. *-t-*) requires a Lycian *-t-* in the dative-locative, not *-d-*. However, these correspondences only apply to *inherited* /t/. If we take either the PA locatives **kē-dʰi*, **obé-dʰi* and **kʷé-dʰi*³⁹ or **kéd-i*, **obéd-i* and **kʷéd-i* (all with accented short *e*) as starting point, and show how a secondary /t/ could develop in Luwian, the alleged incongruity can be resolved.

The regular outcomes of these PA forms in Hittite⁴⁰ are /ké:di/⁴¹ = *ke-(e)d/ti*, /abé:di/ = *a-pé-(e)t/di*, and /kʷé:di/ = *ku-e-t/di*, all attested. The dative-locative singular of Lycian *ebe-* “this (one)” is not attested⁴², but the relative **kʷé-dʰi* / **kʷéd-i* leads to Lycian **/téōi/*, then with shift of accent to the final syllable (Melchert 1994:319) to **/teōi/* and finally to /tōi/ = *tdi* after elision of the unaccented vowel (Hajnal 1995:183⁴³).

What distinguishes Common Luwian from the other languages is Çop’s Law, according to which accented short *e* followed by a single intervocalic consonant results in short accented *a* and doubling of the consonant (**/éC₁V/ > /áC₁C₁V/*). Çop’s Law together with the other regular sound laws⁴⁴ should result

35 The pronominal dative-locative plural is only attested in *zaštanza*.

36. Attested as *ke-e-ti* in KUB 43.23 obv. 4, 17, KUB 33.65 iii 3, KUB 32.138: 4, KBo 4.2 i 26, KBo 38.185 right col. 8²; as *ke-e-di* in KUB 43.55 ii 17.

37. *apeti* is attested in KUB 9.19: 7²; *kuiti* is attested in Bo 6943 obv. 3¹ (Fuscagni 2007:155, with refs.)

38. Attested in TL 75:2, 58.3, N324.27, and in *tdike* in 112.4.

39. For an oblique stem *ape-* etc., see for example Kloekhorst 2008:192.

40. With PA **/é/* in open and closed syllables > /e:/ (Melchert 1994:107, 133).

41. The Hittite form /ké:di/ for example can also be derived from PA **ké:di* < PA **ké:ti* (after lenition of intervocalic /t/ after long accented vowel), but this would never explain the attested Luwian forms.

42. The local adverb *ebei* “here” might be the missing dative-locative singular of *ebe-* (Melchert 2004b:11).

43. Hajnal (1995:183) compares *tdi*, which he derives from **/kēidi/*, with Cuneiform Luwian *za-a-ti-i*. As I hope to have shown, the latter form is an ablative-instrumental, and is therefore not cognate with dative-locative *tdi*.

44. With synchronic lengthening of short accented vowel in a closed syllable (Melchert 1994:247).

in /tʰá:ddi/, /abá:ddi/ and /kwá:ddi/. As we have seen we indeed find Cuneiform Luwian *a-pa-a-at-ti* / *a-pát-ti* and *ku-wa-at-ti*⁴⁵, besides Hieroglyphic Luwian non-rhotacising *zati*, *apati* and REL-*ati*.

All attempts to reconstruct another vowel than accented short *e* in the oblique stem can be discarded: the short *e* is necessary in order to invoke Çop's Law to arrive at the Luwian forms with *a*. The long vowel in the Hittite forms is simply the result of secondary lengthening.

Hackstein has recently demonstrated how ablative semantics easily shift to local semantics as a language-internal development (2007:138f.). This explains how the Luwian adverbial ablatives came to be used as locative adverbs. Hittite and Lycian are different in this respect. Instead of using the pronominal ablative-instrumental ending, each of these languages had a different means to form the demonstrative and relative adverbs of place and manner. The Hittite demonstrative adverbs of place are *ka(ni)* "here", *apiya* "there (/then)", and *kuwapi* "where (/when)", and the adverbs of manner are *kiššan* "in this (following) manner", *apeniššan* "in that manner" and *eniššan* "in this/that manner (as just mentioned)". The subordinating conjunctions expressing manner are *mān*, *mahhan* "how, just as". In Lycian we only find locative demonstrative adverbs that are based on the stem *ebe-* "this". These are *ebei*, *ebeli*⁴⁶, and *ebeila*, all meaning "here". Besides that, there is the relative adverb of place *teli* "where" (Melchert 2004b:62), which, as opposed to the situation in Hittite, is distinct from the relative adverb of time *teri* "when" (Melchert 2004b:63). The adverb *mē* is attested both as the conjunction "as", and as adverb of manner "so, likewise" (Melchert 2004b:39).

Lydian on the other hand seems to have followed the same road as Luwian and independently used the ablative-instrumental for marking location, as shown by the locative adverb *ebad* "(t)here" (Gusmani 1964:100), even though the ablative-instrumental case itself disappeared from the nominal and pronominal paradigms (Melchert 1994:338). The form of the stem however is problematic. Taking Cuneiform Luwian *apati* and Hieroglyphic Luwian /*abadi*/, /*abari*/ into account, the PA reconstruction should be **obódi* (< **obóti*⁴⁷), but this should have led to Lydian †*bad* and does not explain the Hittite forms either. The Hittite ablatives *kēz*, *apēz* and *kuēz* are probably innovations in historical Hittite (Melchert 1977:457). If not, they can only be explained from PA **k'é-ti*, **obé-ti* and **k'w'é-ti* (see Hackstein (2007:143) for PIE **k'w'éti* > Hittite *kuēz*). After application of Çop's Law the Luwian forms should have become /tʰá:tti/, /abá:tti/ and /kwá:tti/, which, in accordance with Sturtevant's Law, are orthographically similar to the dative-locative. Instead, the endings of the Common Luwian forms are the same as the ending of the nominal ablative.

Given these difficulties the simplest solution is to assume that the pronominal paradigm in Proto-Anatolian did not contain an ablative case. In Hittite we originally find the instrumental forms filling the ablative slot (*kēt*, the enclitic possessives in *-et/-it*, Melchert 1977:263) before *kēz*, *apēz* and *kuēz* adopted the nominal ablative ending *-z*. In Common Luwian the nominal ablative-instrumental ending /-adi/ was adopted in the pronominal paradigm, and still in prehistoric times with respect to the demonstratives restricted to the adverbs. Instead, the true adverbial forms /tʰin/ and /abin/ were incorporated in the Hieroglyphic pronominal paradigm. We might expect the same for Cuneiform Luwian based on an *argumentum ex silentio*, because there are no attestations of ablative noun phrases with a demonstrative adnominal.

45. Although Sturtevant's Law would allow for a writing with DI, the writings *a-pád-di* and *ku-wa-ad-di* are not expected given the absence of the sign DI in the Cuneiform Luwian syllabary (based on a search in Melchert 1993).

46. For a discussion of *ebeli* and *teli*, see Rieken 2008b.

47. The environments for lenition of inherited /t/ are absent. The proto-form should not have led to /d/, but since the /d/ was generalized in all other ablatives, it was taken over by analogy.

8. SUMMARY

Based on the differential treatment of the dentals, the Common Luwian dative-locative singular of the demonstratives (*za-* and *apa-*) and relatives (*ku-*) needs to be distinguished from the demonstrative and relative adverbs of place and manner. Starting in the late 9th century BCE, only the latter can be rhotacised in Hieroglyphic Luwian. In addition, the Cuneiform Luwian dative-locatives are always written with a geminate dental, whereas the adverbs always show non-geminate orthography. This undoubtedly points at a /t/ for the dative-locative, and a /d/ for the adverbial form. In view of the fact that ablatives can have both locative and modal semantics, I suggest to equate the adverbial ending /-adi/ with the Common Luwian nominal ablative ending.

The use of the nominal ablative ending in the demonstrative and relative pronouns and adverbs is most likely an independent innovation in Hittite, Common Luwian and Lydian but not in Lycian (for Carian there is no evidence). For the dative-locative singular on the other hand, a PA form can be reconstructed as **obé-d^hi* / **obéd-i* etc. This explains the Hittite forms with /e/ and /d/, Lycian *tdi* /tđi/, and after application of Çop's Law also the Common Luwian forms with /a/ and /t/:

FIGURE 5: THE DATIVE-LOCATIVES SINGULAR AND ADVERBS OF THE DEMONSTRATIVES IN THE ANATOLIAN LANGUAGES

| | <i>Hittite</i> | <i>Lycian</i> | <i>Lydian</i> | <i>Cuneiform Luwian</i> | <i>Hieroglyphic Luwian</i> |
|-------------------------------|----------------|--------------------|---------------|-------------------------|--|
| dative-locative sg. | | | | | |
| < PA <i>*kédi</i> | <i>ke:di</i> | — | — | (<i>zašti</i>) | /t ^s ati/ |
| < PA <i>*obédi</i> | <i>ape:ti:</i> | (<i>ebei</i> (?)) | (<i>bλ</i>) | <i>apa(:)tti</i> | /abati/ |
| < PA <i>*k^védi</i> | <i>kui:ti</i> | <i>tdi</i> | (<i>qλ</i>) | <i>kuwatti</i> | /kwati/ |
| adverbial abl. | | | | | |
| | <i>ke:z</i> | — | — | <i>za(:)ti:</i> | /t ^s adi/ > /t ^s ari/ /t ^s idi/ > /t ^s iri/ |
| | <i>ape:z</i> | — | <i>ebad</i> | <i>apati(:)(n)</i> | /abadi/ > /abari/ |
| | <i>kue:z</i> | — | — | <i>kuwa(:)ti(:)(n)</i> | /kwadi/(?) > /kwari/ |

APPENDIX 1

Tudhaliya IV

dat.-loc.sg.
zi/a-ti-i(a)

zi/a-ti-i(a) STELE (EMIRGAZI § 6)

dat.pl.
zi/a-tá-zi/a

zi/a-tá-zi/a-pa-wa/i REGIO-*ní-zi/a* (YALBURT BLOCK 4 § 2)

Suppiluliuma II

adverb
zi/a+a-ti

SÜDBURG § 18

Mid 12th century BCE

dat.-loc.sg.
zi/a-ti

zi/a-ti TERRA-*i(a)* (KARADAĞ 1 § 1), *zi/a[-ti²]* LOCUS-*i(a)* (BURUNKAYA § 1)

10th-mid 9th century BCE

dat.-loc.sg.
za-a-ti-i

za-a-ti-i |POST-*ní* (TELL AHMAR 5 § 4); *za-a-ti-i* STATUA-*ru-ti-i* (KARKAMIŠ A1a § 31); *za-a-ti-i* ^dTONITRUS-*ti-i* (KARKAMIŠ A2+3 § 20)

za-a-ti

za-a-ti- ‘“CAELUM”-*sa-na* [^d]TONITRUS-*hu-ti* (TELL AHMAR 1 § 21); *za-a-ti* (“SCALPRUM”) *ku-ta-sa₅+ra/i-i* (KARKAMIŠ A13d § 5); *za-a-ti* CAELUM ^dTONITRUS-*ti-i* (KARKAMIŠ A13d § 10)

za-a-ti-...

za-a-ti-wa/i CAELUM ^dTONITRUS [(TELL AHMAR 2 § 22); |*za-a-ti-pa-wa/i* |EXERCITUS-*la/i/u-na-sa-na* (DEUS)TONITRUS-*ti-i* (TELL AHMAR 6 § 28)

za-ti-i

za-ti-i |SUPER+*ra/i-a* (TELL AHMAR 2 § 20); *za-ti-i* (“PODIUM”) *hu-ma-ti* (KARKAMIŠ A11b+c § 17)

za-ti...

za-ti-pa-wa/i DEUS-*ni-i* (ALEPPO 2 § 24); *za-[ti]-pa-wa/i* (DEUS) *á-tara/i-su-ha* (KARKAMIŠ A4d § 1); *za-ti-pa-wa/i* *kar-ka-mi-si-za*(URBS) ^dTONITRUS-*ti-i* (KARKAMIŠ A2+3 § 16); *za-ti-pa-wa/i-ta* SOLIUM-*sa-*‘ (HAMA 4 § 8); *za-ti-pa-wa/i-*‘ “SOLIUM”-*sa* (HAMA 5 § 5)

dat.-loc.pl.
za-a-ti-ia-za

|*za-a-ti-ia-za*[(TELL AHMAR fr. 5 l. 3); *za-a-ti-ia-za* (“SCALPRUM”) *ku-ta-sa₅+ra/i-za* (KARKAMIŠ A11b+c § 24); *za-a-ti-ia-za* (DOMUS.SUPER) *ha+ra/i-sà-tá-na-za* (KARKAMIŠ A11b+c § 33); *z[a]-a-ti-i[a]-za* (“SCALPRUM”) *ku-ta-sa₅+ra/i-za* (KARKAMIŠ A20a1 § 3)

za-ti-ia-za

za-ti-ia-za PORTA-*na-za* (KARKAMIŠ A11a § 20); *z[a-ti]-ia-za* [DEUS-*n*]^{i²}-*za* (KARKAMIŠ A11b+c § 19); *za-ti-ia-za* (DOMUS.SUPER) *ha+ra/i-sà-tá-na-za* (KARKAMIŠ A11b+c § 20)

adverb

not attested

Late 9th - beginning 8th century BCE

dat.-loc.sg.
za-a-ti

za-a-ti (MENSA) *wa/i-si* (ANCOZ 1 § 1); *za-a-ti* *á-là/i* DEUS.AVIS PRAE-*na* (BOYBEYPINARI 2 § 8a)

za-a-ti-i

[*z*] *a-a-ti-i* ^m*á-sa-ti-wa/i-su-sá-na* | (“STATUA”) *ta-ru-ti* (MARAŞ 14 § 7)

za-ti-i

za-ti-i (MONS) *hu+ra/i-tu-la* MONS-*wa/i-ti-i* (ANCOZ 8 § 4)

zá-ti-i

zá-ti-i-‘ |DEUS-*ní* (KARKAMIŠ A29 f 1.1)

za-ti

za-ti LOCUS-*lá/i-ti-i* (KARKAMIŠ A6 § 9); *za-ti* LOCUS-*lá/i-ti* (KARKAMIŠ A6 § 23); *za-ti* |DEUS-*ni* (KÖRKÜN § 7)

za-ti-...

za-ti-pa-wa/i ... STATUA-*ru-ti-i* (MALPINAR § 26)

dat.-loc.pl.
za-ti-ia-za

za-ti-ia-za URBS+*MI-na-za* (ANCOZ 7 § 7)

adverb
za-ti

za-ti (KARKAMIŠ Stone bowl § 2, ANDAVAL § 4); |*za-ti* (KARKAMIŠ A7 § 3)

| | |
|---|--|
| <i>za-ti-...</i> <i>zá-ti</i> | <i>za-ti-pa/ha-wa/i</i> (KARKAMIŠ Stone bowl § 3) ÇALAPVERDİ 1 § 4 |
| | Mid - end 8th century BCE |
| dat.-loc.sg. <i>za-ti-i</i> | <i>za-ti-i tu-wa/i+ra/i-si-i</i> (SULTANHAN § 34); <i>za-ti-i</i> “TERRA”- <i>sa-REL+ra/i-i</i> (BOHÇA § 13); <i>za-ti-i</i> LOCUS- <i>là/i-ti-i</i> (BOHÇA § 13) |
| <i>za-ti</i> <i>za-ti-...</i> | <i>za-ti STELE-ri+i</i> (CEKKE § 22) <i>za-ti-pa-wa/i</i> DEUS- <i>ní</i> (KARKAMIŠ A31+ §10); <i>za-ti-pa CAELUM</i> (DEUS) TONITRUS (CEKKE § 4); <i>za-ti-pa-wa/i</i> URBS+ <i>MI-ni</i> (CEKKE § 20); <i>za-ti-pa-wa/i</i> (STELE) <i>wa/i-ni-ri+i</i> (TİLSEVET § 6); [<i>za</i>]- <i>ti-pa-wa/i</i> STELE- <i>ni-ri+i</i> (KARKAMIŠ A5a § 12); <i>za-ti-pa-wa/i-ta</i> URBS- <i>ni</i> (AKSARAY § 6) |
| <i>zi/a-ti</i> | <i>zi/a-ti LOCUS²-ti</i> (KARKAMIŠ A21 § 8) |
| dat.-loc.pl. <i>za-ti-za</i> | <i>za-ti-za-pa</i> DOMUS- <i>na-zá</i> (KULULU 5 § 4) |
| adverb <i>za-ti</i> <i>za-ti-i</i> <i>za-ti-...</i> <i>za-ri+i</i> <i>za+ra/i-i</i> <i>zi/a-ara/i</i> <i>zi-ti</i> <i>zi-ri+i</i> | <i>za-ti</i> (AKSARAY § 5); <i>za-ti</i> (KARABURUN § 5, KULULU 5 § 3) KULULU 2 § 2 [<i>z</i>]- <i>ti-pa</i> (KARKAMIŠ A18e § 2) <i>za-ri+i</i> (SULTANHAN § 7, 18; BOHÇA § 2, 4, 5) BOR § 6 TOPADA § 8 KULULU 1 § 16 KARKAMIŠ A27e fragm. 2 § 4 |
| | Beginning 7th century BCE |
| dat.-loc.sg. <i>za-ti</i> | <i>za-ti</i> ‘CASTRUM’- <i>si</i> (KARATEPE § XL); CASTRUM- <i>ní-si za-ti</i> (KARATEPE § LXV) |
| dat.-loc.pl. adverb <i>za-ri+i</i> | not attested KARATEPE § LXVIII |
| | Unclear date <i>za-a-ti</i> (STELE) <i>ta-ni-si</i> (MEHARDE § 6; SHEIZAR § 7, both 900-700 BCE ⁴⁸) |

48. Hawkins 2000:416. However, the presence of initial-*a*-final points to an early date for both MEHARDE and SHEIZAR.

APPENDIX 2

| | |
|---|---|
| | Suppiluliuma II |
| dat.-loc.sg. <i>*a-pa-ti</i> | <i>*a-pa-ti</i> ANNUS (SÜDBURG § 18) |
| | Late 12th century BCE |
| dat.-loc.sg. <i>*a-pa-ti</i> | <i>*a-pa-ti-pa-wa/i</i> (GÜRÜN § 7, GÜRÜN lower § 7) |
| | 10th-mid 9th century BCE |
| dat.-loc.sg. <i>*a-pa-ti</i> | <i>*a-pa-ti-pa-wa/i</i> (KARKAMIŞ A14a §9, TELL AHMAR 6 § 31); <i>*a[-pa]-ti-pa-wa/i</i> (BABYLON 1 § 15); <i>*a-pa-ti-pa-wa/i-ta</i> (ALEPPO 2 § 21; KARKAMIŞ A2+3 § 11); <i>*a-pa-ti-pa-wa/i-tá</i> (KARKAMIŞ A11b+c § 25) |
| <i>*a-pa-ti-i</i> | <i>*a-pa-ti-i</i> (“ANNUS”) <i>u-si</i> (KARKAMIŞ A11b+c § 15, 34, KARKAMIŞ A25a § 7); <i>*a-pa-ti-i</i> (ANNUS) <i>u-si-i</i> (TELL AHMAR 6 § 26) |
| <i>pa-ti</i> | <i>pa-ti-ha-wa/i</i> (KARKAMIŞ A1a § 38) |
| <i>pa-ti-i</i> | <i>pa-ti-i</i> (“ANNUS”) <i>u-si</i> (MARAŞ 4 § 3) |
| dat.-loc.pl. <i>*a-pa-tá-za</i> | <i>*a-pa-tá-za-pa-wa/i-ta</i> (TERRA+LA+LA) <i>wa/i-li-li-da-za</i> (KARKAMIŞ A11b+c § 8); <i>*a-pa-tá-za-pa-wa/i</i> TERRA+LA+LA- <i>da-za</i> (KARKAMIŞ A25a § 2) |
| | Late 9th-early 8th century BCE |
| dat.-loc.sg. <i>á-pa-ti</i> | <i>á-pa-ti-pa</i> (KÖRKÜN § 9); <i>á-pa-ti-pa-wa/i</i> (BOYBEYPINARI 2 § 20, MALPINAR § 11) |
| <i>pa-ti</i> | <i>pa-ti-pa-wa/i</i> (BOYBEYPINARI 1 § 10, ANCOZ 7 § 14); LOCUS- <i>lá/i-ti-i-</i> ‘ <i>pa-ti</i> (TELL TAYINAT 2 fr. 1a § i) |
| adverb <i>á-pa-ti</i> | KÖRKÜN § 5 |
| | Mid 8th-end 8th century BCE |
| dat.-loc.sg. <i>á-pa-ti</i> | <i>á-pa-ti-pa-wa/i+ra/i-ta</i> (ŞIRZI § 6); <i>á-pa-ti-pa-wa/i-ta</i> (KARKAMIŞ A31+ § 15); <i>á-pa-ti-pa-wa/i</i> (CEKKE § 24); <i>á-pa-ti-wa/i-ta-</i> ‘ REX?-[<i>ti</i>] (ANKARA § 9); <i>á-pa-ti-pa</i> (KARABURUN § 11); [] <i>á-pa-ti</i> INFANS- <i>ni-i</i> (AŞŞUR f+g § 16) |
| <i>pa-ti</i> | <i>pa-ti-pa-wa/i</i> (KARKAMIŞ A25b § 3); <i>pa-ti-pa</i> (KARKAMIŞ A18e § 6) |
| dat.-loc.pl. <i>á-[pa]-tá-za_x</i> | <i>á-[pa]-tá-za_x</i> (“ANNUS”) <i>u-sá-za</i> (AKSARAY § 4a) |
| | Early 7th century BCE |
| dat.-loc.pl. <i>á-pa-ta-za</i> | TERRA- <i>lá/i-ta-za-</i> ‘ <i>á-pa-ta-za</i> (KARATEPE § XXIII); <i>á-pa-ta-za-pa-wa/i-ta</i> [] <i>“LOCUS”-lá/i-ta-za-ha-«pa-wa/i»</i> (KARATEPE § XXXIII) |
| adverb <i>á-pa-ti-i</i> <i>a-pa-ri+i</i> | KARATEPE Hu. § XXXI KARATEPE Ho. § XXXI |
| | Unclear date |
| | <i>pa-ti-pa-wa/i</i> (BEIRUT § 3; 9th?); <i>*a-pa-ti-pa-wa/i</i> (MEHARDE § 6; SHEIZAR § 7, both 900-700 BCE); <i>á-pa-ti-pa-wa/i</i> (TULEIL 2 § d; mid 9th - early 7th); <i>á-pa-ti-i</i> (SAMSAT fr. 1, 9th-8th centuries); <i>pa-ti-i-[pa/ha]-wa/i</i> (MARAŞ 11 § 3; ?) |
| Unclear attestation | <i>pa²-ti-pa-wa/i²-tá</i> (IZGIN § 17, 11th-10th centuries) |

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