UNIVERSITY OF CALIFORNIA Los Angeles

Hittite Vocabulary:

An Anatolian Appendix to Buck's *Dictionary of Selected Synonyms in the Principal Indo-European Languages*

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy in Indo-European Studies

> by David Michael Weeks

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LIST OF ABBREVIATIONS

- AfO: Archiv für Orientforschung.
- AI: Jaan Puhvel, Analecta Indoeuropaea. Innsbrucker Beiträge zur Sprachwissenschaft 35 (Innsbruck, 1981).
- AIED: Henrik Birnbaum and Jaan Puhvel, eds., Ancient Indo-European Dialects (Berkeley and Los Angeles, 1966).
- AJPh.: American Journal of Philology.
- Alimenta: Harry A. Hoffner, Jr., Alimenta Hethaeorum. Food Production in Hittite Asia Minor (New Haven, 1974).
- Alp, *Körperteilnamen*: Sedat Alp, "Zu den Körperteilnamen im Hethitischen" (*Anatolia* 2 [1957]).
- ANET: James B. Pritchard, ed., Ancient Near Eastern Texts Relating to the Old Testament (Princeton, 1950, 2nd ed. 1955).
- Antiquitates Indogermanicae: M. Mayrhofer, et al., eds., Antiquitates Indogermanicae. Gedenkschrift für Hermann Güntert. Innsbrucker Beiträge zur Sprachwissenschaft 12 (Innsbruck, 1974).
- AO: Archiv Orientálni.
- BB: Bezzenberger's Beiträge.
- Bechtel, Hittite Verbs: George Bechtel, *Hittite Verbs in -sk-. A Study of Verbal Aspect* (Ann Arbor, 1936).
- Beiträge … Pokorny: Wolfgang Meid, ed., Beiträge zur Indogermanistik un Keltologie Julius Pokorny zum 80. Geburtstag gewidment (Innsbruck, 1967).
- Benveniste, *Origines*: Émile Benveniste, *Origines de la formation des noms en indo-européen* (Paris, 1935).
- Berman, *Stem Formation*: Howard Berman, *The Stem Formation of Hittite Nouns and Adjectives*. Ph.D. Dissertation, University of Chicago (Chicago, 1972).

- BHD ... Kerns: Bono Homini Donum. Essays in historical linguistics in memory of J. Alexander Kerns (Amsterdam, 1981).
- Bi. Or.: Bibliotheca Orientalis.
- BSL: Bulletin de la Société de Linguistique de Paris.
- Carruba, *Beschwörungsritual*: Onofrio Carruba, *Das Beschwörungs-ritual für de Göttin Wišurijanza*. StBoT 2 (Wiesbaden, 1966).
- CHD: Hans G. Güterbock and Harry A. Hoffner, eds., *The Hittite Dictionary of the Oriental Institute of Chicago* (Chicago, 1980–).
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- Couvreur, Hett. H: Walter Couvreur, De hettitische H (Louvain, 1937).
- *DLL*: Emmanuel Laroche, *Dictionnaire de la langue louvite* (Paris, 1959).
- DSS: Carl Darling Buck, A Dictionary of Selected Synonyms in the Principal Indo-European Languages (Chicago, 1949).
- EHGl.: Harry A. Hoffner, English-Hittite Glossary (RHA 25 [1967]: 5-99).
- EHS: Heinz Kronasser, Etymologie der hethitischen Sprache, vol. 1 (Wiesbaden, 1962).
- Ertem, Flora: Hayri Ertem, Boğazköy metinlerine göre Hititler devri Anadolu'sunun florası (Ankara, 1974).
- *Evidence*: Werner Winter, ed., *Evidence for Laryngeals* (The Hague, 1965).
- Festschrift for O. Szemerényi: Bela Broganyi, ed., Festschrift for Oswald Szemerényi on the Occasion of his 65th Birthday (Amsterdam, 1979).
- Festschrift J. Friedrich: Festschrift Johannes Friedrich zum 65. Geburtstag gewidmet (Heidelberg, 1959).

- Flexion und Wortbildung: Helmut Rix, ed., Flexion und Wortbildung. Akten der V. Fachtagung der Indogermanischen Gesellschaft (Wiesbaden, 1975).
- Florilegium Anatolicum: Florilegium Anatolicum. Mélanges offerts à Emmanuel Laroche (Paris, 1979).
- Friedrich, Elementarbuch: Johannes Friedrich, Hethitisches Elementarbuch. 1. Teil. Kurzgefasste Grammatik (Heidelberg, 1974).
- Friedrich, Staatsverträge: Johannes Friedrich, Staatsverträge des Hatti-Reiches in hethitischer Sprache (Leipzig, 1926, 1930).
- Frisk, Kl. Schr.: Hjalmar Frisk, Kleine Schriften zur Indogermanistik un zur griechischen Wortkunde. Studia Graeca et Latina Gothoburgensia 21 (1966).
- Furnée, Erscheinungen: Edzard J. Furnée, Die wichtigsten konsonantischen Erscheinungen des Vorgriechischen (The Hague, 1972).
- Gedenkschrift Kronasser: Erich Neu, ed., Investigationes Philologicae et Comparativae. Gedenkschrift für Heinz Kronasser (Wiesbaden, 1982).
- GEW: Hjalmar Frisk, Griechisches etymologisches Wörterbuch (Heidelberg, n.d.).
- Goetze, Kleinasien: Albrecht Goetze, Kleinasien (2nd ed., Munich, 1957).
- Goetze, *Tunnawi*: Albrecht Goetze and E. H. Sturtevant, *The Hittite Ritual of Tunnawi*. American Oriental Society Series 14 (New Haven, 1938).
- Götze Pedersen, MS: Albrecht Götze and Holger Pedersen, Muršilis Sprachlähmung. Ein hethitischer Text mit philologischen und linguistischen Erörterungen. Det. Kgl. Danske Videnskapernes Selskab. Historisk-filologiske Meddelelser 21.1 (Copenhagen, 1934).
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- Gusmani, Lyd. Wb.: Roberto Gusmani, Lydisches Wörterbuch. Mit grammatischer Skizze und Inschriftensammlung (Heidelberg, 1964).
- HDW: Johann Tischler, Hethitisch-deutsches Wörterverzeichnis. Mit einem semasiologischen Index (Innsbruck, 1982).
- Hendriksen, *Untersuchungen*: Hans Hendriksen, *Untersuchungen über die Bedeutung des Hethitischen für die Laryngaltheorie*. Det Kgl. Danske Videnskabernes Selskab. Historisk-filologiske Meddelelser 28.2 (Copenhagen, 1941).
- Hethitica 4: Hethitica 4. Travaux édités par Guy Jucquois et René Lebrun. Bibliothèque des Cahiers de l'Institut de linguistique de Louvain 2 (1981).
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- Hommages à Georges Dumézil: Hommages à Georges Dumézil (Brussels, 1960).
- Hrozný, *HKB*: Friedrich Hrozný, *Hethitische Keilschrifttexte aus Boghazköi* (Leipzig, 1919).
- Hrozný, *SH*: Friedrich Hrozný, *Die Sprache der Hethiter* (Leipzig, 1917).
- HWb.: Johannes Friedrich, Hethitisches Wörterbuch. Kurzgefasste kritische Sammlung der Deutungen hethitischer Wörter (Heidelberg, 1952-54).
- *HWb. Erg.*: Johannes Friedrich, HWb. Ergänzungshefte 1, 2, 3 (Heidelberg, 1957-66).

IEW: Julius Pokorny, *Indogermanisches etymologisches Wörterbuch* (Bern and Munich, 1959).

IF: Indogermanische Forschungen.

Indo-European and Indo-Europeans: George Cardona, et al., eds., Indo-European and Indo-Europeans. Papers. (Philadelphia, 1970).

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Jahukyan, *Hayerena*: Gevorg Beglari Jahukyan, *Hayerena ev hndevropakan hin lezownera* (Yerevan, 1970).

JAOS: Journal of the American Oriental Society.

JCS: Journal of Cuneiform Studies.

JEOL: Jaarbericht van het Vooraziatisch-egyptisch Genootschap Ex Oriente Lux.

JIES: Journal of Indo-European Studies.

JRAS: Journal of the Royal Asiatic Society of Great Britain and Ireland.

Juret, *Vocabulaire*: Abel Juret, *Vocabulaire étymologique de la langue hittite*. Publications de la Faculté des Lettres de Strasbourg 99 (Limoges, 1942). Originally in *RHA* 6 (1940-41): 1-66.

Kbo: Keilschrifttexte aus Boghazköi.

KEWA: Manfred Mayrhofer, Kurzgefasstes etymologisches Wörterbuch des Altindischen (Heidelberg, 1956-80).

KlF.: Kleinasiatische Forschungen.

KUB: Keilschrifturkunden aus Boghazköi.

Kümmel, Ersatzrituale: Hans Martin Kümmel, Ersatzrituale für den hethitischen König. StBoT 3 (Wiesbaden, 1967).

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KZ: Zeitschrift für vergleichende Sprachforschung, begründet von Adalbert Kuhn.

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- Les langues du monde: A. Meillet, et al., Les langues du monde (Paris, 1952).

Lg.: Language.

LIEV: Jaan Puhvel, Laryngeals and the Indo-European Verb (Berkeley and Los Angeles, 1960).

Ling: Linguistica.

- Marstrander, *Caractère*: Carl J. S. Marstrander, *Caractère indo-européen de la langue hittite*. Det Norske Videnskaps Akademie, Hist.-fil. Klasse 1918.2 (Christiania, 1919).
- Mélanges H. Pedersen: Mélanges linguistiques offerts à m. Holger Pedersen à l'occasion de son soixante-dixième anniversaire 7 avril 1937 (Aarhus, 1937).
- MSL: Mémoires de la Société de linguistique de Paris.
- MSS: Münchener Studien zur Sprachwissenschaft.
- Neu, *Anitta-Text*: Erich Neu, *Der Anitta-Text*. *StBoT* 18 (Wiesbaden, 1974).
- Neu, Interpretation: Erich Neu, Interpretation der hethitischen mediopassiven Verbalformen. StBoT 5 (Wiesbaden, 1968).
- Oettinger, *Eide*: Norbert Oettinger, *Die militärischen Eide der Hethiter*. StBoT 22 (Wiesbaden, 1976).
- Oettinger, *Stammb*.: Norbert Oettinger, *Die Stammbildung des hethitischen Verbums*. Erlanger Beiträge zur Sprach- und Kunstwissenschaft 64 (Nürnberg, 1979).
- OLZ: Orientalistische Literaturzeitung.

- Otten, Bestimmung: Heinrich Otten, Zur grammatikalischen und lexikalischen Bestimmung des Luwischen (Berlin, 1953).
- Otten, Kumarbi: Heinrich Otten, Mythen vom Gotte Kumarbi. Neue Fragmente (Berlin, 1950).
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- P: Jaan Puhvel, *Hittite Etymological Dictionary* (Berlin, New York, and Amsterdam, 1984–).
- Pāpanikri: Ferdinand Sommer and Hans Ehelolf, Das hethitische Ritual des Pāpanikri von Komana (Leipzig, 1924).
- *PBH*: *Patma-banasirakan handes* (= *Istoriko-filologičeskij žurnal*) (Yerevan).
- Pedersen, *Hitt*.: Holger Pedersen, *Hittitisch und die anderen indoeuropäischen Sprachen*. Det Kgl. Danske Videnskabernes Selskab. Historisk-filologiske Meddelelser 25.2 (Copenhagen, 1938).
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- Puhvel, Myth and Law: Jaan Puhvel, ed., Myth and Law Among the Indo-Europeans. Studies in Indo-European Comparative Mythology (Berkeley and Los Angeles, 1970).
- RA: Revue d'assyriologie e d'archéologie orientale.
- RBPhH: Revue belge de philologie et d'histoire.
- RHA: Revue hittite et asianique.

- RHR: Revue de l'histoire des religions.
- RPh: Revue de philologie, de littérature et d'histoire anciennes.
- Serta Indogermanica: Johann Tischler, ed., Serta Indogermanica. Festschrift für Günter Neumann zum 60. Geburtstag (Innsbruck, 1982).
- Slav. Rev.: Slavistična Revija.
- SMEA: Studi micenei ed egeo-anatolici.
- Sommer, *AU*: Ferdinand Sommer, *Die Aḥḥijavā-Urkunden*. Abhandlungen der bayerischen Akademie der Wissenschaften, Philosophisch-historische Abteilung N.F. 6 (1932).
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- Studia ... A. Pagliaro: Studia classica ed orientalia Antonino Pagliaro oblata (Rome, 1969).
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- T: Johann Tischer, *Hethitisches etymologisches Glossar*. Innsbrucker Beiträge zur Sprachwissenschaft 20 (Innsbruck, 1977–).

TL: Tituli Lyciae (Vienna, 1901).

TPS, TPhS: Transactions of the Philological Society.

- Van Windekens, *Le tokharien*: A. J. Van Windekens, *Le tokharien* confronté avec les autres langues indo-européennes. Volume I. La phonétique et le vocabulaire (Louvain, 1976).
- Vendryes, *Lexique*: J(oseph) Vendryes, *Lexique étymologique de l'Irlandais ancien* (Dublin and Paris, 1959–).
- VLFH: Heinz Kronasser, Vergleichende Laut- und Formenlehre des Hethitischen (Heidelberg, 1956).
- Walde P.: Alois Walde and Julius Pokorny, *Vergleichendes Wörterbuch der indogermanischen Sprachen* (Berlin, 1930).
- Watkins, *Idg. Gr.*: Calvert Watkins, *Indogermanische Grammatik* (Heidelberg, 1969–).

WO: Die Welt des Orient.

ZA: Zeitschrift für Assyriologie und vorderasiatische Archäologie.

ZDMG: Zeitschrift der Deutschen Morgenländischen Gesellschaft.

ABSTRACT OF THE DISSERTATION

Hittite Vocabulary: An Anatolian Appendix to Buck's *Dictionary of Selected Synonyms in the Principal Indo-European Languages*

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The year 1949 saw the publication of Carl Darling Buck's *Dictionary of Selected Synonyms in the Principal Indo-European Languages*, a compilation of the basic vocabularies of over thirty representative Indo-European languages, ancient and modern, relating to several hundred categories of common objects, activities, and notions of everyday life. By analyzing the patterns of word-derivation and meaning-relationship among these lexica, Buck intended to provide "a contribution to the history of ideas," to trace the semantic roots of the words which still embody and shape our most fundamental concepts and concerns, and this great work has become a standard reference source for students of language and linguistic change, anthropology, semantics, and related disciplines.

Since the early years of the twentieth century, it had been clear that a new era in Indo-European linguistics had begun with the discovery and decipherment of the Hittite royal archives of the second millennium BC. The unprecedented antiquity and unique Near-Eastern location of Hittite and its related Anatolian dialects promised to open important new vistas in comparative philology, but Buck was forced to leave it virtually unconsidered by the lack of comprehensive dictionaries and other apparatus.

Progress in Hittitology has continued steadily in the ensuing decades, resulting in greater etymological sophistication and culminating in the appearance of several new Hittite dictionary projects, and it is now possible to add the Anatolian dimension to Buck's classic work. *Hittite Vocabulary* uses the lexicographical material now available to undertake a thorough confrontation of the Hittite lexicon with the extra-Anatolian data and to examine its contribution to comparative Indo-European philology.

PREFACE

In the Preface to his *Dictionary of Selected Synonyms in the Principal Indo-European Languages* (p. xi), Carl Darling Buck wrote: "The principal Indo-European languages are covered. Some of the minor ... languages, as Albanian, Armenian, and all modern forms of Indic and Iranian, are excluded from the survey, since to include them systematically would increase the labor out of all proportion to the results added." Too obscure to rate inclusion even in this list of unconsidered minor languages were Hittite and Tocharian, though inspection shows that in fact they received incidental treatment much the same as Armenian and Albanian.

Such an approach was undoubtedly the proper one at the time (1949). Where the classical Indo-European language groups were thoroughly known and had yielded up essentially all that could be expected in the way of texts, Hittitology especially was a fledgling discipline. Indeed, only thirty-two years had passed since Hrozný had firmly established its position within the Indo-European orbit in *Die Sprache der Hethiter*, and only two since the discovery of the Karatepe bilingual inscription. The Hittite corpus was still growing, and many years of work would still need to be done in fully interpreting the thousands of tablets already pub-lished.

Equally important was the matter of secondary sources. In contrast with the thorough etymological dictionaries and comparative grammars available for other branches (listed extensively in Buck, DSS 2-7), Hittite lexicographical tools were rudimentary. Delaporte's Éléments de la grammaire hittite and Juret's Vocabulaire existed, as did Sturtevant's Comparative Grammar and Hittite Glossary, but even so basic a work as Friedrich's Hethitisches Wörterbuch

was yet to appear. Thus while the Indo-European affinity of Hittite was clear, only a handful of solid lexical correspondences, like watar 'water', kardi- 'heart', genu- 'knee', kessar 'χείο', nepis 'νέφος', and pahhur 'fire', could be found to suit Buck's purpose—certainly not enough to justify the systematic inclusion of Hittite in an already enormous project.

In the decades since the appearance of Buck's Dictionary, however, the talents of another generation of scholars have brought Hittite studies to a state of lively growth that would have gratified the early pioneers. Editions of texts on subjects from law and hippology to ritual and myth have fueled a healthy literature in numerous journals, where etymological and philological studies have multiplied to the point where even the specialist finds it difficult to keep abreast of the annual output. Modern root theory and the increasing understanding of the so-called laryngeals have added new depth and insight to Indo-European etymology, while "Sturtevant's Rule" describing the graphic representation of original voiced: voiceless opposition in medial stops and -h- (see for example Sturtevant, Comp. Gr.1 73-86) was a step forward comparable in importance to that represented by Verner's Law in Germanic. Perhaps most important, recent years have seen the inception of no less than four new full-fledged Hittite dictionaries, with the material recently published or in preparation covering at least half of the Hittite lexicon; two or three of these show promise of completion in their authors' lifetimes. Luwian and Lydian dictionaries have also appeared, and Palaic and Hieroglyphic Luwian, and to a lesser extent Lycian, have added the material for a sturdily underpinned comparative Anatolian linguistics (cf. Puhvel, AI 139-51). While it may take another generation at least for Hittite studies to reach the level of sophistication and maturity now enjoyed by the longer-known branches, it does not seem too early to expect the confrontation of Hittite vocabulary with that of

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the other Indo-European languages to begin producing a positive return on the effort invested, and the present work is an attempt to test that possibility.

If one of Buck's aims was a survey of "the principal Indo-European languages," the other, as indicated by his subtitle, was "a contribution to the history of ideas." In contrast to usual etymological dictionaries, which trace the origins and history of words on the basis of formal correspondence-and whose entries therefore contain only groups of strict cognates, varying in meaning within reasonable limits—the organizing principle of the Dictionary of Selected Synonyms is that of similarity of meaning. The commonly used terms for key notions are recorded, regardless of etymological connection, with such groups of cognate forms as may happen to arise allowed to fall where they may. Assuming that the words a society uses can give us insight (indirectly, to be sure) into the habitual thought processes of its members, we can then translate the isoglossal patterns of cognate-groups into patterns of similarity and difference in concept-formation among the societies of speakers we study—i.e., into a history of ideas.

One further important point is implicit in Buck's decision to limit his "Dictionary of Ideas" (DSS, p. x) to the Indo-European languages. If language and thought go hand in hand, then it follows that those who speak and think in related languages must share somehow related ways of perceiving the world; hence the entire Indo-European group must constitute a single, closed entity, comprising patterns of ideas and ideology quite distinct from those of other language families. And if this is true, then we should be able to find parallels between our basic concepts and though and those not only German, Dutch, and Scandinavian speakers, but of Romans, Greeks, Celts, Iranians, Slavs, Balts, Armenians, Albanians, and even Hittites.

Did the Hittites think the way we do? Of course in a sense the suggestion is absurd. They lived nearly three and a half millennia ago, in a social and political world we can scarcely imagine. Their religion shows practically nothing of inherited Indo-European ideology; it was appropriated wholesale, along with the imperial kingship and many other social institutions, from the more cosmopolitan societies of the Near East. Large parts of their vocabulary and syntax are foreign not only to English and Germanic, but to Indo-European in general.

And yet it is hard to read Hittite texts for very long without being struck by a sense of familiarity with many of their habitual ways of expression and turns of phrase, especially when the language is contrasted with the many non-Indo-European tongues of the surrounding civilizations, Akkadian, Hattic, Egyptian, and the rest. The Hittites, despite their distance from us in time and cultural surroundings, are above all *understandable*, to the extent that even with relatively little training we can read and appreciate much of their subtlety and even humor. Increasing etymological rigor is a key factor in this understanding, as it continues to provide more lexical parallels and thus improve our knowledge of the semantic fields of Anatolian and Indo-European vocabulary, adding a new dimension to the work so admirably founded by Buck.

The major sources for the present work include Hoffner's English-Hittite Glossary (EHGl.), the Chicago Hittite Dictionary (CHD), Tischler's Hethitisches etymologisches Glossar (T) and Hethitisch-deutsches Wörterverzeichnis (HDW), and Puhvel's Hittite Etymological Dictionary (P; including unpublished portions kindly made available to me by Professor Puhvel). The latter two contain extensive etymological discussions and thorough documentation,

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and in many cases I refer to these for convenience rather than the original sources, citations for which can easily be found in T and P.

The work follows the layout of Buck's book, and is intended to be used in conjunction with it, although considerable flexibility has been adopted in the style and format of individual entries. In presenting the material I have tried to steer a middle course, wishing to make the treatment neither too simple for the specialist nor too detailed for the general user, as well as to keep the size of the whole within manageable limits.

The years since 1949 have also seen considerable activity in the fields of Albanian and Armenian philology, as reflected for example in Martin Huld, *Basic Albanian Etymologies* (Columbus, 1984) and John A. C. Greppin, *An Etymological Dictionary of the Indo-European Components of Armenian* (vol. 1, *Bazmavep* 141 [1983]). No doubt the thoroughgoing inclusion of these languages into Buck's framework will soon be found as desirable as that of Hittite, but for the present they must continue to be relegated to incidental mention.

I am particularly pleased to be able to express in print my gratitude to Professor Jaan Puhvel, without whose support and generosity I could not have finished this project. Sincere thanks are also due Professor Terence Wilbur for his constant encouragement.

THE PHYSICAL WORLD IN ITS LARGER ASPECTS

1.1 - WORLD - Although a Hittite word for 'world' is unknown, Anatolian philology has provided clarification of the two most difficult of the terms collected by Buck. For the two meanings of Gk. κόσμος, 'orderly arrangement' and the "secondary" 'ornament, decoration', Puhvel (AI 331-38) finds a semantic and formal common denominator in Hitt. kisai-, denoting the plucking and carding motion of wool-combing (cf. 6.91), with the antonym arha kisai- 'dismantle' matching Gk. ἀποκοσμέω 'clear away'. For Lat. mundus, a primary adjectival sense 'washed, cleansed' (expanded with later cultural contact to fill the semantic sphere of κόσμος) allows the reconstruction *mū-tnó- < *mew-H-, and connection with Hitt. mutai- 'flush, rinse' (AI 338-44; cf. 1.214, 9.36). The ritual connections of both of these terms in Hittite (combing/washing away evil), together with the notion that "ritual is in essence a magic attempt at microcosmic ordering of the universe" (AI 344), may afford a glimpse into the earliest Indo-European conception of universal harmony and order.

The concept of 'the whole world' is expressed in Hittite by circumlocutions such as *nepisas tagnass-a hūlaliesni zik-pat* DUTU-us *lālukimas* 'in the circumference of heaven and earth, you alone, O Sun-God, (are) the (source of) light' or 4 *halhaltumari* 'the four corners (of the world)' (12.76).

1.21 — EARTH, LAND — Buck's doubt (*DSS* 16) about the connection of H. *tekan* and Toch. *tkaṃ* with the group Gk. $\chi\theta\omega\nu$, OIr. *dú*, Lat. *humus*, Skt. *kṣam-*, Alb. *dhe*, etc. can safely be laid to rest (cf. *EHS* 270), along with his reconstruction with interdental spirant; *tekan* reflects the full-grade vocalism **dhéĝh-om*, vs. the zero-grade **dhĝh-* metathesized and simplified or otherwise altered in other languages. Loss of the guttural and addition of the normal -*i-* stem yields Luw. *tiyammi-* (ibid.).

The term *udne* 'land, country' seems to be connected with *watar* 'water' (IE **wed-/ud-* 'to wet'; Skt. *unátti*), and thus to mean specifically 'irrigated, habitable land', vs. *hatanti-* 'dry land' (1.26); cf. Puhvel, *Bi. Or.* 37 (1980): 203, who also adduces Lyc. *wedri* 'land' and Arm. *getin* 'ground, soil' (V. Pisani, *ZDMG* 107 [1957]: 552), as well as Gk. o $\check{v}\delta\alpha\varsigma$ 'ground, soil' (*AI* 221).

1.212 — EARTH = GROUND, SOIL — daganzipa- contains dagan < suffixless locative *dh $\hat{g}h(o)m$, zero-grade of tekan 'earth' (cf. Skt. kṣam-i). The second element is -sepa-, -zipa-, possibly a Hattic designation for a feminine divinity, as in $^{\text{D}}$ Kamrusepa-, $^{\text{D}}$ Ispanzasepa-, etc., see EHS 184-86 and 7.31 below.

$$1.213 - DUST - SAHAR$$
 (Akk. *epru*).

1.214 — MUD — purut-, purutessar seems to mean 'mud' in addition to a primary sense 'clay' (cf. Gk. $\pi\eta\lambda$ ός), and is treated under the latter (9.73). A common term for 'mud' specifically is isuwanit watar, literally 'water with sediment' (P 486); cf. Gk. φόρω 'mix dry with wet' (see 9.73).

halina-, see 9.73.

The cognates of NE mud, from *mew-d-, *mew-H- (Skt. mutra-, Av. $m\bar{u}\theta ra$ -, etc.) are joined by H. mutai- 'flush with excrement', as noted in 1.1 above.

1.22 — MOUNTAIN, HILL — *kalmara*- 'mountain' probably reflects IE *k l-m(o)-, matching OS *holm* 'hill' (A. R. Bomhard, *RHA* 31 [1973]: 112), plus the topographical suffix -(a)ra- as in gim(ma)ra-'field' (*EHS* 186). Thus it fits into the group of variously formed derivatives from *kel- 'rise' (Lat. *collis, culmen,* Lith. *kálnas,* Gk. κολωνός, etc. [*DSS* 23]). There is no reason to connect it with GIŠkalmi-, GIŠkalmisana- 'fire-log' (e.g. *EHS* 186); these belong rather with *iskallai*- 'split' < *(s)kel- (9.27; P 414).

Skt. párvata-, Av. paurvatā find a cognate in H. $^{NA4}peru(na)$ -; see 1.44.

1.23 — PLAIN, FIELD — gim(ma)ra- 'open (field)' (Luw. immari-) is generally believed to be an inherited IE word. Most usual is Sturtevant's connection (Lg. 6 [1930]: 216; further references in T 574-75) with the stem seen in tekan 'earth' (1.21), thus perhaps *(dh) $\hat{g}\acute{e}m$ -ro- (with -[a]ra- suffix as in kalmara- 'mountain' [EHS 186]), beside * $dh\acute{e}\hat{g}h$ -om in tekan. This simplification of the initial cluster appears also in e.g. Gk. $\chi\alpha\mu\alpha$ í vs. $\chi\theta\acute{\omega}v$, Skt. gen. $jm\acute{a}s$ vs. nom. $kg\acute{a}m$, and OCS zemlja, Lith. $žem\acute{e}$, Lat. humus.

An alternative approach was reportedly taken by Benveniste (Laroche via Puhvel, p.c.), who considered the base meaning to be 'wintry steppe, rangeland', and the etymon IE *gheym- 'winter; snow'. V. V. Ivanov (*Symbolae Kuryłowicz* 132) tied in the Κιμμέριοι, though the latter more likely belong with H. *kammara*-'mist, fog' (see 1.74).

wellu- 'meadow' is plausibly connected by Puhvel (AI 210-15) with ON vollr 'meadow', W. gwellt 'grass', and especially Gk. Ἡλύσιον (πεδίον) 'Elysian (lit. meadowy) field', reflecting an IE root *(H_2)wel- plus varying u-stem suffixes, different from * H_1 wel- 'twist', and perhaps revealing a very ancient Indo-European concept of the "meadow of the otherworld."

A.Šàku(e)ra- 'field' is a 'parcel' (EHS 165) or 'share' of land, a thematic noun corresponding to the verb kuer-, kur- 'cut' (9.22); cf. Gk. τέμενος < τέμνω. Anat. cognates are Luw. Mallitas-kuri-, lit. 'honey-field', and possibly Lyd. qira 'property, goods' (T 611). Bomhard (RHA 31 [1973]: 112) preferred instead a comparison with Skt. kr, kar, kar,

A.ŠÀterippi-, see 8.12.

1.24 — VALLEY — *hariya-* 'valley' has been successfully equated with Arm. *ayr* 'hole, den' by B. Čop (*Die Sprache* 3 [1956]: 135-38), who notes with Buck the commonality of meaning (via 'concavity') in e.g. OE *denn* 'lair', *denu* 'vale'. The reconstruction is then * $A_1(e)r-y-$; for further speculation on a root * A_1er- (prompted by Lith. *armuõ* 'Tiefe, Abgrund, Moorgrund') see Čop, op. cit. 138.

Much less satisfactory is M. L. Mayer's suggestion (*Acme* 15 [1962]: 242) of origin in Akk. *harru* 'depression, watercourse'; other attempts are surveyed in T 173.

- 1.25 Island According to Kronasser (*EHS* 125), "weder die indogermanischen noch die semitischen Sprachen haben ein altes Wort für 'Insel'," but made use of periphrases like H. *aruni anda* 'amid the sea' (corresponding to Akk. *qabal tāmti*), Lat. *īnsula*, Gk. ἐνάλιος, OCS *ostrovǔ*, *otokǔ*, etc. Hitt. also possessed the term *kursawar* (T 657-58), derived from kurs(a)- 'cut off' (9.22), and thus an exact semantic match for NE *skerry*, scar < ON sker.
- 1.26 MAINLAND hatant(i)-, originally participle of hat-'dry up', thus means 'dry land' (T 214, 219), like Lith. $saus\check{z}emis$ and OIr. $t\acute{t}r$ (: Lat. terra, torreo; Skt. $tr\dot{s}$ -, etc., cf. DSS 17). hat- reflects IE * A_1ed 'be dry', seen also in Lat. ador '(dried) spelt', and hatanti-contrasts with udne 'irrigable land' (1.21) from *wed- 'be wet'

(Puhvel, *Bi. Or.* 37 [1980]: 203). In view of this derivation, the usual gloss of *hatanti*- as 'shore' probably represents a specialization of the primary sense 'dry land'.

- 1.27 SHORE hatant(i)-, see 1.26. Another deverbative term for 'shore' may be kurkessar < kurk- 'preserve, hold back' (T 650), bringing to mind OE wer 'dam, weir', warian 'guard', and Gk. $\delta\chi\theta\eta$ 'bank, dike', connected with $\xi\chi\omega$ (although doubted by Frisk, GEW 2.456).
- 1.31 WATER watar, gen. wetenas (with Luw. Kizzuwatna- < *kez wetenaz 'cisaquinus') fits firmly into the widespread IE *wedōr group, and is already included in Buck's list. But the tentative connection of H. eku-, aku- and Toch. yok- 'drink' with Lat. aquaetc. has not survived; see rather 4.98 and P 268.
- 1.32 SEA Although all are agreed that the Hitt. word for 'sea' is *aruna*-, debate over the word's origin is extensive, and an exhaustive treatment is outside the scope of this work. Discussion has followed four main lines, which may be summarized as follows:
- (1) Connection with the watery Indic god Varuna, via Mitannian influence.
- (2) Reconstruction *mru-no- and tie-in with the widespread IE *mori- or Gk. $\mu \acute{o} \varrho \nu \chi o \varsigma$ 'dark', with reference to the Black Sea (Puhvel, Studies ... Whatmough 236-37 = AI 38-39).
- (3) Hattic origin, from the place-name URU Arinna (URU TÚL-na) via *arinna-'fountain'.
- (4) Connection with IE *er-, *or- 'stir, move', and thus with Skt. arṇava-, etc. This last is most likely, and has given rise to many detailed proposals. See for full discussion and references T 71-73, P 178-82.

- 1.33 LAKE *luli* seems to have meant originally 'lake' or 'pond', later generalized to all small bodies of water, both natural and man-made, including springs, wells, and cisterns (*CHD* 3.80-82). A late Hitt. derivative is *luliyasha* 'marsh'. Probably non-IE in origin (Sum. *TÚL* 'well, spring'? [*AI* 351]).
- 1.35 WAVE hunhunessar 'wave', with variants hunhuessar, huwanhuessar, huwanhwessar, and secondary hunhuesna-, seems to contain reduplication like other terms for natural phenomena, e.g. harsiharsi- 'storm', arsarsura- 'stream', wantewantema- 'lightning'. Beyond the obvious abstract suffix, the multiplicity of forms makes etymologizing difficult, and Čop's attempt (Indogermanica minora 35-37, 49) to reconstruct a root *wen-, seen in OS ūthia, OE yþe, ON unnr 'wave', is little help.
- 1.36 RIVER, STREAM hapa- is cognate with OBrit. Åβος 'the river Humber' (Ptolemy, Geography, cf. P s.v.), while the more usual n-suffixed variant—Lat. amnis, OIr. aub, OBrit. Abona, W. afon, OPruss. ape, etc.—is matched by Pal. hāpna- and H. dat.-loc. sg. ÍD-ni (ibid.) The data point to a root * A_1ebh 'river', which should be kept separate from * $\bar{a}p$ 'water' (contrast DSS 35, 42 and IEW 1, 51-52). Further Anatolian cognates include Luw. hapi-, Hier. RIVER-pi(a)- 'river', Hier. and H. hapat(i)- 'river-land' (see P s.v. and refs.)

The reduplicated arsarsur(a)- 'stream, current' is deverbative from ars- 'flow' < IE * E_1er -s- (10.32), much as Gk. $\acute{o}e\~{o}\mu\alpha$, OIr. sruth (but W. ffrwd < *sprew-; cf. Vendryes, Lexique S-189), NE stream, etc., from *srew- (DSS 41-42).

1.37 — Spring, Well — Besides *luli*- (see 1.33), several other terms for 'spring' or 'well' also occur, all roughly synonymous and

alternating with or accompanied by the sumerogram TÚL. $(T\acute{UL})$ altanni- (P 41-43, T 20) is late Hitt., generally taken as a Hurrian loanword via Luwian. In contrast, $(T\acute{UL})$ wattaru-, watru- appears in OHitt., and apparently springs from the IE word for 'water' (EHS 252), much as does Skt. utsá-, although the spelling with -tt- poses a phonetic difficulty, as it seems to point to an original voiceless stop.

harsumna- (nom.-acc. pl. to sg. *harsumar 'headwaters, source' has been linked (T 187-88) with harsar-, harsan- 'head' (4.20), thus parallel to Akk. rēš ēni 'head of the fountain', and like Engl. 'headwaters', via a suffix -(u)mar (T 188) or -umna- (P s.v.) A weaker alternative is a tie-in with hars- 'tear open; plow'; this poses its own extensive etymological problems (see 8.21), but is not unparalleled semantically, given Avest. xan-, Skt. khā- 'spring', Av. čāt- 'well'; kan-, Skt. khánati 'dig'.

A further Hitt. term for 'spring, fountain' is *sakuni-*, with denominative verb *sakuniya-* 'well up'. The form is itself derivative, from the primary *sakui-*, which appears once in this meaning besides its usual sense 'eye' (4.21). The term thus shows the same polysemy as its Semitic counterparts (e.g. Akk. $\bar{\imath}nu[m]$ 'eye; fountain'), and can be reconstructed **dhyagh**-*i-* and connected firmly with Gk. $\sigma\dot{\alpha}\phi\alpha$ 'clearly', $\sigma\sigma\dot{\phi}\dot{\phi}$ 'wise', $\sigma\alpha\dot{\phi}\dot{\eta}$ 'insight' (17.21, 17.34), through a base-meaning 'clearness, translucency', etc. (cf. Puhvel, *AI* 265-66, 313-21).

1.41 — WOODS, FOREST — GIŠtiyessar was identified by Laroche (RHA 9 [1948-49]: 11-13) as 'woods, (sacred) grove'. Clearly an abstract derivative, the root might be ti-, the weak stem of dai-'place, put', the meaning developing from a locational sense, something like OIr. ross < *pro-sto-. Speculation might even extend to the suppletive passive to dai-, namely ki-, wending its way back through IE *key- 'lie' (Gk. κεῖται) and on to Goth. haipi, NE heath

and W. *coed*, Corn. *cuit* 'woods' (*koy-to- [cf. Gk. κοῖτος], Gmc. *χai-to-/χai-ti- (IEW 521), providing support for 'place, be placed/lie' > 'grove, wood'.

1.42 — Tree — daru- means both 'tree' and 'wood' (1.43), and belongs with Gk. δόρυ, Skt. dāru-, and NE tree, etc. It remains part of the word for 'oak' allantaru (8.61; P 29), just as Gk. δρῦς and OIr. daur have been specialized in this sense.

1.43 - WOOD - See 1.42.

1.44 — STONE, ROCK — Generally accepted for NA4aku- 'stone' (and akuwant- 'stony') is Laroche's connection (RHA 15 [1957]: 25-26, 29) with IE *ak- 'sharp', with cognates Skt. áśman-, OCS kamy, Lith. akmuõ 'stone', Gk. ἄκμων 'anvil', etc., the Hitt. u-stem supported by Lat. acus 'needle', acūmen 'sharp point' (P 24). Although Puhvel notes the difficulty that "the consistent single spelling of -k- points rather to /-g-/" (ibid.), his tie-in with Gk. ἄχυρα, ἄχνη 'chaff', Goth. gazds 'sting', Lat. hasta 'spear' (*A₂égh-/*A₂gh-ádh-) is difficult.

 NA_4 kunkunuzzi-, a kind of stone (often translated 'diorite' since Götze, *KIF*. 1 [1930]: 201), formed with the implement-suffix -uzzi-(EHS 121) on the reduplicated root *kun*-. C. H. Carruthers (*Lg.* 9 [1933]: 154-55) derived the word from IE * g^w hen- 'strike' (4.76), thus literally 'tool for striking repeatedly, club', with transfer of the weapon-name to the material it was made from. Alternatively, cf. NA_4 ku(Wa)nna(-n)-?

 $^{NA_4}ku(wa)nna(n)$ -, see 9.66, 16.67.

- 1.51 SKY, HEAVENS Buck already includes H. *nepis* with Slav. *nebo*, Skt. *nábhas*-, Gk. νέφος, W. *nef*, etc. The vocalism with -*is* is unique but authentic (*EHS* 326-27); evidently an Anatolian innovation (cf. Oettinger, *Eide* 24). The *nem* seen in OIr. *nem* may be a variant of the same root or IE **nem* 'bow, bend'; cf. *DSS* 53; Vendryes, *Lexique* N-8.
- 1.52 Sun The common word for 'sun' and the 'sun-god' in Hittite is *Istanu-*, normally written ^{DINGIR}UTU-*us*. This, with its variant *Astanu-*, is simply the Hittite version of the Hattic *Estan-*, *Astan-*, which meant both 'sun-god' and 'day', and ousted the old IE *sawel-, the only Anatolian survival of which seems to appear in $^{\text{D}}$ UTU-*liya-*, i.e. **Saweliya-* matching Hom. † $^{\text{A}}$ $^{\text{A}}$ $^{\text{A}}$ $^{\text{A}}$ $^{\text{B}}$ $^{\text{A}}$ $^{\text{B}}$ $^{\text{A}}$ $^{\text{B}}$ $^{\text{A}}$ $^{\text{B}}$ $^{\text{B}}$ $^{\text{A}}$ $^{\text{B}}$ $^{$

The interchange of meanings 'sun' ~ 'day' in Hattic solar theology seems to have influenced Anatolian vocabulary very early, for the Luw. and Pal. terms for 'sun-god', *Tiwat-* and *Tiyat-* (as well as possible OHitt. ^DSius, EHS 467) match H. siwatt- 'day' and the large number of reflexes of *déy-, *dy-éw- discussed in 14.41 (P 465-68, T 428-30).

1.53 — MOON — The Anatolian word for 'moon' was *arma-;* it appears in this shape in Hitt. and Luwian, in Hier. as MOON-*ma-*, and in very many Anatolian names like Lycian Gk. Ερμαμοας, Ερμενηνις, Lyc. *ermmenēni*, etc. It generally means 'month' as well, like the numerous reflexes of IE **mēnes*, etc., but clearly does not continue that term of its basic sense of 'measuring'.

Although pronounced "ohne Etymologie" by Tischler (T 62), *arma*- has been connected (e.g. Laroche, *RHR* 148 [1955]: 18-21) with a large group of words having to do with 'weakness, sickness, paleness', including *arma(n)-, irma(n)-, irmanant-*

'sickness', derived from IE *ormo- as seen in OE earm, ON armr, Goth. arms 'wretched' (and possible Arm. olorm 'pity'), and explained as 'the pale one', in contrast to both the daytime sun and the widespread IE replacement lunar designation as 'the shining one' (Lat. $l\bar{u}na$, etc.; Gk. σελήνη; Skt. candrámas-). Also related are armai- 'be pregnant', armahh- 'impregnate' (4.73; Puhvel, Bi. Or. 36 [1979]: 58); full dicussion in P 151–60.

1.54 — STAR — haster- is a match for Gk. ἀστής, and with it preserves the initial laryngeal lost in the other dialects: $*A_1(e)$ ster-. Arm. astl may support full-grade vocalism, and also suggests original -r/-l heteroclisis (P s.v.). This reconstruction obviates root-connection with IE ster- 'spread out' (DSS 56), as well as with *ster-'stiff' (Pârvulescu, KZ 91 [1977]: 41-50; IEW 1022), but Akk. Ištar is still implausible as an ultimate source (see T 204-6).

Buck's cited *astira*- is a superseded reading; *KBo* XIX 10 + *KUB* VIII 75 I 22 now reads firmly ^{URU}Hastiras (Puhvel, *Bi. Or.* 37 [1980]: 202).

1.55 — LIGHTNING — wantiwant- and wantemma- exhibit multiple derivational devices, starting from the verbal stem wantai- 'be warm, glow'. On one hand, wantemma- shows the action noun suffix -ma (EHS 178). wantiwant-, on the other, is either a participial adj. with -want-, or less likely a reduplicated form (EHS 121; in the latter case one would expect *wantiwanti-, but the suggestion is supported by the reduplication in harsiharsi- '[thunder]storm'). Both formations are present in wantiwantema-.

The stem is *want-* 'be hot' (15.85; cf. *wantes-* 'grow hot' beside *wantai-*, also NINDAwantili- 'warm bread'), a rhyming synonym to *hantais-* 'heat' (Kronasser [*EHS* 88-89] considered the two etymologically identical, and included H. \bar{a} -, ay- 'be hot' [15.85] to boot [via part. $\bar{a}nt$ -, EHS 67-68]).

- 1.56 Thunder tethai-, tethiski- 'to thunder' and its nouns tethessar, tethuwar, tethima-, indicate a stem teth(a)-, but the word is "without clear etymology" and apparently non-Indo-European (Puhvel, Evidence~87 = AI~133).
- 1.57 LIGHTNING (AS STRIKING), THUNDERBOLT GIŠkalmisana-, besides its normal meaning 'firewood' (< *[s]kel-'split', 9.27), has been taken in this sense (T 469), through an identification something like 'firebrand' = 'lightning bolt' (understandable perhaps to anyone who has seen a tree struck by lightning!).
- 1.61 LIGHT *lalukkima-* '(source of) light', is abstracted from *lukk-* 'be light' and its many by-forms (*CHD* 3.28-30, 74-79), probably via *lalukki-* 'be luminous'. Kronasser (*EHS* 121-22) explains the reduplication as "der Versuch, optische Eindrücke wiederzugeben, besonders helles Licht und schnelle oder wiederholte Bewegungen," apparently having in mind rapid blinking or squinting stimulated by exposure to bright light. In any case the root-connection is clear: H. *lukk-* matches Skt. *roc-* or *ruc-* and fits comfortably in Buck's majority group from IE **lewk-(DSS* 60).
- 1.62 Darkness A Hitt. word for 'darkness' seems to be lacking. 'Celestial darkness', not quite the same thing, is rendered by sumerogram AN.TA.LÙ (Akk. $attal\bar{u}$).

In NHG *dunkel*, ON *dokkr*, a development 'dark' < 'misty, hazy' (Sw. *dunken*, NE *dank*), considered in *DSS* 62 (from Walde-P. 1.851-52), is challenged by Benveniste (*BSL* 33 [1932]: 142), asserting the primacy of 'dark' as shown by the cognate Hitt. *dankui-*, IE **dh(e)ngwo-* (15.63; cf. also *AI* 265).

- 1.63 SHADE GIŠ.GE₆-las 'shade; shadow' indicates an *l*-formation, recalling Lith. *šešėlis*, but nothing can be said about the root.
- 1.72 WIND To the group of words from traditional IE * $w\bar{e}$ -'blow' can now be added H. huwant-, which when compared with Gk. ἄημι (also Aeol. αὕελλα 'whirlwind', W. awel 'breeze', awen, OIr. ai 'poetic inspiration'; cf. C. Watkins, Celtica 6 [1963]: 215–16) confirms a more detailed reconstruction of the root as * A_1weE -. huwant- (/hwant/) thus reflects something like * A_1wE -nt-, * A_1w -e/ont-, participial like Gk. ἀέντες, Lat. ventus, W. gwynt, etc.
- 1.73 CLOUD *alpa* is apparently of IE provenance, but its exact source has so far eluded identification. Tischler (T 18) records Čop's adduction of Gk. $\lambda \acute{\alpha}\pi \eta$ 'scum', Russian *lópan*' 'Brunnen im Morast', from an IE **lpa*-, with semantic development as in Latv. *mākuônis* 'dark cloud' vs. Lith. *makōnė* 'puddle'. Puhvel (P 38) notes this suggestion and offers two more: Couvreur's connection (*Hett. Ḥ* 106, 149) with Goth. *luftus* (**lewp*-), and a reconstruction * $A_2\acute{e}l$ -p- > Skt. *álpa* 'small', Lith. *alpùs* 'weak', with * A_2l -ép- > Lith. *lepùs* 'soft', Gk. $\lambda \alpha \pi \alpha \phi \circ \varsigma$ 'slack', with doubtful shift from 'air' to 'flimsy, insubstantial' to 'cloud'.

The earliest and still most popular approach ties *alpa*- to Gk. $\dot{\alpha}\lambda\phi\dot{\circ}\varsigma$ 'white leprosy', Lat. *albus* 'white'. Puhvel's objection (P 38) that a development from 'white' to 'cloud' would be not only unique, but out of keeping with "the dominant Hitt. association of clouds with rain and water" is well taken, but the equation is phonetically impeccable, and the word could well have lost all connotation of 'whiteness' in Hittite, 'white' being expressed by other terms (see 15.64). On balance IE * A_2el -bho- remains most likely.

kammara-, see 1.74.

- 1.74 MIST (FOG, HAZE) The likely basis of kammara- 'fog; haze, smoke; cloud; swarm of bees' is IE *kem- 'cover' (T 472–73), seen e.g. in ON hamr, OE -hama 'covering, skin', perhaps from the appearance of fog or mist covering the ground; cf. Skt. dhvánati 'cover', dhvānta- 'darkness', Av. dvanman 'cloud, mist'. A. Heubeck (Hermes 91 [1963]: 490–93, seconded by Puhvel, P s.v.) deftly tied in the name of the Κιμμέριοι, ἠέρι καὶ νεφέλη κεκαλυμμένοι (Odyssey 11.15), originally a descriptive adjective like that of the sun-darkened Αἰθίοπες.
- 1.75 RAIN Of the many attempts to explain H. heu- (gen. helylaw-) surveyed by Tischler (T 238-40, to which add now E. Neu, BHD ... Kerns 203-12), the only one that works is the idea (rejected early by H. Zimmern [Stand und Aufgaben 441]) linking it with Gk. ὑετός (vb. ὕει), Toch. swase, swese (vb. AB su-), OPruss. suge, Alb. shi 'rain'. Thus the reconstruction includes s-mobile and laryngeals, with a basic form *(s)E₂ew-H-, sE₂-uH- (detailed analysis in Puhvel, Bi. Or. 37 [1980]: 203-4). Further extension *sE₂uH-g- in Lat. sūgere, OE sūcan, OIr. súgim 'suck' and *sE₂uH-k- in ON súga, OE, OS, OHG sūgan 'suck', Lat. sūcus 'juice, sap' (NE swig < *sE₂wH-ék-?) may point to some such further nuance as 'flowing', 'nourishment', or the like.

Also of PIE age is *warsa-* 'rainfall, precipitation', matching Skt. *varṣám* 'rain' and Gk. ἔρση 'dew' (pl. 'rain-drops') < *wers-, with zero-grade in OIr. *frass*, Skt. *vṛṣṭi-*.

1.77 — ICE — Hittite *eka-* 'ice, frost; cold' reflects IE **yeg-* 'ice', seen also in OIr. *aig*, ON *jaki*, *jokull*, etc. (P 258, *IEW* 503), thus giving more solid support to an original IE primary ice-term than arose from Buck's survey.

Derivatives are *ekuna-*, adj. 'cold' (15.86), *ekunima-* 'coldness', like Gk. κρύος 'icy cold' : κρύσταλλος or MCorn. *yeyn* 'cold', and perhaps *ikniyant-* 'lame' (4.94).

- 1.81 FIRE The inclusion of H. pahhur (gen. pahhuenas) and Luw. *pahur (N. Oettinger, MSS 34 [1976]:102-3) in the group of Gk. $\pi \acute{v}o$, etc. permits the IE word to be reconstructed confidently as an -r/-n heteroclite with a voiceless a-coloring laryngeal (Benveniste, Origines 169; Pedersen, Hitt. 187-88; Puhvel, Evidence 89 = AI 135), thus *peA₁-ur-, *peA₁-un-. No trace of the other IE fireword, *egni-, *ogni-, appears in Hittite.
- 1.82 FLAME Two different approaches have been taken to the explanation of happin(a)- 'open flame'. One one hand, V. V. Ivanov (Etimologija 1977: 145) adduced ON ofn 'hearth', OE ofen, Gk. ἀπνός (Myc. i-po-no) 'oven', etc., thus following B. Čop ($Indogermanica\ minora\ I$: 34-35), who compared ὀπτός 'roasted'. More promising is the direction taken by R. Gusmani ($Incontri\ linguistici\ 4$ [1978]: 242-43) and A. J. Van Windekens ($BHD\ ...\ Kerns\ 330$ -31), connecting Gk. ἄπτω 'kindle, ignite; attach' < * A_1ebh -, the Gk. word being conflated with an originally separate verb (perhaps * α πτω) 'attach', cf. Engl. 'set fire to'.
- 1.83 SMOKE tuhhui-, tuhhuwai- 'smoke' is cognate with Gk. θύος 'burned incense' > 'sacrifice', θύω 'offer (burnt) sacrifice', τύφω 'smoke, smoulder', thus *dhuA_I-, *dhew-A_I-; cf. θυμός 'spirit', Lat. fūmus 'smoke', etc. (W. Petersen, AO 9 [1937]: 210-11; IEW 261).

A further derivative is *tuhhuessar* 'incense'; despite *EHS* 104, the latter probably does not belong with *tuhs-* 'cut off', and there is no need to posit ad hoc a homonym *tuhs-* 'sich kultisch reinigen' in order to read *tuhhuisar tuh(uh)sa* as a figura etymologica (ibid.): it

simply means 'cuts the incense', with *tuhs*- 'cut' (9.22; H. G. Güterbock, *RHA* 22 [1964]: 106-7). More likely verbal connection is with tuhh(ai)- 'gasp, wheeze, cough', etc.; cf. Gk. $\kappa\alpha\pi\nu\delta\varsigma$ vs. Goth. *af-hwapjan* 'choke', likewise NE *smoke* vs. Lith. *smáugti* 'choke'.

For the alternative term kammara- see 1.74.

- 1.84 Ashes No Hittite word has surfaced, but E. P. Hamp (*Evidence* 126-27) connected Alb. $h\bar{\imath}$ 'ashes' with H. \bar{a} -, ay- 'be warm' (15.85). Skt. $\bar{a}sa$ 'ashes' was compared with H. as(s)- 'remain' by Oettinger (*Stammb*. 187), but Puhvel (P 189) is skeptical.
- 1.85 BURN Intransitive 'burn' in Hitt. is war-, with the transitive sense being expressed by the causative warnu-, like Goth. brinnan: brannjan. Probably not related, as has long been assumed, to Gk. θερμός < * g^wher -mo- (e.g. DSS 1077), as it violates normal phonetic development of initial * g^wh -, seen rather in kuenzi 'he kills' = Skt. $h\acute{a}nti$ (cf. Puhvel, AI 262, 265). More likely is Götze Pedersen's connection (MS 74) with OCS $var\breve{u}$ 'heat', Lith. virti 'cook' (5.21).

Hittite *pahhuriya-* (*HDW* 58) is denominative from *pahhur*, thus 'burn like fire'.

With Gk. $\alpha \mathring{t}\theta \omega$, Skt. *idh-* 'kindle', Lat. *aestus* 'heat', etc. (*DSS* 75) cf. Hitt. *ay-* 'be hot' (15.85).

1.86 - LIGHT (VB.), KINDLE - lukki- (and late H. lukk- [CHD 3.76]) is one of the many reflexes of IE *lewk- (1.61), paralleled in this meaning by Fr. allumer.

MANKIND: SEX, AGE, FAMILY RELATIONSHIP

Perhaps the most striking feature of Anatolian kinship and family terminology is its maternal and matriarchal bias, in contrast to the strongly patriarchal structure so well known among other speakers. Besides the historical record of Indo-European Herodotus (History 1.173), who remarked on the unique matriliny of the Lycians, considerable linguistic evidence demonstrates the Hittites' general adoption of native Anatolian custom at the expense of inherited Indo-European tradition. Noteworthy are the replacement of IE terms for 'father', 'mother', 'brother', 'sister', etc. by indigenous ones, the designation of 'family' by hassatar (2.82) < has 'give birth' rather than a reflex of *genE- 'beget' (Gk. γένος, etc.), the maternally-based terms anninniyami- 'mother's brother's (child)' for 'cousin' (2.55), annaneka- 'co-uterine sister' (2.45), andaiyant- 'entering one' for 'son-in-law' (2.63), and so on; see Laroche, BSL 53 (1958): 186-93.

 $2.1 - \text{Man}^1$ (Homō) – The very difficult Hitt. antu(wa)hha/antuhsa- presents multiple barriers, both morphological and phonological, to a definitive etymology, as neither the original declension nor stem-formation is certain. An origin in Hattic $ant\bar{u}h$ 'human' has seemed likely to Laroche (JCS 1 [1947]: 194–95) and others, with the prefixed version d-andu-ki perhaps yielding Hitt. danduki- 'mortal'.

Other possibilities involve IE elements, e.g. Oettinger's (Stammb.~373) * $en-dhweA_1-o-$, with root * $dhew-A_1-$ as in H. tuhhui-, Lat. $f\bar{u}mus$ 'smoke' (1.83) and formation like Gk. $\check{e}v-\theta\bar{v}\mu o\varsigma$ 'spirited'. The often repeated (from Kretschmer, Glotta 9 [1918]: 232) connection with Gk. $\check{\alpha}v\theta\varrho\omega\pi o\varsigma$, because it must take into account Myc. a-to-ro-qo, compels a reconstruction along the lines of * $A_2nr-\bar{o}kw-(o)s$, which has the virtue of tying in Hes. $\delta\varrho\omega\psi$ · $\check{\alpha}v\theta\varrho\omega\pi o\varsigma$ but leaves seemingly insurmountable phonetic problems. Further tries and refs. P 79-83, T 36-37.

antuhsatar, antuhsannant- 'mankind; population' are straightforward abstract derivatives.

Lyd. antola, anlola may mean 'funeral stele', if from H. *antuwahhala- (Gusmani, Lyd. Wb. 59; Neue epichorische Schriftzeugnisse aus Sardis [Cambridge, Mass., 1975], p. 5, comparing Gk. ἀνδοιάς 'statue').

For H. *danduki-* 'mortal' (adj. and noun), see above. Lúmayant-'grown man', part. of *mai-*, *miya-* 'grow' (12.53).

2.21 — Man² (VIR) — Hittite uses *pesna*- 'penis' (4.492) in synecdoche to mean both 'man' and adj. 'male' (2.23), somewhat as OE *wæp(en)-man, wæpned-man* (with 'penis' < 'weapon'). A closer parallel may be Lat. *mās* 'male', if cognate with *membrum* (*virile*) < **mēmsro*- (P s.v., comparing Skt. *māṁsá*- 'flesh'; cf. *DSS* 85). The abstract deriv. *pesnatar* (LÚ-*natar*) 'manhood, virility, potency' was further reconcretized to mean 'male genitalia' and 'semen', as SAL-*natar* became 'vagina' beside 'womanhood'.

Hier. and Luw. *ziti-* (common in personal names, e.g. *Armaziti-*), etym. ?

On the group including Gk. $\alpha v \eta \varrho$, etc. see in(n)arawant 'strong', 4.81.

2.22 — WOMAN — Sumerography conceals the Hitt. word, but dat. SAL-ni, gen. SAL-nas, etc. and the abstract SAL-natar 'womanhood' combine with Luw. unatti-/wana(tti)- 'woman' to suggest a reflex of the near-ubiquitous IE *gwen-eA (RV jáni-, OIr. ben, Arm. kin, zero-grade Skt. $gn\bar{a}$, Gk. γ vv $\dot{\gamma}$, etc.). Nom. SAL-za points specifically to *gwen-s or perhaps *kuenan-s < *gwen-on-s, -n-suffixed as in Gmc. (Goth. qino, OE cwene) (F. Starke, KZ 94 [1980]: 74-86).

Lyc. *lada* 'woman, wife', cf. perhaps Gk. Λητώ, Dor. $\Lambda \bar{\alpha} \tau \dot{\omega}$.

- 2.23 MALE *pesna-* 'man', adj. 'male', *pisnatar* 'manhood', all from *pesna-* 'penis', 4.492; cf 2.21.
- 2.26 GIRL SALhaz(i)kara(i)- 'maiden' or 'girl' in temple-service, exclusively in plural. Tischler (T 234) and Puhvel (P s.v.) concur in suspecting indigenous Anatolian origin, as well as in doubting Kronasser's analysis (EHS 186) as *hazzk-tara- 'musical-instrument player'.

suppis(s)ara- 'maiden, virgin' is formed from *suppi-* 'pure' + the fem. suffix *-sra-* (*EHS* 187) seen as well in *alhuesra-/alhuitra-*, a temple-priestess (P 33-34).

Ideogram SALKI.SIKIL 'girl'.

- 2.27 CHILD H. *hammasa-* 'small child' goes with Luw. *hamsa-*, Hier. *hamasa-* 'grandchild', likely the original meaning: cf. 2.48.
- 2.28 INFANT *hassant-* 'baby, small child', part. of *has-* 'give birth' (4.72), thus 'one just born', like NHG *kind* < **genE-to-*. Also DUMU.NITA.GAB 'boy nursing' and DUMU.SAL.GAB 'girl nursing' (E. A. Hahn, *Studies ... G. S. Lane* 163).

- 2.31 Husband Hittite uses LÚ (*pesna*-) 'man', or Akk. LÚMUTU.
 - 2.32 WIFE DAM (Akk. aššassu).
- $2.33 \text{MARRY} \text{'To take a wife' appears as } -za \dots \text{DAM-anni } da$ -, lit. 'take (so-and-so) to oneself in wifehood' (cf. OIr. do-beir mnai, Lat. $ux\bar{o}rem \ d\bar{u}cere$), and $-za \dots \ ^{L\dot{U}}MUTI \ iya$ 'make (so-and-so) one's husband' serves as the distaff equivalent.

hamenk- 'bind' (9.16) also comes to mean 'marry', like NE "get hitched"; cf. *ishanittarātar* 'marriage alliance' (2.81) < *ishai-* 'bind'.

- 2.34 MARRIAGE The state of marriage (but not the wedding ceremony) is denoted by DAM-atar 'wifehood' (like Avest. $n\bar{a}iri\theta wana$ -) or ^{SAL}É.GE₄.A-atar 'bride-hood, engagement'.
- 2.35 FATHER PIE *p#tēr- does not survive in the Anatolian languages, all of which show replacements of the common *Lallwort*-type. Thus H. *atta-* 'father', *attalla-* 'fatherly, paternal' (cf. Goth. *atta*, Russ. *otec*); Luw. *tāti(ya)-*, Hier. *tati(a)-*, Lyd. *taada-*, Lyc. *tedi*, adj. *tedesi*, Hier. *tatali-* (W. *tad*, Rum. *tată*); Pal. *papa* (P 224-26).
- 2.36 Mother Like *pltēr-, IE *mātēr has been supplanted in Anatolian, by anna-, anni- (Luw. anni[ya]-, Hier. SAL-natin, Pal. anna-, Lyd. ēna, etc., Lyc. ēni). Parallels include Lat. anna 'foster mother', Hes. ἀννίς, Arm. han, OHG ana 'grandmother', Lith. anýta 'mother-in-law', etc. (P 55-57).

Lyc. $\chi \tilde{n}na$ 'mother' corresponds to H. hanna- 'grandmother' (Puhvel, Evidence 84 = AI 130).

- 2.37 PARENTS Siding with those languages which express 'parents' through combinations of the terms for 'father' and 'mother', Hittite uses asyndetic atta- anna- or anna- atta- (cf. French père et mère; also H. huhha- hanna- 'grandparents'), Pal. anna- pāpa-. The original compound atta anna, anna atta, paralleling Skt. pitárāmātárā(u), mātárāpitárāu (classical mātāpitarau) and elliptical matara(u), pitara(u) (cf. Sp. padres, Goth. fadrein), appears in the expression (attas) annas siwatt- 'day of death', lit. '(fathers' and) mothers' day'; see AI 205-9.
- 2.41 SON The Hitt. word is consistently hidden beneath sumerographic DUMU(.NITA). H. C. Melchert (*IF* 85 [1980]: 90-95) equated the sporadic DUMU-*la* with *ayawala* in *KUB* XIV 3 I 11-12 L^LTARTENU-ma UL ANA LUGAL *ayawalas* 'is not the crown prince the *a*. of the king?', but etymology supports the reading 'agent, deputy', etc. (< Luw. *aya* 'make'), favored from Sommer (*AU* 41-54) to Kronasser (*EHS* 174) and Puhvel (P 13).

Luw. DUMU-*ni*- and DUMU-*annassi*- suggest a form in -*anni*-, again with no clues to the root.

Lyc. *tideimi* 'son' < Luw. **titaimi*- 'suckled, sucking' (*VLFH* 211), cf. H. *titan*- 'tit'; semantics as in Lat. *filius*, Latv. *dēls*.

2.42 — DAUGHTER — Normally DUMU.SAL, the inherited IE term survives in the Luwoid ^{SAL}duttar(ri)yati-</sup> and variants (cf. F. Starke, KZ 94 [1960]: 77). Anatolian *du(g)atra- yielded Luw. *dwatra- (cf. Hier. WOMANtú-wa-tara [J. D. Hawkins, KZ 92 (1978): 112-16]) > Lyc. B *tbatra > Lyc. kbatra (A. Heubeck, Die Sprache 8 [1962]: 86; Laroche, BSL 62 [1967]: 47-48).

2.43 - CHILD - DUMU.

- 2.44 BROTHER Luw. *nani(ya)* (also personal name ^INani-) and Lyc. *nēni* indicate a Hitt. reading **nana* for ŠEŠ, with support from attested ŠEŠ-*ni*. Further corroboration probably resides in H. *annin(n)iyami* 'cousin', i.e. 'mother's brother's son' (2.55). Here again the PIE term has been supplanted.
- 2.45 Sister Hittite has *neka* as well as NIN, both on its own and in personal names such as *Hasusarniga* 'Queen's Sister'. Neumann (*Antiquitates Indogermanicae* 280-82) plausibly derived *neka* from *nana* 'brother' (cf. Sp. *hermana* and Gk. ἀδελφή) via the appurtenance suffix -(*i*)*ga* (*EHS* 170-71), thus *(*na*)*niga* paralleling the separate WAnat. development seen in Luw. *nanasri*(*ya*)-, Hier. *nanaśri*-, Lyc. *neri* (< *[*ne*]*nehri*-) 'sister' (O. Carruba, *Parola del Passato* 24 [1969]: 269-72).

The Hitt. compound *annaneka*- is 'mother-sister(s)', i.e. 'sisters with the same mother' (Goetze, *AO* 17.1 [1949]: 288-90; P 58-59).

2.46 — GRANDFATHER — In contrast to much of Anatolian kinship terminology, H. *huhha*- (Luw. *huha*-, Lyc. χuga) may be of PIE origin (* A_1 [e] uA_1 0-), matching Lat. avus, Arm. hav, and cognate with Goth. $aw\bar{o}$ 'grandmother' and OIr. $\acute{a}ue$ 'grandson' (*awi-yo-; cf. NHG enkel, $\ddot{a}hnlein$: ahn). References at T 261.

The competing Hitt. term $d\bar{a}n$ atta- 'second father' is a very archaic designation with close ties to such ancestor-terminology as Gk. τρίπαππος, τριτοπάτωρ, Lat. *tritavus*, etc.; full discussion in AI 391-92.

A third mode of reference 'father's father' appears in akkadographic ABI.ABI.

huhha- hanna- means 'grandparents', as *atta- anna-* 'father (and) mother' is also 'parents'.

2.47 — GRANDMOTHER — H. hanna- (AMA.AMA), Lyc. $\chi \tilde{n}na$, recalls Hes. ἀννίς, OHG ana, Arm. han 'grandmother', Lat. anna 'foster mother'. A common IE * A_1 en- can be reconstructed (refs. T 145-46) without prejudicing an ultimate origin in "Kindersprache" (EHS 118; T 145).

 $2.48 - GRANDSON - Considerable confusion exists, both in modern scholarship and in Hittite usage, among terms for 'grandson, grandchild' and those for the more general notion 'descendant, offspring', as transfer from one meaning to the other is easily possible (e.g. Gk. <math>\check{\epsilon}\gamma\gamma\sigma\sigma\sigma$ 'descendant' > 'grandson'; cf. H. *hammasa*- 'small child' vs. Luw. *hamsa*- 'grandchild', and the similar instability of IE **nep*(\bar{o})*t*- 'grandson, nephew, offspring' [DSS 111-12]). Closest to the specific end of the scale is DUMU.DUMU(-MEŠ) 'son's son; children's children', etc. (similarly DUMU.DUMU.DUMU 'great-grandson'), with the opposite extreme represented by Hitt. neut. *hardu*- (Luw. *harduwatt[i]*-, Hier. *hartu*-), tentatively interpreted as 'Urenkel' (T 189) but meaning basically 'descendant(s), offspring' (see 2.57).

The formulaic expression *hassa hanzassa*, formerly explained as a petrified dual-dvandva and translated 'Enkel und Urenkel' (cf. T 195), was convincingly reinterpreted by Melchert (*RHA* 31 [1973]: 57-70) as an asyndetic directional (dative) meaning 'to the first (and) second generation' (such a phrase could easily then come to mean 'children and grandchildren'). The first element is clearly deverbative from *has-* 'beget, give birth' (4.72), while the second remains etymologically troublesome. T. Milewski's analysis (*L'indo-hittite et l'indoeuropéen* [Krakow, 1936], p. 32, n. 3) *hanza* 'before' + *hassa-* 'generation' is formulaically attractive but chronologically perverse: one would expect *appan* here, as in Lyc. *epñ-neni* 'youger brother' (*TL* 8.2-3); Melchert's comparison (op. cit. 64-65) with Lat. *prōgnātus*, Gk. ἔγγονος is not entirely satisfactory,

as he himself noted (ibid., n. 5-6).¹ Laroche's alternative explanation (BSL 53 [1957-58]: 188-89) equates hanzassa- with Luw. hamsa-, Hier. hamasa- 'grandson', H. hammasa- 'small child' (plus difficult suffix -[s]sa-), thus hassa hanza-ssa would show the opposite semantic development 'children (and) grandchildren' > 'generation (and) next generation'. In either case the etymology of Hitt. hammasa- poses its own problems; Oettinger's attempt (Eide 24) < *A(o)mso- (ON $\acute{a}ss$, <code-block> msir) may be right.</code>

2.53 - Nephew - Lyc. tuhes 'sister's son'.

2.55 — COUSIN — H. *annin(n)iyami*- is attested; if from Luwoid **anni-nani(ya)*- (P 71-72), the meaning is originally 'mother's brother's (offspring)', but it has been generalized at least as far as 'father's sister's son' (*KUB* XXI 1 III 34-36, quoted ibid.).

2.56 — ANCESTORS — The Hittites apparently shared the Indo-European concept of departed ancestors as the 'fathers' or 'mothers and fathers' ([gen. pl.] *karuuiliyas addas* 'ancient fathers'; cf. RV *pitáras*) who have gone ahead to the next world (H. *wellu-*, Gk. Ἡλύσιον π εδίον, etc.; cf. AI 210-15); the old elliptical dual expression survives in *annas siwaz* 'day of death', lit. '(fathers' and) mothers' day' (AI 205-9).

Hier. *huhati-* 'ancestor', with adj. *huhatali-*, H. *huhhatalla-*, lit. 'grandfatherly', fr. *huhha-* (2.46).

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^{1.} A Hitt. model *hanz-huhha- 'great-grandfather' is needed to fill the analogical slot of Lat. pro-avus; one wonders whether it might lurk in Luw. hamsukkalla-, Hier. GRANDCHILD-masukula- '(great-) grandchild', from something like *hanz-huhh-talla- (cf. OIr. áue vs. Lat. avus, NHG enkel, ähnlein vs. OHG ano, with 'grandson' derived diminutively from 'grandfather').

2.57 — DESCENDANTS — H. hardu- 'offspring, descendant', pl. harduwa-, with Hier. hartu- and Luw. harduwatt(i)-, is accompanied by the phrase harduwa harduwati 'in regelmäßig aufeinander-folgender Nachkommenschaft' (T 189). R. Normier's comparison (IF 85 [1980]: 58) with Arm. ordi 'child, offspring' may be apposite, fr. PIE *A1rdh-. The suggestion of O. N. Trubačev (Voprosy jazykoznanija 2 [1957]: 88, championed by V. V. Ivanov, Etimologija 1979: 135-36), connecting OCS $rod\tilde{u}$ 'kin, family, birth', is also tempting, but requires separating $rod\tilde{u}$ and roditi 'give birth' from IE *werdh-, *wredh- 'grow', Skt. várdhati, Gk. ὀθός (Lac. βορθαγορίσκος), etc. (IEW 1167). Van Windekens (BHD ... Kerns 332) adduces Hes. ἀρτύς · σύνταξις, Arm. ard 'structure, construction' and other forms, envisioning a basic sense 'line (of descent)'.

Luw. warwala/i- 'offspring', warwalanant- 'descendant' (NUMUM-ant-) are read thus by Laroche (*DLL* 108), vs. warwatn(ant)- in N. van Brock, *RHA* 20 (1962): 105. A plausible link with Slavic *vĭrvĭ 'line' was put forward by V. N. Toporov, Strukturno-tipologičeskie issledovanija v oblasti grammatiki slavjanskix jazykov (Moscow, 1973), p. 122-23.

2.63 — SON-IN-LAW — *andaiyant-*, probably from *anda* 'in' + part. of *i-* 'go', is literally 'he who has gone in', and reflects areal son-in-law tradition seen also in Akk. *errēbu* 'he who enters' and Turk. *iç-güvey* 'inside son-in-law' (P 78-79).

LÚkusa- may in some occurrences mean 'son-in-law' or the like, but this reading should not be substituted (pace Starke, Funktionen 144) for the acc. sg. of kussan- 'payment' in the Code (11.77/78). J. J. S. Weitenberg's comparison (IF 80 [1975]: 66-70) with Gk. κύσθος 'weibliche Scham' fails on phonetic grounds: the latter plainly belongs with Lat. cunnus < *kut-no- (4.47). It might be preferable to derive (LÚ)kusa- from IE *ĝews- 'choose' (with either full or reduced

- vocalism; cf. Goth. *kiusan* vs. Lat. *gus-tus*), with the meanings 'chooser' or 'chosen one' justifiable for either bride (Weitenberg's ^[SAL]*kusa-*) or the "entering" (*andaiyant-*, cf. above) groom (cf. ON *kvenn-kostr* 'good match [in marriage]'). H. *kusata-* 'brideprice' may belong here, as a derivative of ^{SAL}*kusa-* (cf. Weitenberg, loc. cit.), or with *kussan-* (discussion T 673-74).
- 2.65 BROTHER-IN-LAW LÚkaena- (Lyd. kãna-), usually taken as some undetermined (or nonspecific term for) 'in-law' (T 459-60), belongs here according to P 79. F. Mezger's link with demonstrative ka-/ki- (KZ 75 [1957]: 76) is thinkable in view of the many similarly pronominal derivatives from *s(e)we-, *swo- meaning the same thing in other languages (e.g. Lith. sváinis 'sister's husband', pl. Gk. ἀέλιοι, ON svilar 'husbands of sisters'; OCS svatŭ 'relative', Russ. svojak 'wife's sister's husband', etc. (DSS 126).
- 2.71 STEPFATHER Luw. *tātawanni-*, formed from *tāti(ya)*-with the sufix *-wanni-* (EHS 183), in the manner of Lat. *patrāster*, etc. This and Luw. *annawanni-*, H. *annawanna-* 'stepmother' suggest a likely though unattested H. **attawanna-*.
- 2.72 STEPMOTHER H. annawanna-, Luw. annawanni- < 'mother' + -wanna/i-, as in 'stepfather' above (P 65, T 28-29).
- 2.75 ORPHAN *kurimma* was identified by Kronasser (*EHS* 180; supported in T 646-47) as a Luwoid participial formation (suffix -[a]imma-) on the stem *kuer-|kur-* 'cut off' (9.22). Semantically parallel to NHG *waise* < *weydh- 'divide, split' (cf. IE *widh-ew- \bar{a} 'widow'), and like Gk. ὀϕϕ α vó ς , Lat. *orbus*; OCS *sirŭ*, etc.

The exact meaning of *wannummiya*- is hard to pin down; noting that it occurs with both DUMU and SAL, Laroche (*RHA* 9 [1949]: 14-15) suggested a combination of 'orphaned' and

'childless', comparing Gk. ὀφφανός and Lat. *orbus*. E. A. Hahn (*Studies ... G. S. Lane* 160-62) added the sense 'widowed' as well, accepting Güterbock's translation 'bereaved' (*JAOS* 78 [1958]: 240 and n. 19). The basic sense 'alone, deserted, abandoned', etc. invites comparison with Lat. $v\bar{a}stus$ 'desolate', OHG wuosti 'wasteland', OIr. fas 'empty', cognate with H. wastai- 'sin, failure', etc. (16.75), an equation semantically supportable (cf. Gk. χήρα 'widow', χώρος '[empty] land') but phonetically difficult ($< *w\bar{a}s-n-ummi$ -?).

2.76 - WIDOW - SALudati- was interpreted 'veuve' by Laroche (*RA* 43 [1949]: 70), who connected it plausibly (ibid. n. 2) with IE *widhewā by reading initial ú- as /wi-/ and the fem. suffix -(i)t(i)- as a Hitt. counterpart of IE *-wā, thus *widha-ti-. This interpretation and etymology were wholeheartedly endorsed by Hahn (op. cit. 154-70).

2.81 — RELATIVES – *ishanittarātar* '(marriage) alliance, kinship' and *ishanattalla*- 'kinsman by marriage' are most probably from a caustive **ishanai*-, **ishaniya*- (P 395-96, T 381-82) to *ishai*- 'bind' (9.16), semantically like Skt. *bándhu*- 'relative', Gk. π ενθερός 'father-in-law', Czech *přibuzní* 'relative'. A former reading 'blood relative' relied on an unlikely derivation from *eshar* 'blood'.

Lúkaena- '(brother-?)in-law', 2.65.

2.82 - FAMILY - hassatar, see 19.23.

ANIMALS

 $3.11 - \text{Animal} - \text{Although the meaning is evidently 'living creature(s)', like Gk. <math>\zeta \tilde{\omega}$ ov, NIr. beath(aidhe)ach, OCS $\check{z}ivot\check{u}$, Lith. $g\acute{y}vulis$, etc., the formation and ultimate source of H. huitar are somewhat unclear. A Luw. counterpart huitumar is plainly derived from the Luw. verb huit- 'live', but the corresponding Hitt. verbal slot is filled by huis-, which is not the immediate source of huitar (or the further denominative huitnant-). Rather than an improbable Luw. loanword in Hittite, the explanation may lie in a PAnat. verb *huit-, yielding separate abstract derivatives in Hitt. and Luw., and reflecting a separate root, or at least stem-formation, from that of H. huis-. For fuller discussion cf. T 264-68, 269-71; possible root-connections are via huit- and huis- 'live': see 4.74.

[*Update:* Puhvel (p.c.) compares *huitar, huitn-* with ON *vitnir* 'creature' (describing the wolf Fenrir, and forming compounds like *hróðvitnir* 'wolf' [lit. 'slaver-creature'], *grafvitnir* 'snake' [< *grafa* 'dig'], and *sporvitnir* 'horse'), thus reconstructing **Hweyd-* or **Hwed-*.]

3.12 — MALE — In most cases the sumerogram refers automatically to the male of animal species, unless additionally marked 'female' (SAL[.AL.LAL]) or a distinct female form (see 3.13). The terms used to refer to human beings (2.23) could probably also be applied to animals for particular emphasis, especially NITÁ as the masculine counterpart to SAL(.AL.LAL).

- 3.13 Female Female animals are in part designated by distinct sumerograms, e.g. $^{\text{UDU}}\text{U}_{10}$ 'ewe' vs. $^{\text{UDU}}\text{ŠIR}$ 'ram', $^{\text{GUD}}\text{\acute{A}B}$ 'cow' vs. GUD.MAH 'bull', ÙZ 'nanny goat' vs. MÁŠ 'he-goat', EMÈ 'jenny' vs. ANŠU 'ass'. In other cases the qualifier SAL(.AL.LAL) 'female' could be affixed (cf. *EHGl.* 18-19 and n. 2).
- 3.14 Castrate kars- 'cut (off)' (9.22) is used in this self-explanatory sense, like the cognate Dan. skære (DSS 142) and Gk. ἐκτέμνω, Fr. couper, Swed. sn"opa, NE cut, NHG verschneiden, Czech $vy\~rezati$ (DSS 141-42).
- 3.15 LIVESTOCK huitar 'animals' (see 3.11) was given as the Hitt. reading for MAŠ.ANŠU (Akk. būlu) by Friedrich (HWb. 285; ZA N.F. 5 [1929]: 41), with semantics paralleled by e.g. Rum. vite, Lith. gyvuliaì, plurals meaning 'live-stock, domestic animals', and Dan. kreaturer, Engl. dial. critters. Derivation and context point more in the direction of a less specific 'animal life, fauna'; cf. gi]mras huwitar 'beasts of the field', huwitar hūman 'all game' (AI 220).
- H. sup(pa)l(a)- 'cattle', with "singulative"-suffixed *suppalant-*(*EHS* 261; Laroche, *OLZ* 51 [1956]: 422) 'head of cattle', appeared to Kronasser (*EHS* 324) to be an *-l*-stem, probably of foreign origin.
- Gk. π 0 \acute{o} 6 \acute{a} τ α , lit. 'forth-going ones', has a parallel in Hitt. UDUiyant- 'sheep', see 3.25.
- 3.16 Pasture, Graze wesiya- 'put to pasture' (itv. weseski-) is denominative from wesi- 'pasture' (3.17), like Sp. pastar, OFr. pasturer; OE læswian < læs. E. Benveniste (HIE 97-101) presented a strong case for the reconstruction of an original IE verb *wes- with this meaning, comparing H. wesi-, Avest. $v\bar{a}stra$ -

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'pasture, pasturage' and H. Lúwestara-, Av. $v\bar{a}star$ - 'herdsman, protector'; see 3.18.

Hier. *lapana/i-* is denominative, from a noun matching Luw. *lapana-* '(summer) pasture', 3.17.

3.17 — PASTURE (SB.) — *wesi*- is from PIE **wes*- 'pasture, protect flocks', cognate with Avest. *vāstra*-, adj. *vāstrya*- (with numerous further derivs.; see *HIE* 98), Skt. *svásara*- <**su-vasar*- (Renou, *Études védiques et pāninéennes* 10 [1962]: 75), perhaps Toch. A **wäsri* grassland' (Van Windekens, *Le tokharien* 565). See further 3.18.

H. *wellu-* 'meadow', besides Puhvel's derivation fr. **wel-su-*(1.23), has also been reconstructed **wes-lu-* by Čop (*Ling.* 6 [1964]: 44, 51), but the existence of *wesi-* plus the unsupported *l-*suffix (cf. *EHS* 252-3) make this etymology doubtful.

Luw. *lapana-* 'summer pasture', with derivatives *lapanali-, lapanallahit, lapanuwani-,* adj. *lapanassi-,* Hier. vb. *lapana/i-,* is obscure (*CHD* 3.40-41).

3.18 — HERDSMAN — LÚwestara- matches Avest. vāstar- both formally and semantically, from PIE *wes-tr-. As pointed out by Benveniste (HIE 97-101), the Hittite and Avestan terms wes(iya)-and vāstrya-, etc. have to do with 'protecting; ruling' as well as simply 'pasturing', allowing the reconstruction of an original sense of *wes-tr- as 'shepherd, pastor, protector of the flocks', with very early transfer to the relationship between men and the gods. Details of possible ultimate connections of this root *wes- with its many IE homophones (IEW 1170-73) remain to be worked out.

^{Lú}lapanalli- is from Luw. lapana- '(summer) pasture', with deverbative parallels e.g. Lat. pāstor, Lith. ganýtojas, OCS pastyrĭ, pastuchŭ (DSS 149-50).

3.19 - STABLE, STALL — Like other ancient IE speakers, the Hittites had no native word for the technologically advanced notion of a separate, enclosed building for the housing of livestock. They may have adapted an old word meaning 'standing-place', 'pen', or 'hut' (cf. H. *hali*- 'pen, corral'; asau[w]ar 'fold'), as happened in the other dialects, or may simply have adopted the indigenous terminology that appears ideographically as É GUD 'Rinderstall' or É LÚIŠ 'Haus des Wagenlenkers' (HWb. 270).

According to E. Neu (*Interpretation* 162), [£]kizzumi- refers to 'Stallung' in KUB XXXV 148 III 40 GUD-us [£]ki-iz-zu-mi-ya dakkudaku-wair 'sie trieben die Rinder zum k.' (T 598), but no etymology is apparent.

3.20 — CATTLE — The survival of PIE *gwōu- into Anatolian is indicated by Hier. COWwawa- (HWb. Erg. 2: 47; Laroche, BSL 62 [1967]: 59), Lyc. wawā (Laroche, loc. cit. 59-61), and H. nom. sg. GUD-us, acc. GUD-un (HWb. 275; cf. N. Oettinger, MSS 34 [1976]: 101-2).

$$3.21 - BULL - GUD.MAH$$
 (nom. sg. GUD.MAH-as).

3.22 - Ox - Regularly GUD. The unclear bovine designation ^{GUD}*hursalami*- might belong here, if related to *hursakniya*-, the latter referring to some kind of roasting, drying up, or destroying by fire (T 308), thus 'cauterizing'?; cf. Lat. \bar{u} rere, OE (\bar{a})fyrian 'castrate', lit. 'burn (off)'.

$$3.24 - CALF - (GUD.)AMAR.$$

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3.25 — SHEEP — Luw. *hawi-*, Hier. *ha-wa/i-i-śa*, Lyc. $\chi aw\tilde{a}$, and H. **hawi-* (UDU-*is*) reflect the initial laryngeal phoneme in PIE * $A^{w_1}owi$ -, attested only indirectly or lost without trace in Gk. olg, Lat. *ovis*, OIr. *ói*, OHG *ouwi*, Lith. *avìs*, OCS *ovica*, Skt. *avi-*, etc., and seen as well in Arm. *hovi-w* (T 230).

(UDU)iyant- is originally the participle of i- 'go', and the notion of 'walking wealth' is comparable with Gk. $\pi \varphi \circ \beta \alpha \tau \alpha$ and ON ganganda fé (Pedersen, Hitt. 148) as well as Oscan eítiuvam 'pecuniam' < *ey-tu- (P 348 with refs.).

- 3.26 RAM UDU.NITÁ-an, acc. sg., also UDU.ŠIR (ŠIR 'testicle').
- 3.27 Wether Possibly UDU.ŠE 'fatted sheep', cf. Ved. $p\acute{e}tva$ 'wether' < $p\bar{\imath}$ 'grow fat'.
 - $3.28 EWE UDUU_{10}$.
- 3.29 LAMB (UDU)ÁŠ.SAL.GAR. Tischler (*HDW* 47) tentatively assigns *lazzandati-*, on the basis of *Kbo* XXIV 26 III 3-4 [...] *hāwēs lazzandatin hasta* [... *laz]zandatis* ^D*Aindupinzu hasta* ""Sheep" begot *l.*; *l.* begot A.', but *CHD* (3.50) infers no more definite meaning than 'an animate being'.
- 3.31 SWINE ŠAH(-as), Akk. šahū. Neu (Interpretation 60, n. 6) suggested H. huntari-, which Tischler (T 288) connected with huntariya- 'fart' (4.64) and huntarnu- 'grunt'; cf. NE slang oinker.
- 3.32 BOAR Possibly ŠAH *IZ.ZI* 'wild hog', lit. 'forest swine', like MW *baed coed* (*HWb*. 293).

- 3.33 BARROW ŠAH ŠE, lit. 'fat hog', plausibly refers to the castrated variety; although lacking the Skt. support enjoyed by its ovine counterpart UDU ŠE (3.27), the greater growth of the neutered animal is alluded to negatively in SCr. *nerast* 'boar', and perhaps positively in Lat. *maiālis* 'barrow' (*DSS* 162, 163).
 - 3.34 Sow ŠAH SAL.AL.LAL.
 - 3.35 Pig(let) ŠAH.TUR.
- 3.36–3.38 GOAT MAŠ 'goat', MAŠ.GAL 'he-goat', ÙZ (Akk. *enzu*) 'nanny-goat', MAŠ.TUR 'kid' (Akk. *puḥādu*).
- 3.41 HORSE While Hitt. texts universally employ the sumerogram ANŠU.KUR.RA, lit. 'mountain ass' (cf. 3.46), evidence for an Anatolian reflex of PIE *ekwo- comes from Hieroglyphic Luwian (Karatepe) aśuwa- (Phoen. ss). A further survival may appear in the first element of H. Lúassussanni- 'horse-trainer', if from Mitannian *aśva- or the like; see for discussion P 222-23, T 91. For discussion of the original source of IE *ekwo- see A. Goetze, JCS 16 (1962): 34-35.
- 3.42 STALLION ANŠU.KUR.RA.NITÁ, lit. 'male horse', ANŠU.KUR.RA.MAH(-as) 'stud horse, stallion'. To the etymological kin of Lith. *er̃žilas*, Latv. *èrzelis* have been added H. *ark* 'mount, copulate' (4.67) and pl. *arkiyēs* 'testicles' (4.49).
 - 3.44 MARE ANŠU.KUR.RA.SAL(.AL.LAL).
- 3.45 FOAL Besides ANŠU.KUR.RA.TUR, H. kūrka- may mean 'foal', comparable to NPers. kurra 'foal', Gk. κύονος

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'illegitimate son'; perhaps borrowed in Arm. *k'urak* 'foal' (B. Forssman, *KZ* 94 [1980]: 70-74; T 651).

3.46 — ASS (DONKEY) — Hittite uses the same basic ideogram, ANŠU, for *Equus asinus* as it does for the donkey's later-imported congener *E. caballus* (ANŠU.KUR.RA). As Buck notes (*DSS* 172), the Sumerian word is generally reckoned to be ultimately related to Lat. *asinus* and its many European equivalents, as well as to Gk. ὄνος. Male and female of the species are predictably expressed by ANŠU.NITÁ and ANŠU.SAL(.AL.LAL) respectively, with the alternative EMÈ also for the latter ('jenny').

3.47 — MULE — ANŠU.GÌR.NUN.NA.

- 3.51-3.55 CHICKEN While a very large number of different bird-names have been collected (cf. 3.64), not one can yet be reliably identified with the domestic hen. Even Sommer and Ehelolf's tentative location here of MUŠEN.GAL 'large bird' (*Pāpanikri* 64), though paralleled by Gk. ồgviç 'hen' and NE *fowl*, is challenged by B. Landsberger (apud Friedrich, *HWb*. 287), who reads rather 'goose'.
- 3.56 GOOSE Although 'goose' may be MUŠEN.GAL as mentioned above (3.51), essentially it suffers from the same indeterminacy as most other Hitt. bird-names.
- 3.57 DUCK Like most other birds, which of the many attested Anatolian names referred to the *Anatidae* is undetermined. *CHD* (3.6-7), however, confidently and no doubt rightly interprets H. *lah(h)anzan(na)* as some kind of duck. It further specifically identifies MUŠEN HURRI 'sheldrake' as *Tadorna tadorna* (following Landsberger, *WO* 3.3 [1966]: 262-66).

- 3.61–3.612 DOG UR.ZÍR 'dog', UR.ZÍR SAL.AL.LAL 'bitch', UR.TUR 'puppy'.
- 3.63 MOUSE A. G"otze (ZA N.F. 6 [1930]: 65-70) collated the personal name ¹Mashuiluwa- and its allograph ¹P'iŠ.TUR-wa- to recover H. or Luw. mashuil- 'mouse'. Connection with PIE * $m\bar{u}s$ is unlikely; Hattic or Hurrian origin seems more probable.
- 3.64 BIRD The occurrence of pl. *suwais* once for MUŠEN-*es* reveals a Hitt. cognate (/swai-/ < *s- A_2 woi-) of Indo-Iranian *vi-, Arm. *haw* (< * A_2 wi-), Lat. *avis* (< * A_2 ew-*is*), etc. (cf. J. Schindler, *Die Sprache* 15 [1969]: 144-67, also tying in Gk. $\tilde{\phi}$ óv, Lat. *ovum*, etc. 'egg' as * \bar{o} -Hwy- \bar{o} m).

wattai- may be 'bird' in general (*HWb*. 249) or some specific kind (Otten - von Soden, *Vokabular* 40, n. 2); cf. the name ¹Watti-hahla-'Yellow-bird' (Tischler, *Serta Indogermanica* 452).

A fairly large number of specific bird-names are attested (cf. the list at *EHGl.* 22-23), especially in ornithomantic contexts; a few can be identified more or less exactly. Besides *lahhanza-* 'duck' (3.57), attempts have been made, for example, on *alila-, aliliya-* (: Lat. *olor*, OIr. *elae* 'swan' [P 34-35]), *aramni-* (: Gk. μέρμνος 'falcon, hawk' [P 127-28]), *arda-* 'heron' (P 175-76), *hapupu-* 'owl' (T 167), *hara(n)-* 'eagle' (: Gk. ὄρνις? [T 170-71]), *kakkapa-* 'partridge'? (T 461), and *kallikalli-* 'falcon' (T 466). The name of *pattarpalhi-* recalls the North American "Broad-winged hawk," *Buteo platypterus p.*

3.65 — FISH — KU₆-u- (Akk. $n\bar{u}nu$) may correspond to (possibly incomplete) parhu[- (EHS 252); a derivation from parh'hurry, leap about; hunt' would make sense in terms of the darting movements of fish-schools.

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3.66 - Fisherman - LúŠU.PIŠ.

3.71 - WOLF - In addition to UR.BAR.RA (Akk. barbaru), there is ulip(pa)na-, a possible cognate of Lat. vulpes, Gk. $\grave{\alpha}\lambda \acute{\omega}\pi\eta\xi$, Lith. lãpė, Bret. louarn' fox' (perhaps also OIr. Olc, Primitive Ir. Ulcagnus; cf. IEW 1178; Tomás Ó Cathasaigh, The Heroic Biography of Cormac mac Airt [Dublin, 1977], p. 33-34), RV lopāśá-'jackal', all of which could be tabuistically deformed distant relatives of IE $*wlk^wo-/^*luk^wo-$.

ON vargr, Sw. varg have an important cognate in H. hurkel 'crime', 21.41.

3.72 - LION - walwalla- is inferred from the collocation of Lú.Meš walwalla- and Lú.Meš UR.MAH 'lion-men'. It may be from the same ultimate source as Gk. $\lambda \acute{\epsilon}(\digamma)\omega v$, thus *(wa)-lwa-lla-; Puhvel (P s.v.) also suggests verbal origin in PIE *wel-w- 'steal', comparing semantically ON vargr 'wolf' < 'robber' (< 'strangler').

A different type of lion, perhaps 'winged lion' or 'sphinx', is denoted by *awiti-*. G. Neumann's analysis (*KZ* 77 [1961]: 76-77) as *owi-edi- 'sheep-eater' has to be rejected because the Anatolian reflex of IE *owi- (i.e. * A^{w_1} ówi-) is Luw. hawi- (3.25). Better is the comparison (P 246, with refs.) with Lat. $inv\bar{s}us$, Hom. αϊδηλος 'fierce, hateful', lit. 'un-faceable, terrible', from *n-wid-.

3.73 — BEAR — H. hartagga- (/hartka/) shows that the PIE reconstruction is * A_1 rt \hat{k} o-, seen also in Gk. ἄρκτος, Lat. ursus, OIr. art, W. arth, Skt. \hat{r} kṣa-, and Av. arəša-. A further connection with Skt. \hat{r} akṣas-, Av. rašah- 'destruction' < * A_1 ret \hat{k} - (P s.v.) also makes good sense, as the author's personal experience can confirm.

3.77 — ELEPHANT — H. (or Luw.) *lahpa-* 'ivory' (KAxUD *AMSI*, lit. 'elephant's tooth') is reminiscent of Gk. $\grave{\epsilon}\lambda \acute{\epsilon}\varphi\alpha\varsigma$, and may be likewise of Egyptian origin (*DSS* 189); cf. Laroche, *RPh.* 39 (1965): 56-59.

3.79 — Hunt — *hurna- (iter. hūwarniskizzi, inf. hurnuwanzi) was compared by Čop (Slav. Rev. 7 [1954]: 232) with Latv. vērt 'run', OCS variti 'precede'. A base-meaning 'go quickly; flee' plus causative yields the sense 'make run away, hunt' in *hurna-, Lith. varýti, SCr. juriti, with parallels in H. pittenu- (below) and many other IE hunting-words (DSS 190-91); Gk. αὖοι-ταχέως, Aesch. αὐοι-βά-τᾶς 'swift-striding' supports a reconstruction * $A_1w(e)r$ -.

pittenu- (Luw. *pittanu-*) has the same meaning, being causative to *pittai-* 'run, flee' (10.41).

siyattaliya- is denominative from *siyattal*- 'spear; arrow' or the like, derived from *sai*-, *siya*- 'shoot; press; seal' (like *RV sāyaka*- 'missile') < PIE * seE_1 - 'throw' (cf. 9.432).

'Hunter' is often LÚ UR.ZÍR-a- 'dog-man', fittingly for the practice of running down game reflected in *hurna*- and *pittenu*-, and recalling Gk. κυνηγέτης 'hunter', lit. 'dog-driver' (cf. *KUB* XXXIII 121 II 11-12 ["Kessi-Saga"] ^IKessis-za ^{GIŠ}ŠUKUR sarā dās UR.TUR^{HLA} EGIR-an-seit halzais n-as INA HUR.SAGNattara hurnuwanzi pait 'Kessi picked up his spear, called the dogs after him, and went to Mt. Nattara to hunt'). An alternative hunting technique appears in H. appaliyalla- 'trapper', derived via appalai- '(en)trap' < appala- 'trap, snare' < ep(p)-, ap(p)- 'seize' (11.14); cf. P 95-96.

3.81 — INSECT — Hittite entomological nomenclature presents a picture similar to that of its ornithological terminology, but on a smaller scale. Although a general term for 'insect' is unknown, a few varieties can be identified with varying certainty (e.g. lalakuesa- 'ant' [CHD 3.27], mutgalla- 'caterpillar' [N. van Brock,

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- RHA 20 (1962): 101], gagastiya- 'grasshopper'? [T 462], masa-'locust'), still others remain obscure (see e.g. HDW 124 and speculations on several further forms in Alimenta 86-93).
- 3.82 BEE NIM.LÀL (Akk. *nubtu*); LÚ NIM.LÀL 'beekeeper'.
- 3.84 WORM Tischler offers *wagai-* 'Mehlwurm' (*HDW* 124); if this meaning is correct (*EHS* 207 "unbekannter Bedeutung"), derivation from *wak-* 'bite' (4.58) is conceivable.
- 3.85 SNAKE The name of *illuyanka* or *elliyanku*-, the serpent or dragon slain by the storm-god in Hattic mythology, is probably of indigenous origin (P 359). Attempts by Sayce (*JRAS* 1922: 185) and Kretschmer (*KZ* 55 [1928]: 80) to find an IE etymology involving Gk. ὄφις, Lat. *anguis*, Skt. *áhi*-, etc. are rejected by Tischler (T 355), although unresolved problems of phonetic detail in the latter forms still leave the question open. Sum. MUŠ.

PARTS OF THE BODY; BODILY FUNCTIONS AND CONDITIONS

- 4.11 BODY Hitt. *tuekka-* 'body; self, person' is most often connected (since W. Petersen, *Lg.* 9 [1933]: 18) with Skt. *tvác-* 'skin, hide', IE **twek-os*, with semantic development as in Skt. *śárīra-* 'body' : *śárman-* 'cover(ing)', OPruss. *kērmens* 'body' : RV *cárman* 'skin', OHG *līchamo* 'body' : OE *hama* 'covering'. Specialization in another direction is seen in the Gk. $\sigma\acute{\alpha}\kappa\circ\varsigma$ 'shield', originally referring either to its material (ox-hide) or function (covering, protection).
- E. Risch's alternative comparison of *tuekka* with Gk. σάρξ 'flesh' (*Die Sprache* 7 [1961]: 93-98), though semantically tenable, is phonetically difficult, and is doubted by Gusmani (*Lessico* 50, n. 42).
- 4.12 SKIN; HIDE The Hitt. word (KUŠ)kursa- 'skin, hide; (esp.) fleece' seems at first sight derived from kurs- 'cut off', like Gk. δέρμα: δέρω 'cut', OIr. seche: Lat. $sec\bar{a}re$, etc. (thus Sturtevant, $Comp.\ Gr.^1$ 119, $Comp.\ Gr.^2$ 56), but lack of derivational parallels casts doubt on this simple explanation (EHS 189, T 655). Some scholars (e.g. Pisani, Paideia 8 [1953]: 308), on similar semantic grounds, have compared Skt. $c\acute{a}rman$ 'hide', Lat. corium 'leather', etc., positing IE root-connection in *(s)ker- 'cut', but these forms probably belong with H. kariya- 'hide, cover up' from a homophonous root (see 12.26).

Another approach to *kursa*- sensibly considers it a Cappadocian loanword, akin to Akk. $gus\bar{a}nu(m)$ 'leather bag' and Gk. $\beta\dot{v}$ 0 $\sigma\alpha$ 'hide; leather', whence MLat. *bursa*, MHG *burse*, NHG *Börse*, *Bursch*, Fr. *bourse* 'purse' (EHS 139; Gusmani, *Lessico* 32; T 655-56 with refs.).

Skt. tvac-, Gk. σάκος match H. tuekka- 'body', 4.11.

- $4.13 \text{FLESH} \text{The ideogram UZU (Akk. } \bar{s}\bar{\imath}ru)$ is universal. UZU suppa- means specifically 'ritually pure' flesh, from suppi-'pure' (15.87). There is also uzi-'Fleisch, Eingeweide', of Hurrian origin (HDW 98).
- 4.14 HAIR *ishiyani-* 'body hair' is from *ishiya-* 'bind' (see 9.16); a parallel to this strange shift is the cognate Lat. *saeta* 'coarse hair, bristle' (Oettinger, MSS 35 [1976]: 101); cf. P 400, 402.

The usual word for 'hair', tetana-, is obscure.

- 4.142 BEARD zama(n)kur- 'beard', samangurwant-'bearded' apparently belongs with Skt. śmáśru- (Laroche, RHA 11 [1950]: 40-41), entailing Arm. mawruk' 'beard' as well as OIr. smech, Lith. smãkras 'chin', from IE *smek-, *smok(-ru)-.
- 4.15 BLOOD eshar- or ishar- has long been recognized as the Hittite cognate of Gk. $\check{\epsilon}\alpha Q$, Skt. $\acute{a}srg$ -, etc. (DSS 206), IE * $\acute{e}sHr$ -/* $\acute{e}sHr$ -. It is particularly well endowed with derivatives, e.g. eshanant-; adjs. eshassi-, eshanuwant- (Luw. ashanuwant-), eshanuwant-, eshanuwant-, eshanuwant-), eshanuwant-; eshanuwant-; eshanuwant-), eshanuwant-; eshanuwant-; eshanuwant-), eshanuwant-; eshanuwant-), eshanu

The term denotes 'dark (i.e. venous) blood' (BAD.GE₆, Akk. adammu; Gk. αἷμα κελαινόν), as opposed to 'bright (arterial) blood' (BAD.UD, Akk. sarku), represented by H. mani-, of

unknown affinity (Knobloch [*Kratylos* 4 (1959): 38] derived it from IE **mā-ni-* 'damp, moist' [*IEW* 699], as in Lat. *mānāre* 'flow, trickle').

4.16 — BONE — One of the key discoveries for initial PIE (voiceless) o-coloring phoneme ${}^*A^w_{I^-}$ (besides Luw. hawi- 'sheep', 3.25) is H. hastai- (Luw. hassa-), cognate with Gk. ὀστέον, Lat. os, Skt. $\acute{a}sthi$ -, etc. (first in Benveniste, BSL 33 [1932]: 139), IE ${}^*A^w_{I}\acute{e}st$ - $(\bar{o})i$ -. The initial laryngeal has further fueled speculation on the possible relationship of Lat. costa 'rib', OCS kosti 'bone' (e.g. A. Martinet, Phonetica 1 [1957]: 22; E. Polomé, Evidence 40 and n. 176). Cf. T 202-3.

hastai- is joined by denom. hastiyant- 'bone' and possibly hastali- 'hero' (T 203-4); É hastiyas is the 'bone-house' in which the bones of the cremated dead are placed, after being dipped in a jar of fat and wrapped in linen, in a funeral ceremony remarkably reminiscent of the rites for Patroklos and Hektor in *Iliad* 23.224-54 and 24.782-804 (cf. Gurney, *The Hittites* 164-69).

- 4.162 RIB UZUTI is usually read *tapu(wa)s* (with denom. *tapuwassant*-) 'Rippe, Seite' (*HWb*. 212, *HDW* 85, *EHS* 260, 328, 341-42, 343); the primary meaning may be 'side', given the case-form advs. *tapusa-*, *tapusa-* 'sideways; beside' (12.36).
- 4.17 HORN *karawar* is cognate with the common IE stock from * $kerA_2$ -, related to Gk. κέρας, Lat. *cornū*, Goth. *haurn*, Skt. *śṛriga*-, Av. *srū* 'horn'; Skt. *śiras*-, Gk. κάρη, Arm. *sar*, Lat *cerebrum*, OHG *hirni* '(fore)head; peak', etc. The Hitt. word (and Lyc. *keruti* 'horned animal') includes a *u*-extension (or suffix) * krA_2 -wr-, or * krA_2 -wr-, linking it with such originally adjectival forms as Gk. κερα(r)ός 'horned', Lat. *cervus*, W. *carw* 'deer', OPruss. *sirwis* 'doe', etc. (T 500-2).

(SI)sawatar-, neut. sawitra- and agent-noun sawatar- 'horn-player' is both the drinking horn and the musical instrument (HDW 73, HWb. 189).

- 4.18 TAIL KUN (Akk. *zibbatu*) is tentatively equated with H. (UZU)*sisai* by Tischler (*HDW* 76) and Hoffner (*EHGl.* 87), the latter rejecting Friedrich's reading 'tooth' (*HWb.* 194).
- 4.19 BACK *iskis-* 'back' may refer originally to the horizontal 'ridge' of animals, to judge from its toponomastic use in HUR.SAGIskisa- 'Mt. I.' (Laroche, *RHA* 19 [1961]: 78-79; *EHGl.* 60, n. 116), like Lat. *dorsum*, OE *hrycg*, NHG *rücken*, Gk. νῶτον, etc.

Etymology is complicated by the indeterminacy of formation. Assuming the initial i- to be prothetic (cf. ispant- 'night' [14.42]), Hrozný connected -skis- with OIr. sciath 'shoulder blade' (SH 42, n. 1). A stronger comparison, based on an analysis isk-is-, ties in Gk. $i\sigma\chi$ (ov 'hips' (F. Ribezzo, Rivista indo-greco-italica 4 [1920]: 130); the expression iskisa pai- 'mount, copulate with' (used of animals) apparently supports this connection by focusing specifically on the lower part of the back (P 425). Further suggested cognates are Lat. ilium 'loin, flank' (Ribezzo, loc. cit.) and Gk. $i\xi \dot{\nu}\varsigma$ 'waist', Skt. $s\acute{a}kthi$ - 'thigh' (T 401-2).

4.20 — HEAD — The Anatolian words for 'head', harsar (with hypostatic harsan[a]-) and halant-, as well as hupalla- 'skull' (or the like), share an initial h- whose source is hard to determine, making etymology difficult in each case. If h- could be shown to come from IE * \hat{k} - (contrary to the normal outcome), then multiple possibilities would present themselves: harsar is comparable with Skt. śíras-(gen. ś \bar{i} rsnás), Gk. κρ $\bar{\alpha}$ νίον, and other forms from IE * \hat{k} er A_2 - (T 185; add too Gusmani, Lessico 23); halanta- has been matched with OCS glava, Lith. galvà 'head', Arm. xalam, Lat. calva 'skull' < * \hat{k} el- (T 126-

27); hupalla- recalls Gk. κεφαλή 'head' and κύπελλον 'cup', Skt. kapāla- 'skull', Goth. gibla 'gable' (*ghebhel-; refs. T 291). Yet all these must remain only enticing possibilities in the absence of a convincing explanation of the shift from expected Hitt. *k- to attested h-. Assumption of analogical influence from halanta- 'head' (W. Petersen, AO 9 [1937]: 203; T 185) begs the question, by abandoning halanta- itself to non-IE origin in order to account for the h- on which the analogy is based. Further undermining an analogically shifted original *k- are Luw. harmahi- 'head' (: H. harsar) and Lyc. qla 'chief, head man' (: H. halanta-). Finally, the expected outcome of *ker-/kr- may appear intact in the second element of H. kitkar- 'at the head of' (T 596-97).

The prudent course is thus to seek a source in either an IE $^*H_{1^-}$, e.g. a connection (A. Juret, *Vocabulaire* 12) with Lat. *altus* (*A_1el -), or indigenous sources (as in the case of *hupalla*-, 4.202).

It might be possible to rescue one or more of the above comparisons by a reconstruction (suggested by Puhvel, p.c.) like $*(k)H_1erA_2-s-$, with movable k- as in Gk. $\kappa\alpha\pi\varrho\delta\varsigma$: Lat. aper 'boar' (perhaps also relevant for H. hastai- 'bone' vs. Lat. costa 'rib', OCS kosti 'bone', 4.16); thus H. $harsar < *H_1rA_2s-r$, Skt. siras and Gk. $\kappa\varrho\bar{\alpha}\nu$ (ov $< *kH_1rA_2-$. Russ. koza 'goat' (: Skt. aja-?), though, may indicate rather the non-palatal velar for k-mobile, and the whole approach seems difficult.

4.202 — SKULL — The unlikely derivation of initial h- from *k- probably rules out any connection of H. hupalla- 'skull' (vel sim.) with Gk. $\kappa\epsilon\varphi\alpha\lambda\dot{\eta}$, Skt. $kap\acute{a}la$ -, etc., as discussed above. More reasonable is a tie-in with various indigenous vessel-names including huppar, huppi-, huprushi-, hupurni, hupuwai-, with semantics as in Lat. testa or NHG kopf 'head' < 'plate' or 'cup' (S. Alp, Anatolia 2 [1957]: 6-7; T 291).

The source of H. tarna-, Luw. tarsama- 'skull' (HDW 87) is unknown.

- 4.204 FACE *meni-* 'face' (IGI.HI.A-*i-*) is probably also the first element in *menahhanda* (IGI-*anda*) 'opposite, against', from dat. *mena- + hant-* 'before the face' (*HWb.* 141). For root-connection, Lat. *mentum* 'chin', W. *mant* 'jaw, mouth', Goth. *munþs* offer a possibility, **mņ-*(*to-*) (cf. Lat. *ē-, prō-minēre* 'stand out'); with transfer of 'chin' or 'jaw' to 'face' as in Latv. *vaigs*.
- 4.205 FOREHEAD H. hant- 'front, forehead' (cf. Lat. frōns) reflects, according to Gusmani (Lessico 22), an archaic PIE rootnoun, from which other languages preserve petrified prepositional case-forms (Gk. ἀντί, Lat. ante, cf. H. hanti-) or suffixed nouns (OIr. étan, OHG andi 'forehead', Skt. ánta- 'limit, end'), thus IE * A_1 ent-(cf. T 149-54).
- 4.206 EYEBROW *enera-, inira-* and further variants (P 271-72) are unrelated to the IE group from *bhrū-, and probably autochthonous. Likewise for the clearly distinct *laplipa-* 'eyelash' (cf. *EHS* 119), separate also from 'eyelid' (*KAPPI ENI*) (ibid.).
- 4.208 CHEEK parsina- may be 'cheek' or 'jaw' (HDW 61), possibly referring to its shape, like very many IE synonyms (DSS 220-24), cf. parsna- 'loin; thigh' and parsnai- 'hook downward'. Cognates are Skt. pārṣṇi-, Av. pāsna- 'heel', Gk. πτέρνη (?), Lat. perna 'calf; thigh; leg', pernix 'swift, agile' (< 'heel'), Goth. faírsna 'heel', IE *pers-n(e)A- (IEW 823).
- 4.21 EYE Hittite *sakui* (Luw. *tawi*-), with pl. *sakuwa* and by-form *sakuni* 'fountain' (1.37), is connected with Gk. σοφός 'wise' (17.21) and σάφα 'clear' (17.34) via IE **dhyog***h* or **dhyag***h*-

(AI 265-66, 313-21), opening a window into the distant Indo-European past when 'vision, insight, clarity' and 'wisdom' were conceptually inseparable.

4.22 — EAR — Terms for 'ear' and 'hearing' in Anatolian (H. *istaman[a]-, istamas-*; Luw. *tummant-, tummantai-*) find no cognates among the widespread descendants of either IE * $\bar{o}us$ - or * $\bar{k}lew$ -. Instead they show a peculiar development from IE * $stemH_1$ -, apparently originally denoting a more general concept of 'sense-perception' (e.g. in IGI.HI.A-*as istamassuwar* 'perception of the eyes' = 'eysight'; P 460), and specialized in another direction elsewhere: beside H. istanh- 'taste' (15.31), there are Gk. $\sigma\tau$ όμα 'mouth', $\sigma\tau$ όμαχος, Avest. staman- 'throat, maw', W. safn 'jawbone', OHG deriv. stimma 'voice', among others (op. cit. 460-61).

hazzizzi- means 'ear' as well as 'understanding', like its Akk. source *hasīsu* (T 233-34).

- 4.23 NOSE Only KAxKAK securely belongs here; *kapru*may mean this (T 494) or 'throat' (*EHGl.* 24, *EHS* 252).
- 4.24 MOUTH Here Hitt. continues and further illuminates the etymon of Lat. $\bar{o}s$, Skt. $\bar{a}s$ -, etc. The vocalisms of Lat. $\bar{o}s$ and H. a(y)is(s)-, obl. iss- can be unified through a reconstruction $*A^{w_1}\acute{e}E_1$ -s-, with zero-grade suffix in Lat., Skt., and Av. $\bar{a}h$ -, and $*A^{w_1}\acute{e}E_1$ -s-> $*\bar{o}yes$ > H. $\bar{a}yis$, gen $*A^{w_1}E_1es$ - $\acute{o}s$ (P 17; for *E1 > -y- cf. Puhvel, Evidence 91-92 [= AI 137-38], LIEV 53-61). Luw. $\bar{a}s(s)a$ also belongs here; details on the entire group T 6-8.

Lat. $\bar{o}ra$ 'edge, coast; rope' should be separated completely from $\bar{o}s$ and company and attached rather to H. arha- 'line' (12.84), also meaning 'edge, boundary'.

- Gk. στόμα and related forms find their identity through Hitt. istaman(a)- 'ear' (4.22).
- 4.25 LIP puri- is etymologically obscure. The Hitt. cognate of Lat. *labrum*, *labium*, OE *lippa*, etc. may appear in *lip(p)* 'lick' (4.59).
- 4.26 Tongue lala- (UZUEME) 'tongue; speech', also '(harmful) speech, slander, blasphemy' (CHD 3.21-25), is undoubtedly onomatopoeic, precisely a "Lallwort"; cf. Gk. λάλη(μα) '(idle) talk, gossip, chatter' (EHS 121).
- 4.27 TOOTH kaga- apparently matches OHG $h\bar{a}ko$, OE $h\bar{o}k$ (Laroche, RHA 31 [1973]: 90-91) < *k(o)ng-n-, to which Tischler (T 460) adds Lit. $k\acute{e}ng\dot{e}$ 'hook', Russ. $k\acute{o}got$ ' 'claw'.
- 4.28 Neck kuttar (UZUGÚ) matches Lat. guttur 'throat' < *gut-r (T 678-80). Puhvel (P 208) interprets the phrase GÚ-tar sarā appātarr-a as 'self-assurance', lit. a hendiadys 'neck-lift'. Cf. kuttanalli- 'necklace, collar' (6.45).
- 4.29 THROAT *hurhurta-, hu(wa)hhurti-* is probably non-IE, of foreign or onomatopoeic origin (T 263), and perhaps borrowed in Arm. *xaxurt* 'throat'.

tar(a)sna- is too doubtful ('Kehle' *HDW* 86,87; otherwise *EHS* 182,185) for meaningful etymology.

^{UZU}pappassala/i- 'esophagus' seems to be reduplicative from pas- 'swallow' (Alp, Körperteilnamen 14; Van Brock, RHA 20 [1962]: 94), semantically like most of its synonyms (DSS 233-35). Further root-connection is doubtful; a link with IE *bhes- 'breathe, blow' (IEW 146) is possible, given Skt. bábhasti, bapsati (: Gk. ψύχω?) 'blow', bhástrā 'bellows, leather bag'.

4.30 — SHOULDER — paltana- (suffix -na- as in halhalzana-below) is from IE *pl-t-no-, with parallel formations in Gk. ωμο- $\pi\lambda$ άτη 'shoulder-blade' and OCS plešte (*plet-yo-), OIr. leithe (*plet-yā) 'shoulder'. With commonplace development 'shoulder(-blade)' < 'flat surface', the root-connection involves H. palhi- 'wide, broad' < IE *pél-A₁-, *pl-éA₁- (12.61).

halhalzana- (Luw. halhalzani-), halhanzana-, halhaldana-, when stripped of the secondary reduplication (cf. gakkartana- below), can be compared with Avest. $ara\theta na$ -, RV aratni- 'elbow', IE * H_1 elt-no-(P s.v.). Cf. further H. halhaltumar 'corner' (12.76).

gakkartan(a)i-, reduplicated as in *halhalzana-*, matches ON *herŏr*, OHG *harti* (P s.v.), continuing another PIE term.

A cognate of Gk. $\tilde{\omega}\mu o \varsigma$, Lat. *umerus*, Umbr. loc. *onse*, Skt. *áṁsa-*, Arm. *us*, Toch. A *es*, B *āntse*, Goth. *ams* < IE **om*(*e*)*so-* may be Hitt. *anassa-* 'hips, buttocks' or 'back of shoulders, upper back' (Puhvel, *JAOS* 97 [1977]: 599; *AI* 416; P 63).

- 4.31 ARM While a meaning 'upper arm' has been suggested for ^{UZU}ishunau-</sup> (T 392-93), the etymology seems to support rather 'sinew; bowstring' (Skt. snāvan-, Gk. νεῦρον, Arm. neard, Lat. nervus 'sinew', OHG snuor 'cord', etc., IEW 977; cf. Laroche, OLZ 57 [1962]: 30-31; Oettinger, MSS 35 [1976]: 93-97; P 403-4). A secondary development of 'upper arm' from 'sinew' is difficult to justify, though admitted as a possibility (via 'biceps') by Puhvel, Bi. Or. 38 (1981): 351.
- 4.33 HAND The contribution of H. *kessar* to the reconstruction of PIE 'hand', **ghes-r* (vs. Indo-Iranian **ghes-to-* > Skt. *hásta-*, etc.), was clear already to Sturtevant (*Lg.* 3 [1927]: 121) and is explained briefly by Buck (*DSS* 238-39); many further refs. T 558-63.

Anatolian cognates include Luw. *issari-*, adj. *issarassi-*, Lyc. *izre-* (DLL 52-53).

- 4.34 FINGER Puhvel (AI 260-61, 349-52) explained Hitt. kalulupa- 'finger; toe' as the outcome of *tkad-ul- <*dkmd-ul- '(little) one of a tenfold', with Gk. δάκτυλος (< *δάτκυλος) by metathesis from the same form; Lat. digitulus belongs here as well. The meaning is much like that of Goth. figgrs, etc. < *penk**rós 'one of a pentad' < *penk**ve.
- 4.35 Leg egdu-, igdu- reflects *ey-gh-tu- < *ey-gh- 'go', cognate with Gk. οἴχομαι 'go away', ἴχνος 'foot, footstep', Lith. eigà 'a going' (EHS 252), Toch. B yku 'gone' (P 261), etc. (T 351), from *ey- 'go'. Similar metonymy appears in Skt. jángha- 'lower leg', Av. zanga- 'ankle' < *ghengh- 'walk, go'.
- 4.36 KNEE genu- faithfully reflects the ancient IE word in its oldest reconstructible shape.
- 4.37 FOOT pata- is a full-fledged member of the inherited group of Gk. $\pi o \dot{\nu} \varsigma$, Skt. pad-, Goth. $f\bar{o}tus$, Lat. $p\bar{e}s$, etc., thematized like Skt. $p\bar{a}da$ (Gusmani, Lessico 23), and joined by Luw. and Hier. pata-, Lyc. pede- (DLL 81).
 - 4.38 TOE kalulupa- is 'toe' as wel as 'finger' 4.34).
- 4.39 NAIL Like most of the practically ubiquitous reflexes of IE *(o)nogh-, H. sanku(wa)i- shows unexplained phonetic variations; according to Gusmani (*Lessico* 23) the latter are "di probabile origine tabuistica"—one thinks of the rather unsettling tendency of fingernails (and hair) to continue growing after the rest of the body is dead.

4.392 — WING — *pittar* (possibly *pattar*), gen. *pittanas* or *pattanas*, is from **pétH-r/petH-n-s* or the like (cf. Puhvel, *Hethitisch und Indogermanisch* 212-13 = *AI* 359-60) < **pet-* 'fly' (10.37). Cognate with Skt. *páttram*, Gk. $\pi\tau\epsilon$ οόν 'feather', and thus with Lat. *penna*, OIr. *ette* 'wing', OHG *federa*, etc.; the basic comparison was made already by Hrozný (*SH* 70-71).

partawar goes with the other IE term 'fly', *per- (OCS pariti), akin to Skt. parṇá-, OCS pero 'feather, wing', Lith. spañnas 'wing', etc. (Goetze, Lg. 30 [1954]: 403; Benveniste, BSL 51 [1955]: 36-41; EHS 283-84). Puhvel (P 441-47) further tentatively connects Hitt. ispar(r)-, isparriya- 'spread, scatter, fell; fly (?)', suggesting this as the original PIE meaning (see 9.34).

- 4.40 CHEST taggani-, "ohne nachweisbares Grundwort" (EHS 222).
- 4.41 BREAST *tita* seems to match Ital. *tetta*, OE *titt*, NHG *zitze*, etc., and forms denominative *titiya*-, *titiski*-, Luw. *titai*-'breast-feed'. Possibly an *n*-stem in Anatolian, if Luw. dat. sg. *titani* belongs here (*EHS* 196).
- 4.44 HEART IE * $k\bar{e}r(d)$ appears in H. nom. kir (and suffixless loc. kir), as in Gk. $κ\tilde{\eta}\varrho$ and OPruss. seyr; with these belong Arm. sirt (* $k\bar{e}rdi$ -) and Goth. hairto, etc. (* $k\bar{e}rd$ -on-). Zero-grade * $k\bar{r}d(i)$ underlies Hitt. gen. kardiyas and kartas, and Gk. $κα\varrho\delta(α$, Lat. cor, cordis, OIr. cride, Lith. širdis, OCS srŭdice, etc. (IEW 579). Other anatolian forms are Pal. $k\bar{a}rti$ and perhaps Lyc. B kridesi (A $ker\theta\theta i$) (T 556-58).
- 4.45 LIVER Although IE *yek*-rt does not survive in Hitt., the attested word *lesi-*, *lissi-* may have been its partner in a phrase

'fatted liver'. The postulated development is from *loysi or *laysi, with cognates in Arm. leard 'liver' (< *lis-rt, reshaped after *yekw-rt or neard 'sinew'), Gk. λᾱοινός 'fatted' (< *layes-r-īnos), Lat. lārdum, laetus 'fat, rich, fertile'. The meaning is paralleled in OE lifer, etc. (: Gk. λίπος, λιπαρός) 'fatted') and French foie, Ital. fegato (Lat. liecur] ficātum 'fig-fattened liver' (J. Schindler, Die Sprache 12 [1966]: 77-78; P s.v.). The same meaning appears in Pal. bānnu- 'liver' < IE *pen-nu- 'fattened'; cf. Lith. penù 'fatten' (Melchert, KZ 94 [1984]: 42-43).

The important role of hepatoscopic augury explains the meaning of adj. *lissiyala-* 'oracular', lit. 'pertaining to the liver', as well as the existence of anumber of names for specific parts of the organ, mostly from Hurrian, e.g. *mazeri-*, *nipasuri-*, *sentahi-* (*EHGl*. 55, *HDW* 52, 57, 74).

- 4.46 BELLY; STOMACH UZUpanduha- 'stomach' resembles Lat. pantex, pantices 'entrail(s)', which came to mean 'belly' in Rum. pîntece, Ital. pancia, OFr. panche > NE paunch, Sp. panza. Root *pend-'hang down', with Lat. -t- analogical after venter, uterus, etc.? The same root may also occur in H. pantala- 'moment', 12.52.
- 4.47 Womb For *genzu* 'lap, womb', also 'love, friendship', a derivation from IE * $\hat{g}enE$ 'beget' (H. Eichner, MSS 31 [1973]: 55) is phonetically inexplicable. The variant *gimzu* prompted Laroche's reconstruction (RHA 23 [1965]: 51) from IE *gem(s)- 'contain, grasp' (IEW 368-69), and comparison with Gk. γέντα 'entrails', though γαστήφ is best left as *γφαστήφ < *greHs- 'devour' (Skt. grástar-'devourer' [IEW 404]). Derivatives: denom. genzuwai- 'be friendly towards', adj. genzuwala- 'friendly, solicitous'.

sarhuwant- 'womb; entrails; fetus' (Akk. ša libbi-ša), from an unattested *sarh-, may be comparable with Gk. ὀρύα (< *ὁρύα)

'intestine' < * $srA^{w_{1}}$ (cf. Schindler, *Die Sprache* 15 [1969]: 159; *GEW* 2.429).

A euphemistic reference to female genitalia is apparent in the story of the birth of Ullikummi, where Kumarbi becomes enamored of a huge rock and *katta-kan kuit harzi* 'what it has underneath'.

4.49 — TESTICLE — arki- (attested as nom. pl. arkiyēs, acc. arkius) matches Gk. ὄοχις, Arm. orji-k', Alb. herdhë, MIr. uirgge (*orghi-, and is further cognate with Avest. ərəzi- 'testicle', Arm. orj 'male', Lith. er̃zilas 'stallion', aržùs 'lustful', and ON argr 'passive homosexual' (P 142-43). The etymon is an ancient i-stem from a verb *erĝh-, *orĝh-, attested in H. ark- 'copulate' and cognates in Gk., Slavic, and Indic (see 4.67).

4.492 — PENIS — IE *pes-, seen in Gk. πέος, Skt. pásas-, Lat. pēnis, also yielded H. pesna- *'penis' (< *pes-no-, parallel to Lat. cunnus < *kut-no-; cf. Gk. κύσθος), which became synechdochically 'man, male' and gave rise in turn to pisnatar (LÚ-natar) 'manhood; male genitals, penis; sperm' (P s.v.). The meaning of the verbal root involved is suggested by H. pes 'rub' (Puhvel, JAOS 102.1 [1982]: 179; 9.31 below); cf. Ital. fregare (Oettinger, Stammb. 327, n. 141).

hapusa- is from IE * A^w_1pus -, with the denom. verb * A^w_1pus -yereflected in Gk. ἀπυίω 'mount; marry'; with female subject the passive (Gortyn οπυιεθθαι) is used (cf. van Windekens, *Orbis* 27.2 [1978]: 318; C. Watkins, *Serta Indogermanica* 455-57).

genu-'knee' (4.36) is also 'penis' (like Akk. birku). The symbolic connection of these concepts is apparently common in Indo-European, Semitic, and Finno-Ugric languages: cf. e.g. OE cnēow, OCS kolěno and Finnish polvi, Estonian pòlv, all both 'knee' and 'offspring, generation', as well as OIr. glún-daltae 'knee-nursling'

(like Akk. *tarbit birkiya*); see the discussion and refs. by Puhvel in *Myth and Law Among the Indo-Europeans* (Berkeley and Los Angeles, 1970), p. 95, n. 40.

lālu- '(erect) penis' (*HWb.* 126) is most likely a lallwort, *EHS* 119.

- 4.51 BREATHE; BREATH para- 'breath; air' (HDW 60), parai- 'breathe; blow (up)', paripariya-, paripareski- 'blow a musical instrument' are comparable with OCS para 'steam, vapor', Gk. *ποήθω, πίμποημι 'blow up, inflate', as in IEW 809 (W. Petersen, AO 9 [1937]: 208).
- 4.53 COUGH tuhh(ai)-, iter. tuhheski-, with nouns tuhhima-, tuhhiyatt-, is to be connected with tuhhui-, tuhhuwai- 'smoke' (1.83). The equation of smoke with respiratory distress was a natural one in the days before the custom of its intentional inhalation: e.g. Gk. $\kappa\alpha\pi\nu\delta\varsigma$ 'smoke' vs. Goth. af-hwapjan 'choke'; OE smoca vs. Lith. smáugti 'stifle'.
- 4.55 SWEAT The verb *allaniya-*, occurring in hippological texts, probably means 'sweat', and on this basis is compared with the OIr. noun *allas* 'sweat', providing a rare Hitt.-Goidelic isogloss (*aln-, vs. W. chwys < IE *sweyd-; cf. Pedersen, Féil-Sgribhinn Eóin Mhic Néill [Dublin, 1940], p. 142; Benveniste, HIE 107; P 28-29, T 14). *zappiya-*, primarily 'drip, leak' (10.24), can also refer to perspiration (P 28-29).

enumai-, lit. 'become heated' (< *ay- 'be hot', 15.85), also refers to horses, in which context the gloss 'sweat' (Neu, *Kratylos* 12 [1967]: 166) amounts to the same thing.

For the noun, the hapax *sishau*- may be a Hurrian loanword (EHS 251), and 'perspiration' is also a secondary meaning of

warsula- 'moisture, wetness' (P 28-29), a derivative of *warsa-* 'rain' (1.75; Laroche, *BSL* 58.1 [1963]: 59-62).

- 4.56 SPIT allap(p)ahh-, alpahh- is the Hitt. word, tentatively connected (P 31) with Gk. $\lambda \dot{\alpha} \pi \tau \omega$, $\lambda \alpha \phi \dot{\nu} \sigma \sigma \omega$, OE lapian 'lap, slurp', Arm. lap'em, Alb. lap, Lat. $lamb\bar{o}$, OHG laffan 'lick', from a root *lab(h)-, *lap(h)-, perhaps onomatopoeic in origin (cf. EHS 431, T 15). Details of formation unexplained.
- 4.58 BITE H. wak- (possibly Pal. waq-), iter. wakkiskimeans 'bite (off)' (Friedrich, AO 6 [1954]: 373-76), and has been compared with Gk. ἄγν $\bar{\nu}$ μι 'break' (* $_{\rm F}$ αγ-; Petersen, AO 9 [1937]: 212; A. Kammenhuber, KZ 77 [1961]: 47).
- 4.59 LICK lip(p)-, redupl. lil(l)ipa(i)- (CHD 3.71, 61), evidently belongs with Lat. labium, labrum, OE lippa, OHG lefs, etc. 'lip' < *lep- (IEW 655). The Hitt. sense thus supports the connection of these with Lat. $lamb\bar{o}$, doubted by Buck (DSS 229).
- 4.61 SLEEP IE *swep-/sup- survives in H. sup(p)- 'sleep; dream', with vbl. noun suppūwar, and is also the basis of suppariya-'dream' < *suppar (see 4.62). The verbal use of this root is rare in comparison to the more common term ses- (Luw. sassa[i]-), which although violating normal IE root structure constraints (cf. Les langues du monde 8) is clearly ancient, matching Skt. sas-, Av. hah-.

Careful analysis of Hitt. and other reflexes of the two roots *swep- and *ses-, however, can shed light on their early semantic relationship. Whereas H. sup(p)- and all its cognates mean basically 'fall asleep and dream' (cf. Ved. svap-), the sense of ses- clearly centers more around 'lie down and rest; sleep with, lay (seskiya-); put to bed (sas[sa]nu-; cf. sast[a]- 'bed[ding]'); stay quiet (Luw. sassa[i]-; Ved. $sasvár[t\bar{a}]$ 'stealthily')', with no suggestion of

'dreaming' (P s.v. ses-; Laroche, RPh. 23 [1949]: 39; Ivanov, Peredneaziatskij sbornik 311-20). Thus the distinction seems to be primarily one of "subjective" sleep and its related mental activity vs. "objective" inactivity, viewed from outside—"he is sleeping"—the former being the more ancient term (*swep-), and the latter possibly from an interjection resembling Engl. sh 'silence!' (Mayrhofer, IF 70 [1965]: 249-51). A detailed discussion of IE *swep- and its descendants is provided by J. Schindler, Die Sprache 12 (1966): 67-76.

4.62 — DREAM — The initial-variation in *tesha-* ~ *zashai*-strongly indicates a Hattic origin for the word, as do the theonymic alternatives *Tasha-*, *Zashapuna* (Laroche, *Recherches* 38-39). Many unsatisfactory IE etymologies have been attempted, involving e.g. Gk. δέατο (Sturtevant, *Comp. Gr.*¹ 160), Skt. *dhī-* 'perceive' (Gusmani, *Lessico* 53), Lith. *dvasià* 'ghost' (A. Carnoy, *La Nouvelle Clio* 6 [1954]: 234), and others: cf. P s.v. *tesha-*. *tesha-* has essentially replaced the native nouns *suppūwar* and *sesuwar* (see 4.61), and the attendant periphrasis *teshit aus-* 'see in a dream' competes with *suppariya-*; cf. mpsv. *teshaniya-* (Ù-*at*) 'appear in a dream'. It also means 'sleep' (*teshalli-* 'sleepy') and 'Beischlaf' (*IŠTU* SAL-*TI teshas*).

The deriv. suppariya- itself is of considerable comparative interest, as its likely nominal basis *suppar is not only cognate with Lat. $sopor < *sw\acute{e}p-\bar{o}r$ (Sturtevant, JAOS 56 [1936]: 282-84), but matches Gk. $"v\pi\alpha"o$. Under polarizing pressure from the encroaching innovative "ova"o, "oveioo"o 'false dream' > 'dream' in general, $"v\pi"a$ o was shifted from its original slot 'dream' to 'true dream, real vision' (cf. Odyssey 19.547, 565-76) and thence to 'waking reverie' (e.g. Frisk, "Kl. SChr. 361-65; Mayrhofer, "Studien" zur "indogermanischen" Grundsprache [Vienna, 1952], p. 42-43). A

similar replacement appears in Germanic, e.g. ON *draumr* (: OHG *triogan* 'deceive') vs. *sofa* 'sleep'. P. s.v. *sup*(*p*)-.

- 4.63 WAKE arriya-'rouse, awaken; be awake' is one of the many forms from IE *er-, *or-'move, stir' (10.21), perhaps reflecting a caus. *(E_1)or H_2 éye-, like araizzi 'he rises'. It is echoed in Gk. (Iliad 10.518-19) ὧοσεν 'he roused' vs. ὕπνου ἀνοφούσας 'starting from sleep', and OIr. ar- 'be awake', aire 'watch', airech, Arm. art'own 'watchful, attentive' have been compared (Szemerényi, Studia mediterranea P. Meriggi dicata [1979], p. 613-16). Cf. for meaning Engl. 'stir, be stirring' = 'be awake'. P 138-39.
- 4.64 FART *huntariya-*, when compared with *huntarnu*-'grunt' and the possible *huntari-* 'swine' (T 288), seems to be based on a nominal or verbal stem **huntar-*, perhaps of imitative origin (T 289, *EHS* 457, Otten von Soden, *Vokabular* 26). A link with *huwant*-'wind' (1.72) is also plausible; cf. NE "break wind."
- 4.65 URINATE; URINE Several etymologies have traditionally been defended for *sehur* (verb *sehuriya*-), including derivations from IE * $s\bar{u}r$ -o- 'sour' (IEW 1039), * $s\bar{e}(y)$ 'sow', *sey-(k-) 'trickle, drip', and *sew-(H-) 'rain' (refs. in Puhvel, *Florilegium Anatolicum* 298, n. 5 = AI 366), but all present phonetic difficulties and require more or less tortured morphological and semantic explanations.

After careful dissection of the textual material, Puhvel (op. cit. 297-302 = AI 365-70) determined that the meaning of *sehur* was rather more inclusively 'body wastes, crap', with 'urine' a secondary marked sense in opposition to *sakkar* 'shit' (4.66), and considered it a verbal noun from *sah*-. Reinterpreting the latter as 'clog (with dirt), stuff up', etc. (separate from *sahh*-, *sahh*- 'seek, strive for' [9.99] and its homonym 'flush, wash down' [9.36]), he took a new approach in reconstructing it as an IE pf. **dhyóE*2-, with

related forms having to do with 'dirt, crud, filth' and the like: *dhyeE₂-wr > *dyehur > H. sehur, Luw. dūr (< *deur < *dyehur) 'urine'; *dhoy-k-s or *dhoyE-s > Lat. faex, pl. f(a)eces; *dhoy-t-ē > Lat. foeteō 'stink'; *dhi-mo- > Lat. fimus 'dung, filth'. T. Schultheiss (KZ 77 [1961]: 222) saw a loanword in Arm. šer' 'urine', šr'em 'urinate'.

4.66 — DEFECATE — sakkar (Luw. sahh- 'dirt, filth') has been compared with Gk. σκῶρ, etc. since Benveniste (*Origines* 9). Spelling variants zakkar and zasgar- indicate /(t)skar/ < *skōr, while gen. saknas and derivs. saknuwant- 'filthy, full of shit, impure' and saknumar 'feces' call for a reconstruction *sókr, obl. *sókn- (Puhvel Florilegium Anatolicum 303 = AI 371).

The native Hitt. derivative verb *sakniya*- has a synonym kam(m)ars-, borrowed from or corresponding to Luwian katmars- < * $\hat{g}hed$ -mr-s (with -s variously explained; cf. Puhvel, op. cit. 304 = AI 372 + 417, T 473-75) ~ *ghed-wr-, cognate with Gk. χ έ ζ ω, Skt. had-, Alb. dhjes 'defecate', Av. $za\delta ah$ - 'anus', Toch. B kenmer 'shit'.

salpa- '(dog) shit' (UR.ZÍR-as salpa) matches Arm. alb, and may be analyzed as *sal- 'dirty, dirt-colored, gray' + -bho-, comparing OIr. sal 'dirt, filth', OW p. halou 'stercora', OHG salo 'dirty', Russ. solovój 'light bay' (Schindler, Die Sprache 24 [1978]: 45).

An etymology is now available for the previously unexplained Lat. *fimus* (*DSS* 276); see 4.65.

4.67 — COPULATE — The most common Hittite expressions for human sexual intercourse are euphemisms derived from ses-'lie down' (4.61), thus 'sleep/lie with': seski-, katta(n) ses-; sas(sa)nu-'make cohabit with'.

An alternative term referring more to animal coition is *ark*-'mount, cover', the verbal root underlying *arki*- 'testicle' (4.49) and *arga-tiya*- 'come to violence' (: Skt. *rágha*- 'rage, anger', P 147), with cognates in Gk. ὀρχέομαι 'dance (lasciviously); and Russ. *jërzat*'

'fidget' (P 142-43, 147-48; *AI* 290-92, 416; cf. for meaning possibly Engl. *frike* 'lusty, vigorous', *frig* 'dance, move briskly; fuck'.

Some insight into the Hitt. view of animal and possibly also human coital behavior is afforded by the expression *iskisa pai-*, lit. 'go to the back' (*iskis-* '[lower] back', 4.19); cf. Puhvel, *JAOS* 102.1 (1982): 179, *AI* 416, and P 425.

- 4.71 Beget Besides DUMU(.MEŠ) *iya-*, lit. 'make a child/children' (cf. NHG *kindern* or OCS *roditi* : *rodŭ* 'offspring'), Hitt. also uses *has-* 'bear' (4.72) in this sense.
- 4.72 BEAR The source of has- 'bear; beget' (Hier. has[a]-), pt. hassant-, iter. haski- has been widely debated, but no definitive explanation has yet been offered. IE origin seems likely, but the commonly supported connection with Ved. ásu- 'life', ásura- 'powerful', Av. ahū-, ahura, etc. (from Duchesne-Guillemin, TPS 1946: 81) is unconvincing, as is the inclusion of H. hassu- 'king', on semantic grounds. To derive has- from an unknown *hams-, on the basis of Luw. hamsa- 'grandson', H. hammasa- 'child' (2.48), and further adduce ON áss < Gmc. *ansu- (e.g. Polomé, Lg. 28 [1952]: 453) is overly speculative, while L. Brunner (Die gemeinsamen Wurzeln des semitischen und indogermanischen Wortschatzes [Bern, 1969], p. 187) exchanges semantic problems for phonetic ones in comparing instead Hebr. 'āśāh 'beget; create', Arab. 'aśīra 'family, tribe'. Discussion and refs. T 191-94.
- 4.73 PREGNANT The basic vocabulary includes *armai-'*be pregnant', *armant-*, *armawant-'*pregnant', *armahh-'*impregnate', *-za armahh-'*conceive, be pregnant', lit. 'make oneself pregnant'. The source is evidently *arma-'*moon' (1.53), although the semantic details of the derivation (e.g. "make moon-bound, bring into menstrual orbit" in Puhvel, *Bi. Or.* 36 [1979]: 58 and P 157, with

refs.) are not precisely clear; none of the IE synonyms (*DSS* 283-84) has anything to do with the moon. The etymological sense of *arma*-'feeble, weak, sick; pale' (4.84) may be involved as well, cf. ON *ekki heil* 'not well' and SCr. *trudna* 'tired out, weak' (OCS *trŭdŭ* 'toil, labor'), both also 'pregnant'.

sumrai-, iter. sumreski- 'be pregnant' is likely from sū- 'full' (13.21), via a verbal noun *sumar (< *sū-wṛ-?) 'fullness' (Stammb. 298, n. 78). Cf. for meaning Gk. κυέω 'be pregnant' < *k̂ewA- 'swell' (IEW 592), Fr. pleine 'full; pregnant', and (obs.) Engl. full.

4.732 - CONCEIVE - -za armahh- (4.73).

4.74 — LIVE — The Hittite verbal root is *huis-*, with derivs. *huisu-* 'live, raw', *huiswai-* 'live', part. *huiswant-* 'living, alive', *huiswatar* 'life', and *huisnu-*, *huisnuski-* 'make live, bring to life'. The simplest etymology (e.g. Benveniste, *Origines* 156, 155 n.) derives *huis-* from IE * A_1 wes- 'dwell, stay the night; be' (*IEW* 1170-71; Skt. *vásati*, Goth *wisan*, OIr. *fo(a)id*, Arm. *goy*, Gk. $\check{\alpha}$ εσ α , etc.).

What complicates the picture, however, is the existence of Luw. huit- 'live', with Luw. huitumar and H. huitar, huitnant- 'animal(s)'. As the Hitt. and Luw. verbs cannot be directly equated (Hitt. -s- = Luw. -t- so far only when initial and < *dy-; e.g. siwatt-vs. Tiyat- [14.41], sehur vs. $d\bar{u}r$ [4.65], another source must be found for the latter. The most viable suggestion along this line (Sturtevant, Comp. Gr. 150) involves IE * A_1we - E_1 - 'breathe, blow' (IEW 81-84; cf. H. huwant- 'wind', 1.72) and comparison with Lat. animal < anima 'breath' (IE *an- 'breathe'). Thus the Hitt. and Luw. forms with huit- might reflect an enlarged form like * A_1we -d- (Gk. ἐδανός 'fragrant'), * A_1we E₁-d- (OHG wāzan 'wehen, blasen'; Gk. ἀάζω 'breathe' < αϝάδ-ιω?), * A_1we -dh- (Hes. ἐθμή · ἀτμός), * A_1we -d- (Hes. ἀετμόν · το πνεῦμα; ἀτμός 'steam, vapor'), or * A_1wE_1 -d- (Hes. ἀετμόν · το πνεῦμα; ἀτμός 'steam, vapor'), or * A_1wE_1 -d- (ἀήσυρος 'windy', Skt. vāta-, Av. vātō 'wind'), etc. (IEW

82-84). H. *huis*- could either be left separate (as did Hendriksen, *Untersuchungen* 26, 59), or better seen as a variant $*A_1we(E_1)$ -s- (cf. Skt. $v\bar{a}sa$ - 'perfume', Lith. $v\dot{e}\dot{s}ti$ 'cool oneself off [by blowing]'). See T 264-68, 269-71.

4.75 - DIE - ak(k)- 'die, be killed, be executed', with part. akkant- 'dead, dead person', akkatar- 'death', is the common Hitt. word, and seems to be of IE provenance, yet numerous attempts have failed to find an acceptable etymology. The most commonly proposed etymon is Gk. $v\acute{\epsilon}\kappa\ddot{\nu}\varsigma$ 'corpse', Lat. necare 'kill' (e.g. Hrozn $\acute{\gamma}$, SH 176), a comparison now generally rejected (P 22, T 8). Kronasser's suggested cognate Toch. A $\bar{a}k$, B $\bar{a}ke$ 'end' (VLFH 222) has so far been neither refuted nor expanded upon.

Gk. νέκῦς, Avest. nasu- 'corpse', Lat. nex 'violent death', Skt. naś-, Av. nas- 'perish, vanish' find a better cognate in Hitt. henkan-'(fated) death, disease, plague', IE * E_2 en \hat{k} -/ E_2 ne \hat{k} - (P 22); see the discussion of its semantics vis-à-vis akkatar- in Puhvel, Studia ... A. Pagliaro 3.174-75 = AI 203-4. Further lexical kin can be OIr. éc, W. angheu 'death', OIr. écen, W. anghen 'necessity' (Puhvel, Evidence 88 = AI 134), Toch. näk- 'vanish, perish', Gk. ἀνάγκη 'necessity', among others (AI 18), and possibly Gk. (F)άναξ (AI 6-26).

Another common Hitt. stem is *hark-, harkiya-* 'perish', iter. *harkiski-*, caus. *harkanu-, harkanuski-*, nouns *harga-* and *hargatar* 'ruin, destruction', and nasal-infixed *harnink-*. The cognates include OIr. *orgaim* 'I strike, kill' (A. Cuny, *RHA* 2 [1934]: 205), Gaul. *orge* 'occide', *Orgeto-rīx*, and Arm. *harkanem* 'strike, chop up' (T 175-76), and the root is IE * A^w_1 erg- (H. *harnikzi* < * A^w_1 r-n-ég-ti, *harninkanzi* < * A^w_1 r-n-g-ónti [Benveniste, *Origines* 162]).

A form related to OIr. *marb*, Lat. *morī*, Skt. *mṛ*-, etc. survives in H. *mer*- 'disappear, be lost' (*HWb*. 141), which Gusmani (*Lessico* 21) considers the original meaning of IE **mer*-.

Luw. u(wa)lant- 'dead' was compared (via unattested *wala-) with ON valr, OE wæl 'those slain in battle', as well as Toch. A w"al 'die', Lith. $vel\~y\~s$ 'deceased', Hes. ἀλίβαντες · οἱ νεκροί by A. J. Van Windekens (KZ 77 [1961]: 86-88).

4.76 — KILL — H. *kuen*- matches Skt. *han*-, Av. *jan*- 'strike, kill', OIr. *gonim* 'I wound, kill', Gk. φόνος 'murder', θείνω, Lat. (of-)fendō, Arm. *ganem* 'strike' < IE *g^when- (DSS 288, AI 265).

huek- 'slaughter (animals)' is in all likelihood from IE * H_1 weyk-, cognate with Goth. weihan 'fight', ON vega 'kill', Lat. victima 'sacrificial animal'. Lat. $vinc\bar{o}$ 'gain victory' parallels the nasalinfixed H. *hunink-* 'damage, injure' (11.28). Goetze, Lg. 30 (1954): 403.

hulla-, (hul)huliya- 'strike (down)', see 9.21.

OIr. *orgaim*, Gaul. *orge*, *Orgeto-rīx*, Arm. *harkanem* (*DSS* 289) may go with H. *hark-* 'perish', 4.75.

- 4.77 CORPSE A definite word for 'corpse' is lacking, although one supposes *akkant-* 'the deceased' (4.75) was common enough. For Gk. νεκφός, νέκῦς see H. *henkan-*, 4.75.
- 4.78 BURY *hariya-*, denom. from *hari(ya)-* 'valley; depression, hollow, cave' or the like (1.24, cf. *EHS* 492, T 172-73), cf. ON *heyga* < *haugr*, *grefta* < *groftr* 'grave' < *grafa* 'dig'.
- 4.79 GRAVE The name and nature of the common man's grave are not known (on social-class differences in burial practices see Gurney, *The Hittites* 166). In the fragmentary royal funeral ritual (*KUB XXX* 15), the directions are to place the bones of the cremated body in a É NA₄ 'stone-house' or mausoleum, within which is the É.ŠÀ 'inner (burial) chamber' (*HWb.* 270). Cf. also É *hastiyas* 'bone-chamber', see 4.16.

4.81 - STRONG - Adj. in(n) arawant-, noun innarawatar, with counterparts in Luwoid annaru-, annari- and Luwian anarummi-, suggest H. *innaru-, *innara(wa)-, meaning anarum(m)ahit-, fundamentally 'physical or vital strength, life force, vigor' (P 372). A very early comparison with Gk. $\alpha \nu \eta \rho$ 'man' (Hrozný, SH 74) has been rehabilitated (P 372-73), the reconstruction * E_1 enr, * E_1 ner 'vital strength', etc. tying in such forms as Ved. nar-, Av. nar-, Alb. njeri, Arm. ayr 'man', Ved. nŕtama- 'most forceful', sūnára-, Gk. εὐήνωο 'rich in vital strength', OIr. nert 'strength', Osc.-Umbr. ner- 'man of rank'; cf. T 358-62. Van Windekens (BHD ... Kerns 343) rejects this approach, although it is not incompatible (at least phonetically) with his suggested cognate Gk. ἔναρα 'armor of a slain enemy, booty'. A good alternative (Melchert, Die Sprache 29 [1983]: 17) reconstructs innara- < *en-A2nr-o- 'having strength inside', cf Gk. ἔνυδοος.

tarhui-, noun tarhuilatar, cf. perhaps the Luwian storm-god Tarhunt- and the Asianic Greek Ταρκονδημος. The H. verb tarh'overcome' points to *tér- A_1 -, with *tr-é A_1 - in Lat. in-trāre, Skt. tūrvati 'conquer' (Gusmani, Lessico 17, 53, 94), etc. The basic sense is 'potency', cf. KUB XV 34 II 18-19 LÚ-ni LÚ-natar tarhuilatar SALni SAL-natar annitalwātar 'to the man manliness and potency, to the woman femininity and motherhood'.

(walli)walli(ya)-, cf. 12.91, 16.79.

dassu-, dassuwant- 'thick, stout, strong', nouns dassuwatar, (from denom. dassiya-:) dassiyatar, dassiyawar, (from caus. dasnu-:) dasnumar. The basic form dassu- matches Gk. δασύς and Lat. dēnsus 'thick, dense' < *dns-u- (Gusmani, Lessico 96-97 and n. 24).

hastali- 'hero' (UR.SAG-*li-*) is understood as a substantivized adj. *'strong' < *hastai-* 'bone' (4.16; EHS 212, T 203-4).

Luwoid and Luwian *muwattal(l)i-*, Hier. *muwatali-* 'strong' used of weapons (also PN ¹Muwattali-), plus Luw. abstract

muwaddalahit- 'strength', are perhaps from Luw. muwa- '(seminal) fluid' (HWb. 145-46). Source unknown, as is exact meaning (DLL 72).

warpalli- 'strong, powerful', perhaps in the sense of 'toughness', if related (via a *warpa-) to Gk. $\dot{\varphi}$ άμνος 'thorn-bush', $\dot{\varphi}$ άβδος 'rod', Lat. verber 'switch', Lith. virbas 'twig, switch', Russ. vérba 'willow-branch', IE *wer-b(h)- (IEW 1153).

Skt. *ójas-*, Av. *aojah-*, Lat. *aug-*, Goth. *wahsjan*, etc. are reflected in H. *ukturi-* 'firm, lasting' (15.74).

- 4.82 WEAK malisku-, milisku- (caus. maliskunu-), possibly related to Skt. mlāyati 'weaken', Arm. melm 'soft, limp', Gk. ἀμαλός, ἀμβλύς 'weak', Lat. mulier 'woman' (< *ml-yésī 'the weaker one') etc. < *mel- 'grind, wear down, soften up' (H. malai-, 5.56), with extended forms denoting 'weak, soft, tender': Skt. mṛdú-, Gk. βλαδύς, ἀμαλδόνω, Lat. mollis, OE meltan, OCS mladŭ, and very many others (IEW 716-19). Perhaps malisku- < *ml(E1)-sk-, cf. NHG mulsch 'soft'.
- 4.83 WELL; HEALTH *haddula- 'healthy', haddulatar 'health', with corresponding Luw. hattulahi- and H. derivs. haddulahh- 'make healthy', haddules- 'become healthy', "ohne Etymologie" (T 229).

assuwant- (SIG $_5$ -ant-) 'in good condition', from assu- 'good' (16.71).

4.84 — SICK; SICKNESS — There is a large group of words based on arma(n)-, erma(n)-, irma(n)- 'illness' (GIG), including irman antid.' and adjs. armala-, irmala-, irmalant-. The most plausible comparison (Carruthers, Lg. 9 [1933]: 159-60) is with Goth. arms, OE earm 'wretched', ON armr 'wretched' (vs. heill 'well'), IE *er-mo-, *or-mo- 'miserable, wretched'. Already Meillet (MSL 10

[1898]: 280) had adduced Arm. *ot-ormim* 'misereor', and further Hitt. cognates are *arma-* 'moon' (1.53) and *armant-* 'pregnant' (4.73). P 157-60; other views T 369-71.

Whereas irma(n)- refers to generalized illness, ailments or diseases of specific parts of the body are apparently denoted by inan- (Puhvel, Bi. Or. 37 [1980]: 204-5, P 366-67). Puhvel (ibid.) compares Ved. $\acute{e}nas$ - 'sin, guilt', Skt. $\bar{i}ti$ - 'plague, disease', Av. $a\bar{e}nah$ - 'violence, damage', iti- 'injury', reconstructing * $A_2\acute{e}y$ -(no-) 'affliction', and further adducing Gk. α ivóç 'terrible', with Hes. ζ ητρός 'executioner' and Ved. $y\bar{a}t\acute{a}r$ - 'avenger' <* A_2y - $\acute{e}A$ -.

istarningai- 'ailment' < istarni(n)k- 'afflict' < istark(iya)- 'be sick, ail; afflict' may belong with Toch. A särk, B sark, OIr. serg, OCS sraga 'illness', Lith. sir̃gti 'be ill' (LIEV 25; Ivanov, Obščeindoevropejskaja 65; P 477); on the variation st- vs. s- cf. istanza(n)- 'soul': Lat. sensus (16.11) and P 471. An alternative (also reported in P 477) is Gk. στραγγάλη 'noose', Lat. stringō 'draw tight', OHG strengi 'stiff' < *stre-n-g-, with further noninfixed *stér-g-, *str-ég- in OE stearc 'stiff', strec 'firm', although the semantics are less satisfactory. Further suggestions are reviewed in P 477 and T 434.

4.86 — Cure, Heal — haddulahh- 'make healthy', from haddula-, 4.83.

saktai- 'care for, look after, cure' (*HWb*. 177) may be denom. from a *sag-to- 'knowledge' < sak- 'know', 17.17 (cf. Kronasser, Studies ... Whatmough 128; right formation but doubtful root-connection [OIr. socht 'stupor'] in C. Watkins, Kratylos 19 [1974]: 69-71).

4.87 - PHYSICIAN - LÚAZU, also 'magician'.

- 4.88 MEDICINE wassi-'medicine, salve' (HWb. 248) possibly of a particular kind (EHS 204).
- 4.91 TIRED tariyant-, part. of tariya- < tarra- 'become tired'. tarra- might be cognate with ON preyttr 'exhausted' < preyta < preyta < preyta 'exertion', OCS $trud\bar{u}$ 'toil, hardship', truditi 'become tired', Lat. $tr\bar{u}dere$ 'thrust, press', all from *trewd-, with Hitt. tarra-, tariya- (and perh. Gk. $tr(\omega)$) < *ter-yo-, *tor-yo-; cf. DSS 313).
- 4.94 Lame Various approaches have been taken to explaining *ikniyant*-. A derivation from *egdu-* 'leg' (Oettinger, *Eide* 22) is superficially attractive, but presents fundamental problems both phonetically and semantically, and Benveniste's comparison (*BSL* 35 [1934]: 102-3) with Gk. ὄκνος 'shrinking, hesitation' needs more support.

A different tack involves a connection with H. *egai*-. Carruba (in Neu, *Interpretation* 68, n. 1) interpreted the latter as 'zerspringen' and offered *dudduwarant*- 'lame' < *duwarnai*- 'break' as a parallel. The collocation, rejected by Tischler (T 350), is instead improved upon by Puhvel (P 354), who glosses *egai*- 'freeze, become paralyzed' < *eka*- 'cold, ice' (P 257), thus *ikniyant*- 'lame, paralytic, crippled'.

For *dudduwarant-*, the connection with *duwarnai-* (Carruba, loc. cit.) remains plausible (cf. Goth. *halts* : Gk. $\kappa\lambda\dot{\alpha}\omega$ 'break'), although its further etymology is disputable.

4.95 — DEAF — Besides sumerographic LÚ GEŠTU NU.GÁL 'man who has no ears', Hitt. has *duddumi- (in adv. duddumili-), duddumiyant- and further verbal derivs. duddumes-, duddumiyahh.. *duddumi- has been connected with the interj. (orig. adv.?) duddu- 'halt! be still!' (HWb. 230), perhaps as an adjectivized participle (EHS 219). More cogently, Petersen (AO 9 [1937]: 211-12)

reconstructed *dum(m)- < IE *dhu(m)-bh- or *dhu-m-, comparing Goth. dumbs 'dumb', OHG tumb 'deaf, stupid', Gk. τυφλός 'blind', OIr. dub 'black', ON doufr, OHG toup 'deaf'. See also H. Ehelolf, KIF. 1 (1927): 399-400.

- 4.96 DUMB karussiyant-, from karussiya- 'be silent', has been analyzed (Čop variously, e.g. $Indogermanica\ minora\ 50$) as IE * g^wor -us-yo-, from pf. part. of a root * g^wer seen in Arm. korusanem 'spoil', Lith. gùrti 'cease, abate' (of the wind), Toch. A kur- 'grow weary, get old' (T 529). Further related forms include adv. karussiyantili- 'silently; secretly', vbl. noun karussiyawar, caus. karussiyanu-.
- 4.97 BLIND *dasuwant* (with *dasuwahh* 'to blind') is etymologically obscure; textual discussion by Ehelolf, *KlF*. 1 (1927): 393-98.

Also LÚ IGI.NU.GÁL 'man with no eyes'.

4.98 - DRUNK - nink- 'get drunk' (caus. ninganu-) (HWb. 151) means basically 'drink one's fill' (5.13). An infixed deriv. nini(n)k-means 'to levy troops'.

wiyanai- 'get someone drunk' < wiyana- 'wine' (5.92); the adj. might have been participial *wiyanant- 'drunken'.

Lat. $\bar{e}brius$ can be explained as a cognate of H. eku-, aku-'drink', abstracted from a neg. * $s\bar{e}$ - eg^whri -o- 'without drink', a variant of which also produced $s\bar{o}brius$; similarly Gk. $v\dot{\eta}\phi\omega$ 'be sober' <*ne- eg^wh - (P 267-68 and refs.).

4.99 - NAKED - The e-grade corresponding to IE *nog**- (Lat. $n\bar{u}dus$, OIr. nocht, Goth. naqaps, Lith. nuogas, OCS $nag\bar{u}$, Skt. $nagn\acute{a}$ -, Av. mayna-, Gk. yυμνός) is seen in H. nekumant- (variant nekmunt-), dissimilated from * neg^w -no-nt- (F. O. Lindeman, RHA 23

[1965]: 32; W. Cowgill, in *Evidence* 156; AI 264). H. nekuz 'evening', nekuzi 'evening falls' belong not here (as in DSS 325) but with IE * nok^wts 'night' (14.42).

FOOD AND DRINK; COOKING AND UTENSILS

5.11 — EAT — IE *ed- lives on in H. ed-, ad-, Luw. and Pal. ad-, Hier. ad-, ar-, with iter. azziki- (P 315-20, T 91-92, 117-18).

karap-, karip- 'devour, fressen' is best read /grab-/ and linked with Hes. βράπτειν · ἐσθίειν, Lith. gróbas 'gut' < IE *gwr-ébh-, and further cognates OIr. brágae 'neck', NE craw (*gwr-ógh-), Gk. -βόρος 'devouring', Skt. giráti 'devour', Lith. gérti 'drink' (W. Belardi, Ricerche Linguistiche 1 [1950]: 122-23, 144; Čop, Ling. 5 [1964]: 42; Puhvel, AI 263). Semantically less satisfactory is a connection with Skt. grabh-, NE grab, OCS grabiti 'rob' (Sturtevant, Lg. 8 [1932]: 130; E. Risch, Flexion und Wortbildung 253; T 496-98.

ispai-, ispiya- 'eat one's fill' reflects * $spoE_1$ -y-(e-) from IE * $speE_1$ -(y-) 'be full, be fat, prosper', e.g. Skt. $sph\bar{a}yate$ 'grows fat', OE $sp\bar{o}wan$ 'thrive', $sp\bar{e}d$ 'prosperity, success', OCS $sp\check{e}ti$ 'be successful', Lat. $sp\bar{e}s$ 'hope', pro-sperus 'favorable' (IEW 983, P 431, T 408-9).

Pal. *mūsi* is glossed 'he eats his fill' by Puhvel (*AI* 147), but no etymology is given.

- 5.12 FOOD *etri-* is 'food' and 'meal', both for man and animals, and is formed with the suffix *-ri-* (*EHS* 225) to *ed-* 'eat' (5.11). Denom. *edriya-*, iter. *edriski-* serves for 'feed' (T 119, P 319).
- 5.13 DRINK The common verb *eku-/aku-* is often connected with Lat. *aqua*, OHG *aha* 'water', or with Toch. AB *yok-*'drink' (cf. T 103-4). Phonetically preferable is the comparison

(Juret, RHA 2 [1934]: 251-52) with Lat. ēbrius 'having had enough to drink, drunk'; see 4.98.

nink- 'drink one's fill' can be compared with Skt. náśati, Lat. nanciscor 'attain', Lith. nešù, Gk. aor. ἤνεγκον 'carried', Goth. ganah 'it is enough'; cf. LIEV 25.

 $sar\bar{a}p$ -, $sar\bar{e}p$ - seems to match Gk. ὁοφέω, Lat. $sorbe\bar{o}$ 'drink, sip', *srbh-éye- (cf. Oettinger, Stammb. 426; M. Poetto, JIES 2 [1974]: 435-37).

5.14 — Hunger — kast- 'hunger', kisduwant- 'hungry', kistant- 'famine' are generally thought related to Toch. A kast, B kest 'hunger', although further connections and precise reconstruction are debated. The likely inclusion of H. kist- 'be extinguished' leads to comparison with Skt. $j\acute{a}sate$ 'be exhausted', Toch. $k\ddot{a}s$ - 'quench, be quenched', Lith. $g\grave{e}sti$, OCS u-gasiti 'be extinguished', Gk. $\sigma \beta \acute{e} v v \bar{v} \mu \iota$ 'quench', Goth. qistjan 'ruin', and reconstruction * g^wes -'starve' or 'die out', like NHG sterben vs. NE starve (cf. Sturtevant, Comp. Gr. 118, Comp. Gr. 258; T 536-38). A. R. Bomhard (RHA 31 [1973]: 76) separated the Gk. (and presumably Germanic) forms and posited IE *ges- for the rest (rejecting * g^w -, as also Gusmani, Lessico 59).

5.15 - Thirst - kanint- (kaninant- 'thirsty') is analyzed as an -nt- suffixed Luwoid kani- in T 481, with the supposed verbal root *kan- unattested and obscure (EHS 302-3, n. 2). More detailed examination (P s.v.) yields rather a stem *kanen- (< *kneE₁-n-) + suffix -t- (EHS 254-55), leading to comparison with Hom. πολυκαγκής δίψα 'parching thirst' and Photios κέγκει · πεινῆ, Goth. hūhrus 'hunger', Lith. keñkras 'emaciated' < *knk-(r-), the original meaning being 'hunger and thirst'; cf. H. tangarant- and Arm. sin 'empty, not having eaten or drunk'.

- 5.16 SUCK 'Suckle' is *tittiya-*, transparently denominative from *tita-* 'breast' (4.41), with Luw. part. *titaimmi-* 'suckled'.
- 5.17 MIX *immiya* appears frequently in the phrases *anda immiya*-, *menahhanda immiya*-, paralleling Gk. ἐμμείγνῦμι and Lat. *immisceō*. The root is probably IE *mey- (Skt. máyate 'exchange', extended in μείγνῦμι, misceō, OHG miskan, OCS měšiti, Lith. miēšti 'mix'; IEW 714-15), and the prefix *im* a survival of IE *en-, vs. regular Hitt. *anda* (Sturtevant, Comp. Gr.¹ 133, 224; Comp. Gr.² 117; T 356-57; P 361-65); cf. also *innara* (4.81) and *istarna* 'between; within' (<*ens-ter: Lat. *inter*?; P 478-83).

hurtalliya- < hurtalli- 'mixture' has been compared (by Neumann, Kratylos 8 [1963]: 41) with Skt. vart-, Lat. vertere 'turn' < IE *wer-t- (thus * H_1 w[e]r-t-; cf. IEW 1156-58); cf. also Gk. ὁατάνη 'stirring spoon', Hes. βρατάναν · τορύνην?

5.21 - COOK - 'To cook' a meal could be expressed by *zanu*-, a caus. transitive to (intrans.) *zeya*-. The meaning may be properly 'prepare', if related to nasal pres. *zinna*- 'finish' < *si-ne- E_1 - (: Lat. *sinere* 'leave off' < 'let alone' [14.28]), root *sey E_1 - (Oettinger, *Stammb*. 151-52); there are semantic parallels in Sp. *guisar* 'prepare (food), cook', Rum. *gati* 'prepare; cook' (< *gata* 'ready' < Slav. [SCr.] *gotovŭ*), OIr. *air-fogni* 'prepares (food)', Nir. *fuinim* 'I cook' < *fo- + *gníu* 'I make' (*DSS* 337).

marra(i)-, marriya- 'melt, dissolve; cook until tender' (*CHD* 3.180-81) reflects an IE * $merH_2$ -, * mrH_2 -óye-, and has been compared with Skt. mrn ti 'crush, pound', Gk. μαραίνω 'quench', psv. 'die, waste away, wither', and ON merja 'crush, bruise' (IEW 736; cf. W. Petersen, AO 9 [1937]: 207; Oettinger, Stammb. 281).

- 5.22 BOIL *zanu-* (5.21) could have referred particularly to 'boiling'; cf. *Kbo* VI 34 II 22 *n-at wetenit imiyanzi n-at zanuanzi* 'they mix it with water and boil it'.
- 5.23 Roast, Fry *enu-, inu-* is causative from \bar{a} -, ay-, e- 'be hot' (15.85), P 11.

Either here or under 'bake' (5.24) belongs *sanhuwai-*, although H. Eichner's comparison (apud Oettinger, *Stammb*. 367) with Gk. ἀνύω would call for a meaning 'cook, prepare', like *zeya-*, *zanu-*(5.21).

5.25 — OVEN — No Hitt. reading is known for IM.ŠU.(NÍG.)NIGÍN.NA (Akk. *tinnūru*). For UDUN (Akk. *utūnu*) Hoffner (*Alimenta* 138) tentatively suggests *isliman*-.

The group of Gk. $i\pi\nu\delta\varsigma$, Goth. *auhns*, OE *ofen*, Skt. *ukhā-*, Lat. *aulla* probably also includes H. *happina-* 'flame' (1.82), although details are uncertain.

- 5.26–5.37 Words for specific 'vessels' (usually with DUG determinative) are quite numerous (see e.g. *EHGl.* 93-95), appearing plentifully in the detailed instructions of ritual texts. As the exact shape and nature of the implement denoted by a given term is most often impossible to determine, its inclusion under one category or another is to a large extent arbitrary. A small selection of the more reliably identified ones is given here, excluding those expressed solely by sumero- or akkadograms.
- 5.26 Pot hupuwai- is of Hurrian origin, possibly from hupuwa- (T 299). The initial syllable hup- is common in vesselnames, e.g. huppar- 'bowl' (cf. Gk. κύπελλον 'goblet', Pisani, Paideia 19 [1964]: 282), huprushi- 'censer' (cf. Gk. ὄβουζα, Lat. obrussa 'assay', HIE 126-31), and of unknown meaning huppi-,

huphuphi-, hupurni-, hupulli-, and has likely sources in both Hurrian and Sumerian (T 292).

- 5.27 KETTLE *palhi* is a nominalized adj., *palhi* 'wide' (12.61) (*HWb*. 156).
- $5.31 \text{DISH} ^{\text{GI}}$ pattar is 'dish, tray, basket, hamper', and even 'ice-bucket', and seems once to mean 'colander' or the like. It was made of reeds and was used to hold bread. The word is cognate with Lycian Gk. $\pi\alpha\tau\acute{\alpha}$ o α and apparently Lat. patera 'saucer', and Gk. $\pi\alpha\tau\acute{\alpha}$ v η 'flat dish' (Lat. patina); Puhvel, AI 353; Hethitisch und Indogermanisch 210 = AI 357.
- 5.32 PLATE The term *piran pedunas* (with variants) was interpreted (by Puhvel, *Serta Indogermanica* 317-18) as 'proffering platter', from the gen. of a vbl. noun from *peda-* 'bring, carry'.
- 5.33 BOWL huppar- is one of the many areal culture-terms with hup-, cf. 5.26 and T 291-93.

kappi- (DUGPUR.SÍ.TUM) is probably from Akk. *kappu* 'bowl, basin' (Berman, *Stem Formation* 16).

aganni- 'bowl' or 'cup' is from Hurr. aganni-, and has cognates in Akk. agan(n)u, Ugar. agn, Hebr. aggān, Egypt. 'ikn (P 24).

5.34 — PITCHER, JUG — *akutalla*- (also *akugalla*-) is probably from *aku*- 'drink' (5.13) + *-*akutalla*- (cf. Lat. *pōculum* 'drinking-cup'); cf. Puhvel, *JAOS* 97 (1977): 598; P 25.

lahanni- 'bottle' or 'pitcher' matches Akk. *lahannu* and Sum. ^{DUG}LA.HA.AN, a culture-word found in Hurrian ritual contexts (*CHD* 3.6).

lelhūndai- and *lelhundalli*- are literally 'pourers', formed reduplicatively from *lahhuwai*-, *lāh*- 'pour' (9.35); *CHD* 3.60.

ispanduw-, ispanduzzi-, ispanduzziyar- are 'libation-vessels', from *sipant-, ispant-* 'libate, pour' (9.35).

- 5.35 Cup *assuzeri* may be *assu* 'good' + *zeri* 'cup' (P 223-24); the second element compared unconvincingly with Lith. *tveriù* 'hold, enclose', Gk. σοφός 'urn' by V. Georgiev, *KZ* 92 (1978): 95. *aganni* 'cup' or 'bowl', 5.33.
- 5.37-Spoon-hanessa-, secondarily formed from hanessar, is deverbative from han(iya)- 'draw water', thus meaning 'ladle' or the like. The etymology connects Gk. $\check{\alpha}$ vt λ ov 'bilgewater', $\check{\alpha}$ vt λ έω 'bail' (cf. for meaning Lat. $\text{sent\bar{i}na}$ 'bilge' vs. Lith. sémti 'draw water') and probably also Arm. hanem 'draw out, remove'; cf. Benveniste, BSL 50 (1954): 39; G. Kapancjan, Chetto-Armeniaca 96: T 144-45; P. s.v.
- 5.41 MEAL Besides *etri-* (5.12) from *ed-* 'eat', Hitt. also uses *adatar* '(an) eating', the vbl. noun from the same root (P 317-18); cf. NHG *Essen*.
- 5.51 BREAD Words referring to 'bread' form the largest category of Hittite vocabulary. The basic NINDA occurs both on its own and as a determinative prefixed to dozens of specific terms for individual kinds of bread varying in size, shape, composition, color, and function, and expressed in hittitographic as well as ideographic forms. Lists of these (to be used with caution) can be found in *EHGl.* 25-29 and *HDW* 128-29, with discussions in the dictionaries and especially Hoffner, *Alimenta* 129-220.

A suggested Luwian and (Luwoid) Hitt. reading for NINDA is $z\bar{u}wa$ - 'bread; meal' (Otten, *Kumarbi* 11¹; *HWb*. 263; DLL 116), while Pal. may be *wulasina*-, from Hattic *wulasne*- (Laroche, *RHA* 13 [1955]: 74-78).

- 5.52 CAKE Many of the Hitt. NINDA-terms are apposite here, to the extent that 'cake' is understood as a specialized kind of bread. Examples might be NINDA SIG 'thin, flat bread', NINDA KU₇ 'sweet bread' (*mitgaimmi*-), NINDA(.KUR₄.RA) *LABKU* 'moist loaf', NINDA.KUR₄.RA TUR 'little loaf', *am*(*m*)*iyantessar* 'miniature bread' (P 47), *kaggari* 'round bread' (T 462), etc.
- 5.53 DOUGH is(sa)na-, $\bar{e}ssana$ is from IE *yes- 'ferment' (IEW 506), reflecting *yes-(o)no- and cognate with OHG jesan 'ferment' (P 381-85).

The name of 'yeast, ferment(ation)', so vitally imortant in the making of bread, cheese, and wine from the earliest times, is *harnammar*. This verbal noun and the Luw. (orig. part.) *harnant*-'id.' point to a verb *harna*-, of unknown affinity (T 178]. Connection with IE **er*-, **or*- 'rise' (Knobloch, *Kratylos* 4 [1959]: 35) is impossible: the latter is H. *ar*- (10.21, 10.22, 10.55).

5.54 — KNEAD — *immiya-* 'mix' is generally used, 5.17. For an alternative term *salk-* 'knead', a connection with IE **selĝ-* 'let loose, gush out' (*IEW* 900-1) is doubtful (*Stammb.* 216). *harnamniya-* is denom. from *harnammar* 'yeast, ferment' (5.53).

- 5.55 Meal, Flour ZÍD.DA (Akk. *qēmu*).
- 5.56 GRIND The two main terms for grinding appear in the frequent phrase *harra- malla-* 'pound (and) grind'. *malla-* is the inherited IE **mel-* (Goth. *malan*, Lat. *molere*, OIr. *melim*, OCS *mlěti*, Lith. *málti*), while *harra-* may be a Near Eastern culture-word referring to crushing or pounding, with a likely source in Akk. *harāru* 'grind' (Puhvel, *Bi. Or.* 36 [1979]: 57). Alternatively, nuances of 'ruin, spoil, destroy' support a comparison with OCS *oriti*

'destroy', Skt. nir-rti- 'dissolution', árma- 'ruins' < IE * $E_2er(-E_1)$ -, * E_2orE_1 - (V. Machek, AO 17.2 [1949]: 132-33; P s.v.).

Another expression of the crushing technique appears in KUB XXII 70 Rs. 55-56 namma-at NA4kunkunuzzit GUL-anzi 'and they pound it with a k-stone', where GUL = walh- 'pound' (9.21; cf. EHGl. 47, n. 74).

Luw. pasihaiyi-, H. pasihai- 'crush', HWb. 164-65.

- 5.57 MILL The 'millstone' or 'grindstone' is ^{NA_4}ARA , or Hitt. $^{NA_4}hararazi$ -, from the same Akk. source as H. harra- 'crush, pound' (5.56). The 'millhouse' is simply É ^{NA_4}ARA . On the use of $^{NA_4}kunkunuzzi$ as a grinding-stone see *EHGl.* 47, n. 74.
 - 5.61 MEAT UZUUTÚL 'food', with 'flesh' determinative.
- 5.612 BUTCHER Apparently the cook, LÚMUHALDIM, also handled this duty.
 - 5.62 Вееf *suppa* ... *ŠA* GUD.МАН.
- 5.64 SOUP, BROTH The normal ideographic expression is TU₇ (Akk. *ummaru*). A Hitt. reading *parsur* (F. Sommer, *HAB* 173, n. 2; *HWb*. 164, 300) is rejected by Hoffner (*Alimenta* 102-3).
 - 5.65 VEGETABLES (UTÚL) SAR '(edible) greens'.
- Gk. λάχανα might be comparable with Hitt. lakkarwa(n)-, an unknown kind of plant (CHD 3.19); cf. NGk. λάχανο 'cabbage'. gangati-(SAR), see 8.53.
- 5.66 BEAN GÚ.GAL 'bean', GÚ.GAL.GAL 'large bean'. A tentative Hitt. reading *sumessar is deduced from the gen. sumesnas

- (EHGl. 21, HDW 78). Although morphological details are uncertain (cf. EHS 284), the probable connection is with $s\bar{u}$ 'full', suwa-'swell' (13.21); cf. sumrai- 'be pregnant', and for meaning Gk. κύαμος 'bean': κυέω 'be pregnant' < *kewA-'swell', ON baun, OE bēan < *bhew-'swell up', and Lith. pupà 'bean' < *pew-.
- 5.67 PEA GÚ.TUR (Akk. *kakku* or *pulīlu*), *EHGl*. 93. 'Chickpeas' (not strictly speaking a pea) are referred to as GÚ.GAL (5.66).
- 5.68 ONION *suppiwashar* is apparently a loan-translation of the Sum. SUM.SIKIL^{SAR} 'pure-leek' (*HWb*. 199), referring to onion or garlic. GA.RAŠ^{SAR} may mean some kind of onion or leekish plant (*EHGl*. 92); cf. *Alimenta* 107-9.
- 5.69 CABBAGE While no term for this common vegetable has been definitely identified, it is tempting to compare kalwis(si)na-(SAR) with Lat. caulis, Gk. $\kappa\alpha\upsilon\lambda\delta\varsigma$, ON $k\acute{a}l$, NE kale, etc.
- 5.70-POTATO-As the potato was introduced to Europeans only around the sixteenth century AD (*NED* s.v.), it was of course unknown to the Hittites.
- 5.71 FRUIT sesa(na)- means 'fruit' (*CHD* 3.17), etym. unknown. Ideographic alternatives are ^{GIŠ}GURUN, *INBU*.
- $5.72 \text{APPLE} \text{GIS}^{\text{H}}\text{ASHUR}$ (Akk. $hash\bar{u}ru$). The Hitt. reading may be sam(a)luwa(nt)- (cf. Hatt. $\check{s}a$ -a-wa-at?); discussion in Laroche, OLZ 66 (1971): 149; Hoffner, Alimenta 113-15 with refs.
- 5.73 PEAR GIŠkarpina-, tentatively glossed 'Birnbaum' by Hrozný (Code Hittite provenant de l'Asie Mineure I [Paris, 1922],

- § 101), has been compared with Russ. *grabína* 'hornbeam' (G. Neumann, *KZ* 77 [1961]: 78, n. 4; V. V. Ševoroškin, *Etimologija* 1964: 157).
- 5.75 FIG GIŠPÈŠ. Something related to Gk. σῦκον may appear in the second element of H. GIŠhas(s)ik-, marsiqqa-, and siggasigga-, these three possibly referring to varieties of figs (EHGl. 43 and n. 58; T 200-1). In particular, marsiqqa- can be compared to Lat. mariscus 'large fig' (Neumann, KZ 84 [1970]: 141).
- 5.76 GRAPE GIŠGEŠTIN is the normal term for 'vine' and 'grape', with GIŠGEŠTIN HÁD.DU.A 'dried grape' = 'raisin'. Hittite terms specifically denoting 'grapevine' are GIŠ/Ūippi(y)a- (autochthonous, cf. Gk. Äμπελος) and GIŠ mahla- (P 378-79; Pedersen, Hitt. 187), while the fruit itself is expressed by muri- '(bunch of) grape(s)' (EHS 197, 204).
- 5.77 NUT A generic term is unknown. GIŠLAM.GAL is 'pistachio' (*HWb*. 282), Akk. *buṭuttu*.
 - 5.78 OLIVE Always GIŠSERDU (ZERTUM).
 - $5.79 OIL \dot{I}$, \dot{I} .GIŠ, with \dot{I} GIŠZERTUM 'olive oil'.
 - 5.81 SALT MUN, Akk. *ṭābtu*.

A word for 'sodium carbonate', *nitri*-, is an areal culture-word matching e.g. Gk. νίτρον (Puhvel, *AJPh*. 104 [1983]: 217).

- 5.83 VINEGAR GEŠTIN *EMṢA* 'sour wine'.
- 5.84 HONEY Hittite *milit* joins Goth. *miliþ*, OIr. *mil*, Alb. *mjal*, etc. in reflecting faithfully IE **mélit*(*om*)- (*IEW* 723-24).

- 5.85 SUGAR Probably unknown to second-millennium Anatolia.
- 5.86 MILK (sb.) The general designation GA occurs with terms for several kinds of milk, including GA.KU₇ 'sweet milk', GA EMSU 'sour milk', and GA DANNU 'thick milk'. In one passage pankur, normally 'family group, tribe, kin' or the like, appears to have the meaning 'milk'. A connection via the notion 'milk-brothers' (Güterbock, RHA 22 [1964]: 102-3) lies on the edge of probability.

Gk. γλάγος, γαλα(κτ-), Lat. lac(t)- may well be related to H. gala(n)k- 'soothe; satiate', galaktar 'nutriment'; further connections with Skt. $jál\bar{a}ṣa$ - 'soothing' and ON kloktr, Lith. $gl\tilde{e}žnas$ 'soft, tender', Bulg. glezíl 'coddle' are also possible (cf. T 463; Stammb. 149; P s.v.).

- 5.88 CHEESE GA.KIN.AG (*Alimenta* 121-22).
- 5.89 BUTTER *Ì.NUN*.
- 5.91 MEAD This drink was apparently not used in Anatolia, where wine was preferentially made from grapes. Occasionally 'honeyed wine', like the Gk. $\mu\epsilon\lambda\eta\delta\epsilon\alpha$ orvov, was consumed, to judge from the expression GEŠTIN.LÀL (*EHGl.* 21-22, n. 7).
- 5.92 WINE The Hitt. reading of GEŠTIN is wiyana- (Hier. wayana-), expectably representing the Mediterranean areal term seen in both IE (Gk. οἶνος, Lat. vinum, Arm. gini, Alb. venë) and Semitic (Arab. wain, Hebr. yayin) (Gusmani, Lessico 32 and n. 48).

5.93 — Beer — sessar (KAŠ), related to Gk. $\zeta\bar{\upsilon}\theta$ o ς (> Lat. sythum)? On Hittite beer-production see A. Goetze, sythetallen, n. 1-2.

CLOTHING; PERSONAL ADORNMENT AND CARE

6.11 - Clothe, Dress — Inherited IE *wes- appears as Hitt. wes(s)-, Luw. was- 'dress, wear, be clothed', with middle inflection, while was(s)(iya)- (< *wos-), usually active, may express the transitive sense 'clothe'. Conjugational details of these verbs are treated in depth in Oettinger, Stammb. 299-306.

sai- is 'put on' (particularly headwear), from the sense of 'press (on)' (9.342), and the same meaning is expressed literally in anda zikki-, from the iterative zikki- to dai-, tiya- 'place'; cf. NHG anziehen.

ishuzziya- 'gird' (P 401) is denominative from ishuz(z)i- 'belt, girdle' (6.57) < ishai- 'bind' (9.16). sarkuwai- means 'to put on shoes', and must be related to sarku- 'high' (12.31); cf. Ehelolf in Sommer, HAB 86, and G. Neumann (sarku- 'hoher Schuh') apud Oettinger, Stammb. 335, n. 159.

6.12 - CLOTHING - Besides the ideogram TÚG, general terms are derived from wes(s)-, was(s)- (6.11), namely the concretized neuter abstract wassuwar and animate was(sa)pa- (Goetze, Corolla Linguistica 50-51; EHS 184), with sarriwaspa- possibly a calque on Hurr. sarri- 'king' (EHS 125).

aniyatta, a neut. pl. '(ceremonial) habit, vestments', is a vbl. noun from an(n)iya- 'work' (P 69-70).

6.13 — TAILOR — LÚ TÚG 'cloth-man' may be 'tailor' or 'fuller'.

- 6.21 CLOTH Curiously, no general term for 'cloth' or 'fabric' is known, but its presence is signalled by TÚG. 'A cloth' in the sense 'towel' is marked with GAD, with a few varieties such as $^{\text{GAD}}$ mutalliyassa[, $^{\text{GAD}}$ sawalga-, $^{\text{GAD}}$ kazzarnul-.
- 6.22 WOOL hulana- (SÍG), Luw. *i*-stem SÍG-lani-, reflects the * H_1 wl H_2 -no-(A_2 -) seen in practically every branch of Indo-European (DSS 400, IEW 1139, T 278-79), and is also a likely source for Akk. hullānu' (woollen or linen) blanket' (EHGl. 39-40, n. 53). A synonym huliya-, hulaya- is from an alternatively suffixed * H_1 wl H_2 -y- (P s.v.).

The river-name ^{fD}Hulana- (fDSÍG-na-), together with ^{GIS}hulali-'distaff' and the verb hulaliya- 'wind around', points to a verbal root *hul(a)- < IE * H_1 wel(- H_2)- 'wind, twist' (*IEW* 1139-45), underlying the IE words for 'wool' (twisted, spun [material]) as well as those for 'turn, wrap, roll', etc. (10.12-10.15, *DSS* 665). Cf. Laroche, *AO* 17.2 (1949): 13, n. 18; Friedrich, *KZ* 77 (1961): 257.

skin', derived from es- 'be', with semantics as in tuekka- 'body' vs. Skt. tvac- 'skin', OPruss. $k\bar{e}rmens$ vs. Skt. $c\acute{a}rman$ -, with the same respective meanings, or Gk. $\chi g \acute{\omega} \varsigma$ with both (P 313-15).

KUŠkursa- 'fleece; skin, hide', 4.12.

síghuttuli-, a 'tuft' or 'flock' of wool, appears derived from huit(tiya)- 'pull, draw' (9.33; Čop, Ling. 8 [1968]: 55).

Particular kinds of wool or woollen objects may be denoted by ali- (Hurrian; cf. Gk. ἀλινδέω?, P 34), kunzi- (T 637-38), marihsi-, zum(m)ina/i-.

6.23 — LINEN; FLAX — 'Leintuch' has been guessed as the meaning of *kattanipu*- (T 544), perhaps on the basis of a suggested connection (V. Pisani, *Paideia* 8 [1953]: 308) with late Babyl. *kitinnū*,

Phoen. ktn 'linens', Gk. χιτών, Myc. ki-to-. Besides the unclear formation (H. -pu- < ?), the reading may be wrong as well: GAD tanipu- is also possible (T 544).

6.31 — SPIN — The Hitt. expression is probably (appa parza) malkiya- (CHD 3.131-32), but the etymology is unclear. A comparison with Skt. mārṣti 'wipes', Lat. mulgere 'milk' (Stammb. 346) is semantically improbable.

An alternative phrase is *hulanan kapinan iya-* 'make wool into thread'.

The previously unexplained Gk. κλώθω may be compared with H. kaluti- 'line', see 12.84.

6.32 — SPINDLE — The origin of GIŠhuesa- remains a subject of debate, the most likely derivation so far being that (by Kronasser, in *Studi ... V. Pisani* 2, p. 611) from IE *H₁wes- 'turn, wind' (*IEW* 1173 [7. ues-]), comparing Skt. vedá- 'bunch of Kusa-grass' (< *vedá- < *H₁wos-do-), uṣṇṭṣa- 'turban', ON vasask 'be wrapped, mixed up in', NHG dial. wasen, ME wase 'faggot' (the Engl. form also meant 'pad on the head for carrying burdens'). Other suggestions T 268-69.

The spindle is partnered with Gišhulali- 'distaff', a further deriv. from *hul*- 'twist'.

6.33 — WEAVE — Hoffner's idea (*EHGl.* 98, not mentioned in *CHD*) that *malkiya*- serves for 'weave' as well as 'spin' is supported by Lith. *pìnti* 'plait': Goth. *spinnan*.

IE *(H)webh- might survive in H. GADhupra- (Luw. huppara/i-), the name of some woven material or article of clothing (T 293 and

refs.), as well as *hupiki-* 'veil' (T 295) and others, cf. Kronasser, *Beiträge … Pokorny* 46-47.

A Hittite counterpart of Lat. $tex\bar{o}$ may be found in takk(e)s- 'join together; agree to (a treaty); undertake (a conspiracy), weave (a plot)', from IE *tek-s- 'build, put together; weave' (> Lith. $ta\check{s}\check{y}ti$, OCS tesati 'hew'), with the same stem seen in Gik. $\tau\acute{e}\chi\nu\eta$ 'art, skill, craft', etc. < * $tek\hat{s}$ - $n\bar{a}$. A reduplicated stem *te-tk- yields verbs for 'cut, hew, fashion' and related nouns; e.g. Skt. $tak\dot{s}$ -, Av. $ta\check{s}$ -; Gk. $\tau\acute{e}\kappa\tau\omega\nu$, Skt. $t\acute{a}k\dot{s}an$ 'carpenter', Av. $ta\check{s}an$ - 'creator'. Further Hitt. derivs. are taksul 'agreement, treaty, peace' (< 'joining'; cf. Lat. pax < $pang\bar{o}$), taksatar 'flat surface, plain' (< 'piece of [woven] fabric'?), and taksan- 'middle, halfway point' < 'joint, seam', taksan sarra- 'split in half' and UD-taksan tiyazi 'it is midday', lit. the day approaches (its) midpoint'. Cf. Sturtevant, taksan tiy tiy

- $6.35 \text{SEW} \text{Although a verbal reflex of IE } *s\bar{u}$ (*sy \bar{u} -, *s $\bar{\imath}w$ -) is missing, the root probably appears in H. suw $\bar{e}l$ 'thread' (6.38).
- 6.36 NEEDLE Possibly *KIRISSU* (*HWb*. Erg. 1: 31; Goetze, *JCS* 10 [1956]: 37 and n. 62).
- $6.38 \text{Thread} suw\bar{e}l$ can be analyzed as the suffix $-\bar{e}l$ on a root $*s\bar{u}$ seen also in Skt. $s\bar{u}tra$ and ON saumr, possibly also Lat. $su\bar{o}$ 'sew'. The Hitt. form does not help to clarify the relationship between this IE $*s\bar{u}$ and $*sy\bar{u}$ -, $*s\bar{i}w$ (Goth. siujan, Lith. siuti, OCS siti, Skt. $sy\bar{u}$ -, $s\bar{v}v$ 'sew'; IEW 915-16). Cf. Carruthers, Lg. 6 (1930): 161-62; Sturtevant, Comp. Gr. 111; Čop, Die Sprache 6 (1960): 6; P s.v.

gapina- 'thread, yarn' is without certain cognates; tentative comparisons have been suggested with *kappani*- 'cumin', a Semitic loanword (Akk. *kammūnu, kammanu,* Hebr. *kammūn,* etc.; E. Masson, *Recherches sur les plus anciens emprunts sémitiques en grec* [Paris, 1967], p. 51-52), and with Arm. *kap* 'thread' (Jahukyan, *Hayerena* 154). A *gapinanza- may appear, misspelled, in gapanza, cf. Puhvel, *Bi. Or.* 38 (1981): 353.

hanzana- is read as a quasi-synonym 'strand, thread, yarn', also 'web' in the phrase *auwawas hanzanas* (Akk. $q\bar{u}$ ettuti) 'spider's web', by Puhvel, *BHD* ... *Kerns* 237-40.

- 6.41 CLOAK Possibilities are TÚGadupli-, some kind of ceremonial cloak or other garment (= TÚGNÍG.LÁM?), perhaps of common origin with Akk. TÚGuduplu (Goetze, Corolla Linguistica 51-52; P 229, T 94-95), and sek(u)nu-, source unknown.
- 6.412 OVERCOAT TÚGkariulli-, perhaps a sort of (hooded) coat, fr. *kariya* 'cover, protect' (12.26): cf. for meaning Lat. *toga*: $teg\bar{o}$, or Sp. *abrigo*. Cf. Goetze, op. cit. 61.
- 6.42 WOMAN'S DRESS TÚGNÍG SAL. Goetze (ibid.) assigned here TÚGkariulli- and TÚGkaluppa-.
- 6.43 COAT TÚG gapari- (= TÚGE.ÍB?) may denote a tunic or short coat (T 490). *EHS* 225 connects it with *gap(i)- in gapina-'thread'. TÚGsarriwaspa- 'Ober-kleid'? 'Jacke'? (HDW 71) contains waspa- < wes- 'be clothed', see 6.11.
- $6.44-{
 m SHIRT-Perhaps}\ {
 m T\'G}G\'U.\`E.A$ (Akk. nahlaptu); cf. Goetze, op. cit. 52-54, HWb. 296. ${
 m T\'G}_Sasta$ -, if from sas- 'sleep' (4.61), could mean 'night-shirt' or 'bedclothes' (HDW73).

- 6.45 COLLAR *kuttanalli* is from *kuttar* 'neck' (4.28; T 678), and means 'neck-band' or the like; cf. Lat. *collāre* : *collum*.
- 6.46 SKIRT Although a short kilt seems to have been the normal dress of the Hittite common man, its name is as yet undetermined, unless perhaps *ishuzzi-* 'band, belt, girdle' < *ishiya-*'bind' (9.16).

The existence of some sort of skirt may be implied in TÚGiskallessar, derived from iskalla(i)- 'slit, tear', if it means 'slit dress' (T 398, P 414) and not 'torn garment'.

- 6.49 STOCKING patalla- 'sock'? (EHGl. 31) is very uncertain, although this and patalha- appear to be formed from pata- 'foot' (HWb. 166). Cf. also TÚGKAPALLŪ 'stockings', TÚGGAD.DAM 'leggings' (Goetze, op. cit. 60, 62).
 - 6.51 SHOE The regular form is KUŠE.SIR.

Gk. $\pi \& \delta \bar{\iota} \lambda$ ov might be connected with H. patalla- or patalha- (6.49; HWb. 166).

- 6.52 BOOT KUŠE.SIR istappanta 'boots' (Akk. šahupatum), lit. 'covered footwear', fr. istap(p)- 'shut, enclose' (12.25; P 473).
 - 6.54 Shoemaker, Cobbler lúĒPIŠ kušE.SIR.
- 6.55 HAT, CAP TÚG/GADlupanni- is some sort of round, flat 'cap', and is also used of part of a dagger ('pommel'?); cf. Goetze, *Corolla Linguistica* 62; CHD 3.85-86. The source is unknown (*EHS* 222), although the variation seen in *luwanni* suggests local origin (cf. *kupahi*-, Hurr. ku-(\acute{u} -) wa_a -hi, next).

Another type of men's headgear is called *kupahi-* ($T^{UG}SAG.DUL$; areal culture-word, cf. Hurr. ku-(u-) wa_a -hi, Hebr.

koba 'helmet'; Goetze, op. cit. 59; T 640-41), while that of women is denoted by $^{\text{TÚG}}kuressar$, evidently a vbl. noun from *kuer-/kur-* 'cut' (9.22; e.g. Sturtevant, *Comp. Gr.* 152; *EHS* 67), with a possible semantic analogy in $^{\text{TÚG}}iskalessar < iskalla(i)-$ 'slit' (T 646).

- 6.57 Belt, Girdle *ishuzzi-* 'band, belt, girdle' (P 410; see also Puhvel, *Bi. Or.* 38 [1981]: 350), is from *ishai-*, *ishiya-* 'bind' (9.16). There is also $^{\text{TÚG}}$ *massiya-* ($^{\text{TÚG}}$ SA[G].GA.AN.DÙ) 'waistband' (Goetze, op. cit. 54.55).
- 6.58 GLOVE ^{sig}kisri- may belong here, from kessar 'hand', cf. Gk. χειρίς < *ghes-ri-, but the meaning may be rather 'skein of carded wool', frm kis(ai)- 'comb, card' (AI 337).
- 6.59 VEIL GÁD IGI.HI.A must have this meaning (IGI.HI.A 'eyes'); a suggested Hitt. reading is $^{\text{TÚG}}h\bar{u}biki$, possibly from IE *(H)webh- 'weave' (T 295), with foreign -k(k)i- suffix (EHS 211).
- 6.63 PIN sepikkusta- (URUDUZI.KIN.BAR), worn in women's hair, may denote the safety-pin or clasp type (HWb. 301). Etymology is obscure (EHS 191, 197).
- 6.71 ADORNMENT unuwasha- has been analyzed (Oettinger, Stammb. 472) as deverb. unu(w)-a-sha-, from a -nu-suffixed verb u- 'adorn', cognate with Lat. ind- $u\bar{o}$ 'put on' (op. cit. 322), induviae 'clothing', ex- $u\bar{o}$ 'doff', Avest. $ao\theta ra$ 'footwear', etc., IE *eu- (IEW 346).

A *hura- 'ornament' may well be the second element of *istamahura-* 'earring' (Hoffner, *RHA* 21 [1963]: 38). With the denom. *hurai-* 'to ornament, decorate' (Laroche, *RHA* 15 [1957]: 14), it is reconstructed (by Van Windekens, *BHD* ... *Kerns* 338-39) *A₁(e)ur-,

and compared with * A_1 wer- in Gk. $\alpha \epsilon i \omega \omega$ 'lift, suspend', Alb. vjer 'hang up, hook', Lith $virv\tilde{e}$ 'cord', with semantics as in NHG (ohr)gehänge, Fr. pendant.

For discussion of Gk. κόσμος and Lat. *mundus*, see 1.1 and AI 331-44.

6.72 — JEWEL — $^{NA}4ku(wa)nnan$ - ($^{NA}4NUNUZ$) most likely stands for 'lapis lazuli, lazurite', the blue-green mineral used for gemstones and pigment, referred to also by the related Gk. $\kappa \dot{\nu} \alpha vo \varsigma$. Further areally related possibilities in T 688-92.

NA₄.ZA.GÌN 'blue stone' may be lazurite, sapphire, or the like, while NA₄.GUG 'red stone' could be carnelian, porphyry, or ruby; the Hittite word *kirinni*- is perhaps from Hurrian (Laroche, *RHA* 24 [1966]: 176-77).

- 6.73 RING HAR (Akk. *šemīru*); *HWb.* 276.
- 6.74 Bracelet HAR ŠU 'hand ring'.
- 6.75 NECKLACE huwahhuwartalla- is a nominalized -alla-adj. from hu(wa)hhurti- 'throat' (4.29, T 263). Similarly, kuttanalli- is related to kuttar- 'neck', 4.28.
 - 6.82 TOWEL GAD.
 - 6.83 NAPKIN There is a *genuwas* GAD 'knee-cloth'.
- 6.91 COMB GIŠGA.ZUM conceals the noun, but the verb kis(ai)- is cognate with OCS $\check{c}esati$ and nominal derivs. $\check{c}esl\check{u}$, OIr. $c\acute{i}r$ (* $k\bar{e}s$ - $r\bar{a}$) 'comb', ON haddr 'long hair' (< *hazdaz < IE *kos-tos), Lith. $kas\grave{a}$ 'braid, tress' (DSS 449, AI 336-37), from IE *kes- 'comb, card;

clean up; adorn', etc. (cf. Puhvel, AI 331-38, 417; Bi. Or. 38 [1981]: 353-54).

6.94 - OINTMENT - wassi-, 4.88.

6.95 - SOAP - Ancient Anatolian practice apparently made use of alkaline plant materials for cleansing, to judge from Giškarsani- 'soap-weed' (cf. Ertem, *Flora* 131-32), perhaps an areal culture-word akin to Gk. $\kappa \dot{\alpha} \varrho \delta \alpha \mu o \nu$ 'nasturtium' (Furnée, *Erscheinungen* 64, n. 269; T 521).

hasuwai^{SAR}, included as 'soapweed' in *EHGl*. 82, is glossed 'wild rue' (*Peganum harmala*) in T 211, with reference to the use of its resin as a red coloring agent; cf. Pliny (*HN* 28.191) prodest et sapo; Gallorum hoc inventum rutilandis capillis... Berman (*Stem Formation* 59) connects it with has(sa)- 'chip' or 'flake' (of soapwort): cf. *KBo* IV 2 I 39-41 nu hassan Giškarassaniyas dāi n-an-kan pūwati n-an-kan istalgaizzi n-an purpuran 1-EN DÙ-anzi '(s)he takes flakes of soapwort, pounds them, flattens them, and they make them into a lump' (P 451; cf. T 211, *EHS* 526).

The ideogram is ŠE+NÁG (Akk. uhūlu; HWb. 294).

DWELLING, HOUSE, FURNITURE

- 7.11 DWELL Hitt. uses *es-, as-* (Hier. *as-*) 'sit' < IE * $\bar{e}s$ (12.13) to mean also 'remain' and 'dwell', just as Rum. *şedea,* Fr. *résider* from IE **sed-* (P 291-300).
- 7.12 HOUSE pir, parn- (É) is probably an indigenous word, and occurs in most Anatolian dialects: Luw., Hier. parn(a)-, Lyc. $pr\tilde{n}nawa$ -, Lyd. bira- (Laroche, RHA 23 [1965]: 52-54; EHS 161; Puhvel, AIED 240 = AI 144).

purut-, purutessar- 'clay, plaster, mortar' or the like (9.73) also means by extension 'house' (*HWb.* 174).

- 7.13 HUT GIŠZA.LAM.GAR 'hut' or 'tent' (Akk. *kultaru* 'tent'), with GIŠZA.LAM.GAR ŠA GI 'reed hut'; see *EHGl.* 50, n. 81.
 - 7.14 Tent GiŠZA.LAM.GAR (7.13), ÉZARATU.
- 7.15 YARD, COURT hila- (TÙR) is '(court)yard', also 'halo' (around moon or sun), and possesses several derivatives, e.g. hilanni- and hilannant- 'courtyard', hilanmi- and hilannatta- 'courtier', hilanmar 'gatehouse' (7.22), as well as numerous divine, personal, and place-names: Philassi-, Philanzipa-; Ihiliyas; URUHilanmā, URUHilanmatiya-, URUHarsanhila-, URUIstuhila-, etc. (cf. e.g. Laroche, Recherches 69; Noms 67, 284; RHA 19 [1961]: 81-82).

Other Anat. relatives are Hier. GATE-(la)na- = hilana- and Lyc. qla 'enclosure, $\tau \dot{\epsilon} \mu \epsilon \nu o \varsigma'$ (Laroche, BSL 55.1 [1960]: 183; 62.1 [1967]: 55).

All attempts at IE etymology (recorded T 242-43) have failed; an indigenous Anatolian term is indicated.

7.21 — ROOM — *antaka*- or *antaki*- is apparently derived from *anda*- 'within', with a suffix of either foreign (*EHS* 210-11) or IE origin (*-*gh*-; P 77). Lyc. *ñtata* 'chamber' < *ñte* 'in(side)' may be parallel (Laroche, *Fouilles de Xanthos* 5 [1974]: 136).

Some sort of 'anteroom' or 'vestibule' seems to be intended by *arku*- (P 148), possibly from Hurrian (*EHS* 225), cf. Hurroid Akk. *arkabinnu* 'a kind of door' (I. Singer, *ZA* 65 [1975]: 86).

An 'inner chamber' of the house is denoted by É.ŠÀ, H. *tunnakkessar* (*HWb*. 228).

7.22 — DOOR, GATE — The Hitt. reading for GIŠIG 'door' is arasa-, whose variant reading asari- points to a likely source in Hurr. ašar 'gate, door' (Puhvel, P 128-29; JAOS 102.1 [1982]: 178).

While the 'gate' proper is ^{GIŠ}KÁ (Akk. *bābu*), H. *aska*- refers to the 'gateway' which surrounds it (cf. KÁ.GAL-*as āski* and *āsga ANA* KÁ [P 213, 214]), and is another Anat. areal term, like *hila*-'courtyard' (7.15) and *pir*, *parn*- 'house' (7.12; P 215)—PIE **dhwer*-does not survive in Anatolian.

The gateway structure of *aska*- plus ^{GIŠ}KÁ lies within the *hilammar* 'gatehouse' or 'portal', denom. from *hila*- 'courtyard', with a semantic development exactly the opposite of that seen in Lat. *forīs*: *forum* or Russ. *dver*': *dvor* (P s.v.). Also used to denote this structure is KI.LAM, otherwise 'market', cf. Akk. *bāb mahīrim* 'market gate' (Singer, *ZA* 65 [1975]: 91-95).

'Side door' or 'postern' might be the meaning of (É) *lustani-* (*CHD* 3.88); a detailed discussion of the term is in Laroche, *RHA* 10 (1949): 25-26.

- 7.23 LOCK The origin of GIŠhattalu- 'bolt', with animate hattalwant- and denom. hatalwai- 'to bolt, lock', is unknown (T 219). zakki-, possibly 'bar' (EHS 204), is likewise obscure.
- 7.25 WINDOW The Hittite 'window', *lutta(i)-, luttant-* (GIŠAB) was a sophisticated enough affair to be opened (*has-*) and closed (*istap-*), probably by means of shutters (*CHD* 3.88-89). The likely derivation is **luk-t-* < IE **lewk-* 'light' (H. *lukzi* 'becomes light, dawns'; *AI* 221), like Avest. *raočana-* 'window' and ON *ljóre* 'roofhole' < *ljós*, also ON *gluggr* 'window' : *glóa* 'glow'.
- 7.26 Wall kutt- (Akk. šahādu), vbl. noun kuttessar 'walling, walls' (Hier. Chiselkutasara/i-), reflects * \hat{g} hu-t- from IE * \hat{g} hew- 'pour' (IEW 447-48), with the requisite semantics illustrated by Gk. $\chi \hat{\epsilon} \omega$ 'pour; pile up', $\chi \nu \tau \hat{\eta} \gamma \alpha \hat{\iota} \alpha$ 'earth-heap', $\chi \hat{\omega} \mu \alpha$ 'mound' (Laroche, Syria 31 [1954]: 106; EHS 255; T 676-78; P s.v.). This accords with both the occasional NA₄ determinative and the archeological evidence.
- 7.28 ROOF The source of *suhha* is unknown, though it is difficult to separate from *suhha* 'throw, scatter' (9.34); cf. perhaps *suhha warhui* 'strohgedecktes Dach'? (*HWb*. 196).
- 7.31 FIREPLACE *hassa* matches Osc. $\bar{a}s\bar{a}$ -, Lat. $\bar{a}ra$ 'altar', ON *arinn* 'hearth', IE * $\bar{a}s$ (* A_1eH_2 -s-) 'burn' (*IEW* 68); cf. Pal. $h\bar{a}$ 'be warm' (Melchert, *KZ* 94 [1984]: 41-42). Something like NHG 'Herdstelle' or NE 'hearth' may have been referred to by *hassanzipa*-, where -*zipa*-/-*sepa* evokes the intrinsic numinous power of the object; cf. $\bar{A}ska$ -*sepa* (*aska* 'gate', 7.22), *Hilanzipa* (7.15), *daganzipa* (1.212).

- 7.32 STOVE The term for 'brazier', forerunner of the more modern 'stove' (*DSS* 476), is *pahhunalli-* (GUNNI), transparently from *pahhur* 'fire' (1.81), with adj. suffix *-alli-*, *EHS* 212.
- 7.41 Furniture A piece of 'furniture' may be ^{GIŠ}harduppi-, likely a foreign word (*EHS* 224, T 189), compared with Gk. κάρδοπος 'kneading-trough' by Furnée, *Erscheinungen* 257.
- 7.42 BED sast(a)- is from sas- 'lie down, sleep' (4.61), with -t-suffix perhaps equivalent to that of kutt- 'wall' (P s.v.) and lutta(i)- 'window'; cf. e.g. Lat. lectus < *legh- or Gk. κοίτη < *key-.

Further terms are of foreign origin, and refer to various types of couch: GIŠhaputi- (EHS 237, T 168), namulli- (EHS 213), nathi- (< Sum. nàd?, EHS 244).

7.43 — CHAIR — GIŠkishi(ta)-, keshi-, also hishi- (GIŠŠÚ.A-hi-) is a loanword from Hurr. kis-hi-, in turn from Akk. kuššu, Sum. gu.za (cf. GIŠGU.ZA 'throne') (T 590-91).

Obscure and probably also not native Hitt. are *hapsalli-, hassalli-* 'stool' (*EHS* 214, T 167; improbably connected with OPruss. *abse,* Russ. *osina,* OHG *aspa,* ON *osp* 'aspen' by Van Windekens, *BHD ... Kerns* 331-32) and *tapri-* 'chair' (*EHS* 225).

The 'throne' as an item of furniture is $^{GIS}GU.ZA$ (prob. *kishi*- or *hishi*-), but as the symbolic representation of royalty and its power, it is denoted by a separate term *halmasuitt*- (^{GIS}DAG ; often deified $^{DINGIR}DAG$). The source of the latter is Hattic $^{D}Hanwas(u)wit$ - (and variants), analyzed as *ha*- (locative) + n(i)was(u)- 'sit' + -it (fem. suffix) by Laroche (*RA* 41 [1947]: 89), further refs. T 134.

7.44 — TABLE — The usual term is GIŠBANŠUR; several others are uncertain and unanalyzable: *hariuzzi*- (T 173), *lahhura*- = GIŠGAN.KAL (*CHD* 3.15), *papu*- (*EHS* 251), *puriya*- (*EHS* 169-70).

 $7.45 - \text{LAMP} - \text{An alternative to }^{\text{DUG}}\text{IZI.GAR (Akk. }n\bar{u}ru)$ is sasanna- (HWb. 188), perhaps sas-s(a)na- (EHS 183), though a connection with sas- 'sleep, lie down' has not been demonstrated.

(GIŠ) zuppari-, zupparu- 'torch' was linked with Skt. kṣúbhyati 'shake, tremble' by W. Petersen (Mélanges H. Pedersen 473, comparing for meaning Lat. tremula flamma, tremulum lumen, etc.), with improbable -pp- < *-bh-.

AGRICULTURE, VEGETATION

- 8.11 FARMER LÚENGAR.
- 8.12 FIELD A.ŠÀterippi- is from teripp- 'plow' (8.21); cf. late Church Slavic ralija (Pol. rola) from OCS orati 'plow', or Avest. karšū- (Skt. karṣu- 'furrow') from karš- (Skt. kṛṣ-) 'plow'.

An 'irrigated field' may be what is meant by AŠÀsissuras- (HWb. 194, HDW 76; cf. Laroche, Ugaritica 5 [1969]: 778); denom. sissuriya-'irrigate'. It is a likely technical loanword, as are the terms for irrigation ditches or channels, amiyara- (P 48) and alalima- (P 28).

The most probable connection of *arziya-* 'cultivated land' is with *arsi-* 'cultivation, planting' (> *arsai-*, *arsiya-* 'cultivate', 8.15); P 187.

- 8.13 GARDEN GIŠSAR (Akk. kirū).
- 8.14 BARN One of various kinds of outbuildings (all represented ideographically) is É IN.NU.DA (IN.NU.DA 'straw'), read Hitt. *taiszi-* (*Alimenta* 34). Another is Égarupahi-, perhaps 'granary', borrowed from Hurr. *karubi* (Laroche, *RA* 54 [1960]: 198-200).
- 8.15 CULTIVATE arsai-, arsiya- is denom. from arsi'planting, cultivation', probably an areal technical term seen also in
 Hes. ἀρσεα · λειμῶνες. Further identity with ar(a)s-, arsiya- 'flow'
 (10.32) is plausible in view of the importance of Middle Eastern

and Asian irrigational technology in Anatolian agriculture (P 173-74; cf. 8.12).

Like verbs for 'work' (9.31) in many other languages, Hitt. an(n)iya- can have this meaning (P 66, 68); cf. Fr. labourer, NIr. oibrighim, ON yrkja, vinna, OCS dělati, SCr. obraditi, Avest. aiwivaraz-, etc. (DSS 493-94).

8.21 — PLOW — The noun for 'plough' is always concealed by sumerographic $^{GI\check{S}}$ APIN (Akk. *epinnu*). The verb 'to plow', on the other hand, is well attested by two different terms, often occurring together in the asyndetic phrase *harszi terpzi. This expression reflects a situation similar to that denoted by harra- malla- 'pound (and) grind' (5.56), where the inherited word for an activity traditionally known to the early IE speakers is joined by a borrowed term for a more recently adopted Mesopotamian-based technique. Thus teripp- 'plow' matches Lat. trepō and Gk. $\tau o \epsilon \pi \omega$ 'turn', with the same sense as in Lat. terram vertere 'turn the sod' and a possible meaning-parallel in Skt. karṣ-, Av. karš- 'plough' < *kwel-s- (*kwel-'turn'), whereas har(a)s- can be a technical loanword, from Akk. harāšu 'plant', harāṣu 'dig a furrow', or WSem. ḥaraš- 'plow'. See Puhvel, AI 1-3, 110-24; Bi. Or. 36 (1979): 57.

Less likely competing explanations involve connections of teripp- with IE *treb- (MIr. trebad 'plow, inhabit', W. tref 'homestead', Goth. paúrp 'field', Osc. trííbúm, Lith. trobà 'house', etc. [IEW 1090]; e.g. G. Jucquois, RHA 22 [1964]: 91-92), *drep- (Gk. $\delta \phi \epsilon \pi \omega$ 'pluck', $\delta \phi \epsilon \pi \omega$ 'sickle' [Rosenkranz, JEOL 19 (1965-66): 502]), or *ter(i)-, *trī- 'rub' (e.g. Gk. $\tau \phi \epsilon \omega$ [Pisani, Paideia 9 (1954): 128]), but all present formal or semantic difficulties. The derivation of har(a)s- from IE * $ar(\bar{a})$ - 'plow' (from Goetze, Tunnawi 70), though very common, is doubtful (cf. T 182-83).

8.212 — FURROW — akkala- (AB.SÍN) suggests a reconstruction from *ok-, seen in Gk. ὄγμος 'furrow' (Benveniste, HIE 107-8, thus separating ὄγμος from *a \hat{g} - 'drive'), and possibly Lat. occa, Corn. ocet, Gk. ὀξίνη, Lith. akėčios 'harrow' (Čop, Ling. 5 [1964]: 26) and Arm. akaws 'furrow' (Greppin, PBH 1972: 3 [58], p. 221-24; P 23).

The gloss 'tiefgehender Pflug' (T 9, following Oettinger, *Eide* 14, 50) is inferior and unnecessary, cf. Puhvel, *Hethitisch und Indogermanisch* 215-216, n. 36 = *AI* 362-63.

- 8.22 DIG *peda-*, written in classical Hittite *pè-da-* to avoid confusion with *peda-* 'carry off', reflects IE **bhedh-*, with cognates Lat. *fodiō* 'dig', Lith. *bedù* 'bore, dig', W. *bedd* 'grave' (Pedersen, *Hitt.* 76-77; Puhvel, *Hethitisch und Indogermanisch* 214-16 = *AI* 361-63; *IEW* 113-14).
 - 8.23 SPADE GIŠMAR URUDU or URUDUMAR.
- 8.24 SHOVEL intaluz(z)i-, of unknown source, has the suffix -uzzi- (EHS 241). Compared tentatively with Gk. $\xi v \tau \epsilon \alpha$ 'implements' at P 374 and AI 250, rejected in T 362.
- 8.25 HOE The reading of GIŠAL (Akk. allu) is URUDU tekan, kept apart from tekan 'earth' in EHS 270 and also by Laroche (RHA 10 [1949]: 20-21; cf. HWb. 220), who showed that it is from IE *(s)teyg- 'pointed', seen e.g. in Skt. téjate 'is sharp', tigrá- 'sharp', OPers. tigra- 'point' (15.78; IEW 1016).
- 8.27 RAKE Gišhah(ha)ra-, probably 'rake' or similar, was thought to be reduplicated from a *har-, cf. hars- 'till' (8.21) by Rosenkranz (*JEOL* 19 [1967]: 505; also Gusmani, *Lessico* 67; T 122). Rejecting this approach, Puhvel (*AI* 250-51) compares instead Lat.

 \bar{a} rea 'threshing-floor' < * A_1 e A_1 riye A_2 (8.35), via the Hitt. verb hahriya- 'rake'.

8.31 - Sow; SEED - sai-, siya- has both meanings of IE *sē-, 'sow' (Goth. saian; Lat. sēmen, OIr. síl, OE sæd, etc. 'seed') and 'throw' (Skt. sāyaka- 'missile'), as well as 'press, put on (headwear)', with 'sow' especially in the phrase para siya-. See Laroche, BSL 58 (1963): 73-76.

Also meaning 'sow' is *suniya-*, from a primary meaning 'scatter' or 'pour' (9.35).

an(*n*)*iya-* 'work' (9.31) is also used in this sense (P 66, 67, 68).

'Seed' is NUMUM, Akk. zēru, Luw. reading warwalanant- or warwatn(ant)-, 2.57.

- 8.32 Mow war(a)s-, warsiya-, basically 'sweep clean' (9.37), is also used occasionally with reference to fields, and thus may have 'mow' as a corollary meaning (along with 'thresh' [8.34] and 'reap, harvest' [8.41]), e.g. n-asta apūn A.ŠÀ-LAM arha war[asdu 'let him harvest that field' and A.ŠÀ warrasuwas 'harvestable field' (AI 198).
- 8.33 SICKLE *kullupi*-, probably an areal culture-word (cf. Akk. *kalappu*, Hebr. *kēlappoṭ*, Aram. *kulbā* 'hoe, pick'), is usually glossed 'sickle' (e.g. *HWb*. Erg. 3: 10; Laroche, *RHA* 15 [1957]: 9-11), though the possibility of its being made of wood (e.g. Berman, *Stem Formation* 17) may be cause for doubt (T 630). In any case the ideograms URUDUKIN and URUDUKIN.GAL stand for this implement (*Alimenta* 28-29).
- 8.34 THRESH A verb *huek- (inf. huganna, vbl. noun huigatar) is postulated for this activity in Alimenta 31-32, uncon-

nected with homophones meaning 'slaughter' (4.76) and 'utter an incantation' (18.21).

We have also KISLAH-an wars(iya)- 'sweep the threshing-field', with wars(iya)- matching e.g. OCS vrěšti 'thresh' and Lat. verrō 'sweep' (9.37). This descriptive designation of the early technique is echoed in Latin, e.g. Horace (Carmina 1.1.10) quidquid de Libycis verritur areis 'whatever is swept up from Libyan threshing-floors' (AI 247).

8.35 — THRESHING-FLOOR — Sumerographic KISLAH (dat.-loc. sg. KISLAH-*ni*) is the only attested representation of the Hittite concept.

It is possible to compare Lat. $\bar{a}rea$ with H. hahriya- 'to rake' (* $A_1eA_1riyeA_2$), $Gi\bar{s}hah(ha)r(a)$ - 'rake', and to construe H. hahrannas as gen. sg. of a *hahratar '(place) of raking, threshing-place', thus affording some insight into early IE threshing and harvesting technique; see AI 246-51. Such a reconstruction suggests a possible refinement of the meaning of $Gi\bar{s}hah(ha)r(a)$ - from 'rake' to something more like 'ripple', and the further deduction that the sense 'open space' in Lat. $\bar{a}rea$ developed from 'threshing-field', and not the reverse (cf. DSS 510).

8.41 — CROP, HARVEST — The regular term is sumerographic BURU_x-a(nza)- (Akk. $eb\bar{u}ru$); Alimenta 24-28. The usual derivation of halkuessar from halki- 'grain' (8.42) (e.g. Laroche, RHA 11 [1950]: 39-40; T 134) fails to explain either the origin of the -u- (EHS 290; Rosenkranz, JEOL 19 [1965-66]: 503) or the occasional meaning 'first fruits (for sacrifice)'. The key to a better approach lies in the allograph MELKITU 'income, revenue' (Friedrich, AfO 14 [1944]: 349) from $leq\bar{u}$ 'take, receive'. The meaning of halkuessar is thus (substantive) 'yield, próduce', and the etymon IE * A_1elg^wh - (cf. Čop, Indogermanica minora 31-32; P s.v.). Cognates include Skt. árhati,

Av. arəjaiti 'be worth', Gk. ἀλφή 'gain', Lith. algà 'wages', etc. (IEW 32-33).

'To harvest, reap' can be expressed by *wars(iya)-*, properly 'sweep' (9.37); cf. also 8.34 'thresh'.

8.42 - GRAIN - halki- (ŠE; also deified Phalki-; cf. Lat. Ceres) is in all probability a Middle Eastern and Mediterranean cultureword (EHS 211). Possible attestations are widespread, e.g. Anatolian (Tyana) Gk. $\check{\alpha}\lambda\iota\xi$, Lat. (h)alica 'spelt' (Neumann in T 133), and perhaps Etr. $\text{hal}\chi(za)$, if 'beer' (V. Georgiev, Linguistique balkanique 5.1 [1962]: 41).

Čop (*Hethitica* 4 [1981]: 31-32) unnecessarily connected *halki*-with IE $*(A_1)elg^wh$ as in his etymology of *halkuessar* 'produce, harvest', still influenced by the traditional connection of the two (8.41).

8.43 — Wheat — Several individual varieties are referred to in the texts. Wheat in general, and possibly specifically 'bread wheat', *Triticum vulgare*, are denoted by ZÍZ(-tar). kant-, plausibly 'einkorn' (Alimenta 69-73), may have related forms in a Lyc. χada- 'grain' (cf. $\chi\theta\theta$ ase 'Futtermittel' [?]), Lycian place-names Κάδοεμα (called σίτου φουγμός by Stephanus of Byzantium) and Kadyanda < χadawāti 'grain-rich', as if Hitt. *kant-want- (like *Wiyanawanda > Pisidian Οἰνόανδα; G. Neumann, Die Sprache 8 [1962]: 208; cf. T 486). The idea of an Iranian loan source for H. kant- (from J. Potratz, Pferd 184-85; cf. T 486; comparing Avest. gantumō 'wheat') is to be doubted, nor is a connection with Gk. χόνδοος 'groats' (: Ugar. hundrt?) convincing (Juret, Vocabulaire 6; cf. Alimenta 60-70).

The etymology of *karas*-, possibly 'club wheat' or 'emmer' (*Alimenta* 73-77), is unknown (see T 498), as is that of *seppit*- (cf. Laroche, *RHA* 11 [1951]: 68).

- 8.44 BARLEY In addition to generic 'grain' (8.42), *halki*-also means specifically 'barley'. A particular kind is apparently meant by e(u)wa(n)-, an inherited IE word < *yewo- 'grain', seen e.g. in Ved. yava- 'grain, barley', Av. yava- 'grain', Pers. jav 'barley', Lith. $java\bar{\imath}$ 'grain', Gk. $\zeta \epsilon \iota \alpha \iota$ 'spelt', etc. (ibid. and P 321). See *Alimenta* 77-82.
- 8.51 GRASS Several words for (types of?) grass are known. For *welku(want)*-, some connection with the root **wel* seen also in *wellu* 'meadow' (1.23) is conceivable; cf. W. *gwellt* 'grass', ON *vǫllr* 'meadow', etc. No etymologies have been found for *kariyant* or the related *karitasha* (T 507, 510; cf. *kariya* 'cover' [12.26]?) or for *uzuhri* (or '*zuhri*-; *EHS* 225).
- 8.52 HAY The expression 'dried grass' is used; welku hadan or uzuhri-/úzuhri- hadan.
- 8.53 PLANT *gangati*(SAR) apparently refers to herbs, particularly those with magical or healing powers (Laroche, *RHA* 111 [1950]: 38-39), etym. obscure (*EHS* 238).
- 8.54 ROOT *surki* (also *surka*-, *HWb*. 200) reminded Neumann (*KZ* 77 [1961]: 78-79) of IE **swer*-/*sur* 'pole, post', Skt. *sváru*-, OE *swer*-, etc. 'post', Lat. *surus* 'twig, sprout', with -*k*-suffix as in ON *svíri*, OE *swira* 'neck' < **swer*- χ *yōn* (cf. *EHS* 211; Eichner, *MSS* 31 [1973]: 74). Root-connection of Gk. (F)Qíζα, Lat. (*w*)*rādix*, via **wr*-*d* vs. *(*s*)*wr*-*k*-, is suggested by Puhvel (cf. Hitt. *sankuwai*-: Lat. *unguis* 'nail').
- 8.55 BRANCH The word is alkista(n)- (Akk. ARTU), serving for 'branches' of vines, etc. and 'boughs' of trees. A division into alk- + -ista(n)- is secured by the further botanical

terms hurpasta(n)-, hurpusta-'leaf' (8.56), hatt-alk-esna-'thorn-bush', and tap-alk-ustana-, name of a plant. Disengaged from the various affixes, the root alk- (IE * A_2 él- \hat{g} -) can be linked (cf. Čop, Indogermanica minora 30-31), with OCS loza 'vine, tendril, shoot' and Hes. ὀλόγινον · ὀζῶδες and κατάλογον · τὴν μύρτον (* A_2 l-o \hat{g} -; cf. P 36, T 17-18).

8.56 — LEAF — hurpasta(n)-, hurpusta- refers to a 'leaf' of trees and other plants, as well as the skin of an onion. Setting aside the suffix -asta(n)-, -ista(n)-, -usta(n)- (cf. 8.55), the word can be reconstructed * H_1wrb - and compared with e.g. Lit. $vi\bar{r}bas$ 'twig, sprig', etc.; Gk. $\dot{\varphi}\alpha\dot{\beta}\delta\alpha\dot{\varsigma}$ 'twig, rod' (IEW 1153); and possibly Lat. $verb\bar{e}na$ (< *verbes- $n\bar{a}$), sacred leaves and branches of various plants (cf. Neumann, KZ 77 [1961]: 79; EHS 43; refs. and further details T 307, P s.v.).

The collective 'foliage' is expressed by GISIah(h)u(wa)rnuz(z)i-(CHD 3.15-17; Laroche,*Ugaritica*5 [1968]: 774-75, 778-79); etym. ?

- 8.57 FLOWER *alil-, alel-* belongs to a widespread group of culture-words, including such far-flung members as Gk. $\lambda\epsilon$ í φ i φ 0, Lat. *līlium,* Coptic *hrēri, hlēli* 'lily', Alb. *lule,* Cushitic *ilili,* Basque *lili,* and Estonian *lill* 'flower'; cf. Benveniste, *BSL* 50.1 (1954): 43; T 16-17; P 32-33.
 - 8.60 TREE taru-'tree, wood', 1.42.
- 8.61 OAK *allantaru* is composed of Semitic *allan* 'oak' (Akk. *allānu*) + Hitt. *taru* < IE **doru* 'tree', 1.42; Hoffner, *Orientalia* N.S. 35 (1966): 390-91; T 14; P 29.
- 8.65 FIR Although e(y)a(n)- has been assigned here in the past (e.g. Güterbock, *RHA* 22 [1964]: 100; *EHGl*. 41; *CHD* 3.78, 956),

it is better interpreted as 'yew' and compared with ON $\acute{y}r$, NE \emph{yew} , OIr. \acute{eo} , OPruss. \emph{iuwis} , etc. (cf. Ivanov, $\emph{Etimologija}$ 1971: 298-302; Friedrich, $\emph{Proto-Indo-European Trees}$ [Chicago, 1970], p. 136-37, and see Puhvel, $\emph{Kratylos}$ 25 [1980]: 136-37; P 253-57). The name of the 'fir' is more likely $\emph{tanau-}$, probably cognate with OHG \emph{tanna} , Du. $\emph{den'}$ 'fir' (: Skt. $\emph{dhanvan-'bow'?}$), IE $\emph{*dhonu-}$, $\emph{*dhon-wo-}$ (Neumann, \emph{KZ} 77 [1961]: 77-78). The flat needles of \emph{Abies} hint at ultimate connection with IE $\emph{*dhen-'}$ 'flat surface, palm' (Gk. $\emph{\theta}\emph{e}\emph{v}\alpha\emph{o}$, etc., \emph{IEW} 249).

8.67 - VINE - GIŠGEŠTIN, 5.76.

MISCELLANEOUS PHYSICAL ACTS; OTHER MISCELLANEOUS NOTIONS

9.11 — Do, Make — iya- is the basic verb meaning 'make' and 'do'. Besides the common iter. essa- (P 300-5, T 111-12), related forms include Luw. a(y)a-, Hier. a(i)a-, Lyc. a-, and Lyd. i-. The most plausible etymology connects iya- with Toch. $y\bar{a}m$ - 'make' (H. Holma, Journal de la Société finno-ougrienne 33.1 [1916]: 23-24). Beyond this widely accepted collocation, many other attempts have been made which are semantically doubtful, mostly involving IE * $y\bar{e}$ - 'throw' (IEW 502). Further linking of Skt. yam-'hold' (e.g. Watkins, Idg. Gr. III/1: 71) is also questionable, and identification with H. iya- 'go' (10.47; e.g. Hrozný, SH 153) is generally rejected (cf. T 338-43, P 335-47). Abandoning this approach altogether, V. Machek (Die Sprache 4 [1958]: 79; approved of in P 346) saw iya- as a verbalization of the pronominal stem a-'it' (<*e-o-), thus '(do) it', by the same process as in anniya- work'.

an(n)iya- 'work, do, produce', etc. (Luw. an[n]i[ya]-, Pal. ani[ya]-) has been interpreted as denominatively based on an IE word for 'weight, burden', as in Lat. onus 'load', Gk. ανiα 'distress' (e.g. J. Duchesne-Guillemin, TPS 1946: 74). Formal and semantic difficulties with this derivation prompted V. Machek (op. cit. 76-79) to imagine instead a development from pronominal anna-, anni- 'that', as in Lith. anuoti: anas, Czech onačiti: OCS onu (T 30, P 66-71).

- 9.12 WORK (sb.) aniyatt-'work; task', is from an(n)iya-'make, do', etc. (9.11), with abstract suffix -t-; see EHS 254, P 69-70.
- 9.13 WORK (vb.) The sense is most nearly rendered by an(n)iya-, 9.11.
- 9.14 BEND Closest to the transitive sense is *laknu* 'knock over; fell (tree or wrestling opponent); train (vine); persuade', lit. 'cause to lean' < *lakk* 'fall down or out, incline' (*CHD* 3.17-18, 19-20), cf. OE *hlinian*, $hl\bar{x}nan$, Gk. $\kappa\lambda\bar{\imath}\nu\omega$, Lat. $d\bar{e}$ - $cl\bar{\imath}n\bar{a}re$, etc. < IE *kley-. The root-connection is probably with IE * $le\hat{g}h$ -, * $lo\hat{g}h$ 'lie', OCS položiti 'lay', etc. (Eichner, *MSS* 31 [1973]: 99, n. 83), cf. *DSS* 834.

Words meaning 'bend oneself, bow' and the like are numerous. kaniniya- 'crouch' may be fr. IE *kney-n-, corresponding to *kney-g*h- in OE $kn\bar{\imath}gan$ 'bow, bend', Lat. $c\bar{o}$ - $n\bar{\imath}ve\bar{o}$ 'blink', etc. (Puhvel, Bi. Or. 38 [1981]: 352). hink- 'bow, show reverence' can match Skt. $a\bar{\imath}ic$ - 'bend, hook' (IE * A_1enk -, * A_1onk -), with Gk. $a\gamma\kappa\bar{\omega}\nu$ 'elbow', Lat. uncus, OE angel 'hook', etc. (Hendriksen, uncus) Untersuchungen 28, T 250-51). uncus 'prostrate oneself' is connected with Lat. $u\bar{\imath}is$ 'fall down, collapse' (Laroche, uncus) (P 1968]: 243-44), Gk. uncus0 'rush forth' < *uncus1 'stir, rush' (P 184-85).

9.16 — BIND — *ishai-*, *ishiya-* (Luw. *hishiya-*) is from IE * sE_2 -óy- (with prothetic *i-*), the root * seE_2 -(y-) 'bind' and its variants being seen in numerous cognates including Skt. *sātum*, *syáti* 'bind', *sétu-*'bond', Av. *hāy-*, Lith. *siēti* 'bind', ON *seiðr* 'rope, line', *sími* 'string' (cf. Lat. *saeta* 'bristle'), Gk. $i\mu\dot{\alpha}\varsigma$ 'strap', etc. Cf. *DSS* 546, *IEW* 891-92, T 384-88, P 398-403.

hamenk- was compared with Gk. ἄγκω, Lat. angō 'lace up', OCS vezati 'bind', etc. (IEW 42) by Pedersen (Hitt. 197), though his connection via a *hwenk- with Skt. váñcati 'stagger' was misguided.

More plausibly Van Brock–MacGregor (RHA 20 [1962]: 32) reconstructed a nasal-infixed ham-en-k- (* $H_1[a]m-en-\hat{g}h-$), endorsed by Oettinger, Stammb. 148 and n. 32 (doubted in T 142 and EHS 433); similarly V. Georgiev, $Linguistique\ balkanique\ 25.4$ (1982): 15. Van Windekens ($Festschrift\ for\ O.\ Szemerényi\ 913-14$) tentatively opts for a Semitic source (*hnk), while deriving Gk. αναγκη 'constraint' directly from Hitt. hamank-. Puhvel (p.c.), reading /hmenk-/, suggests a comparison with Lat. mancus 'crippled', IE * H_1menk- .

kaleliya- 'bind, fetter' appears denom. from an unknown *kalelor *kaleli- (EHS 497; Oettinger, Stammb. 354), perhaps -ēl (cf. suwēl-'thread', 6.38) added to a root *kel-, but no root-formation is apparent.

9.17 — BOND — *ishiul-* 'binding', also 'obligation, treaty', a neut. abstract from *ishiya-* 'bind' (9.16), gave rise further to factitive *ishiulahh-* 'enjoin, instruct' (P 401). Related words with equivalent meaning include Lith. *saītas*, OE *sīma*, Avest. *hinu-*, Skt. *sétu-*.

$$9.18 - \text{CHAIN} - \text{URUDUSÌR.SÌR}$$
 (?; EHGl. 30).

9.19 — ROPE, CORD — ishima(n[a])-, ishamin(a)- is from ishiya-, ishai- < $*sE_2$ -(y-) (9.16), thus analogous to Gk. $i\mu\dot{\alpha}\varsigma$ 'strap', Skt. $s\bar{\imath}m\acute{a}n$ - 'hair-parting', ON $s\acute{\imath}mi$, OE $s\bar{\imath}ma$ 'string, band', and cognate also with ON $sei\eth r$ 'line', seil 'cord', Lith. $sa\bar{\imath}tas$ 'band, string', etc. (P 399-400, 402).

sum(m)anza(n)- < *sū- 'sew' + -mņ-(s)- (cf. $suw\bar{e}l$ - 'thread', 6.38), can be compared with Gk. ὕμνος (cf. for meaning H. ishamai-, Skt. s'aman-, Gk. ὄιμη 'song' < * seE_2 -m-, * sE_2 -om-y-; P 395), ON saumr 'seam', Skt. sy'aman- 'bond' (P s.v.; EHS 178, 199).

suwēl-, gapina-, hanzana-, see 6.38.

9.192 — KNOT — DUR (?; *EHGl.* 53 and n. 93).

9.21 — STRIKE — Besides *kuen-* < IE * g^w *hen-* (*DSS* 552; see 4.76), a variety of other Hitt. words express similar notions:

wal(a)h- (GUL-ah-) may belong with Lat. vulnus, Hom. οὐλή 'wound', etc. (IEW 1144-45; Benveniste, BSL 33 [1932]: 137), the root being * $welH_1$ -. Cf. also Arm. balxem 'knock' (T. Schultheiss, KZ 77 [1961]: 221).

Identity of *hulla-, hulliya-* 'strike down' with wal(a)h- (assumed by e.g. Petersen, *JAOS* 59 [1939]: 176; T 274-76) is formally improbable, and comparison with Gk. ὄλλῦμι 'destroy' (Couvreur, *Hett. Ḥ* 143-44, 324; O. Szemerényi, *KZ* 73 [1956]: 73-74) is also doubtful; see 11.27. Cf. also Arm. *xolxolem* 'massacre' (Schultheiss, op. cit. 220).

zahh- is obscure, the source of *z*- being unknown. Reconstructing **ds-eA*₁- > **das*- as in Hom. δαΐ 'in battle' (Schindler apud Oettinger, *Stammb*. 447) is very speculative; for δαΐ cf. rather H. *lahha*-, 20.13. V. Georgiev's derivation (*KZ* 92 [1978]: 95-96) from **tw-eh*- (adducing Gk. σάω 'sift, bolt') relies on an improbable shift of **tw*- > H. *z*- (cf. also A. Carnoy, *Orbis* 1 [1952]: 426).

hazziya- 'strike, hit' and further hazziski-, hazziki- 'strike (play) a musical instrument', are derivs. of hatta-, whose basic sense seems to be 'chop' (9.22).

lahiyai- 'attack' (Lyc. pret. *laχadi* 'he attacked') is from *lahha-* 'military campaign; journey' (20.13; *CHD* 3.4-6, 7-9).

9.22 — Cut — IE *(s)ker- (IEW 932-47) survives in Hitt., Pal., Luw. kars-, with -s-extension as in Gk. κουρά 'tonsure' < *κορσά, Toch. A kärṣṭ, B kärst 'cut off'. A -t-extended form (in Skt. kṛṇṭáṭi, Russ. Church Slavic črěsti 'cut', Lith. kir̃sti 'hack', Arm. k'ert'em 'peel', Lat. cortex, etc.) yielded the rarer H. kartai- 'cut (cloth)'; cf. T 517-20, 523-24. The same *(s)ker- also produced iskar- 'sting, prick,

stab, skewer; stick, fasten; cling to'; cf. ON *skera* 'cut, prick', OE *scear* 'plowshare', and for meaning Engl. 'stick, hew, cleave' (P 416-19).

The synonym *kuer*- is probably not related to the forms from *(*s*)*ker*-. Explaining the initial *ku*-, which must be original, has proved difficult. The answer may lie either in Pisani's link (*Geolinguistica* 352) with IE **skew*- 'cut' (Skt. *skunāti* 'stir', *IEW* 954), with -r-extension as in Lith. *kiáuras* 'perforated', ON *skora* 'scrape', thus *(*s*)*kw-er*-, or in a connection with IE **kwer*- 'make' (*IEW* 641-42), with meaning influenced by *kars*- (Pedersen, *Hitt*. 128; T 607-11), but both approaches are semantically troublesome.

tuhs- 'cut off, finish' can be equated with Gk. δεύομαι 'be lacking', Ved. $d\bar{u}$ sáyati 'spoil, ruin', from IE *dew- H_1 -s- (Sturtevant, Lg. 18 [1942]: 23; T 215-16).

hattai- 'chop; strike' (Hier. hat-, Luw. hattalla- 'club', hatali- 'strike down', Lyc. $\chi ttadi$ 'smashes') resembles Arm. hat 'piece', hatanel 'cut' (Austin, Lg. 18 [1942]: 23; T 215-16).

happesnai- 'cut up (sacrificial animals)' may be literally 'dismember', if from happessar 'limb, body-part', seemingly from happ- 'join, attach', 12.22.

kukkurs- is reduplicative from *kuer*- (above; T 610), with *-s*-perhaps analogical from *kars*-.

ark- and mark- mean basically 'cut up' in the sense of 'divide' (and 'distribute'), see 12.232.

9.23 — KNIFE — Several types are known, all referred to by the basic sumerogram GÍR (*EHGl.* 53).

9.25 — AXE, ADZE — ates(sa)- (HASINNU, $P\bar{A}SU$) may well be cognate with OE adesa, Goth. aqizi, Gk. $\alpha \xi t v\eta$, Lat. ascia, etc., and

also Akk. *haṣinnu*; a likely international technical term; see P 227-28.

summittant- 'hatchet, axe' or the like may be *sm(e)y-t-(o)nt- < IE *smey-(t-), Gk. $\sigma\mu t\lambda \eta$ 'knife', ON $smi \delta r$, NE smith (IEW 968), with epenthetic -u- as in sulai- 'lead' (9.68); cf. Knobloch, Festschrift V. Christian 66-67; Kratylos 4 (1959): 41.

9.26 — Break — *duwarnai*- was connected by Goetze (*Lg.* 30 [1954]: 403) with Skt. *dhvárati* 'harm, destroy', and further explained as nasal present **dhwṛ-né-E₁*- in Oettinger, *Stammb*. Further comparison of Gk. $\theta \varrho \alpha \dot{\nu} \omega$ 'break to pieces' also recommends itself, though the relation of IE **dhrew*- and **dhwer-(H-)* is problematic (*IEW* 274-75, 277).

Luw. *lawarr-* 'despoil, strip', also 'break (an oath)' (*CHD* 3.49) is equated with the root of *duwarnai-* as **dhw(e)rE*₁- in Oettinger (loc. cit.), with areal t-/d- $\sim l$ - variation as in *Tabarnas/Labarnas*; *EHS* 61-64.

parsiya- means 'break', referring either to limbs (Oettinger, Eide 53, n. 5) or bread, in the latter case joined by NINDAparsa- (a kind of bread) and denom. parsai- 'crumble'. A possible root-connection is IE *bher- 'cut, bore, shave', etc.: Gk. φάρω 'split', OIr. bern 'gap, pass', berrad 'shave', Arm. beran 'mouth', Alb. brimε 'hole', Lat. feriō 'strike', ON berja 'bore', esp. Latv. birzt 'crumble' (IEW 133, EHS 503), with -dh- extension in Gk. πέρθω 'destroy', Skt. bárdhaka-'cutter' (IEW 138). On the other hand, the -s- of the Hitt. form is matched better by OHG brestan 'burst; crack(le)', Lith. braszkěti 'crackle' < *bhres- (IEW 169; cf. Knobloch, Kratylos 4 [1959]: 34; Tischer apud Oettinger, Stammb. 519, n. 15; here also OIr. brissim 'break'?).

9.27 — SPLIT — *iskalla(i)*- 'split, slash, tear', etc. belongs with Gk. σκάλλω 'hoe', Lith. *skélti*, Arm. *celum* 'split' (with doublet

skalim 'splinter' < Hitt.; cf. Schultheiss, KZ 77 [1961]: 222), ON skilja 'separate', MIr. scoiltid 'splits' (Hrozný, SH 71) < IE *sk(e)l- H_2 - (IEW 923-27, P 413-14). Also related is H. G^{IS} kalmi- 'fire-log' (Frisk, Kl. Schr. 57).

hatta(i)- 'slice up, cut open', see 9.22.

- 9.28 Tear iskalla(i)- develops a meaning 'tear' from 'split; slit' (9.27), particularly with reference to garments; cf. NE *slit* as well as H. $^{\text{TúG}}$ iskallessar 'slit (or torn?) dress' (P 414).
- 9.31 Rub The verbal root *pes* (iter. *paski*-) is seen elsewhere in nominal derivatives for 'penis' (H. *pesna*-, Lat. *penis* < **pes-ni*-, Gk. π έος, π όσθη, Skt. *pásas* [4.492]), indicating that it may have served already in PIE times as a euphemism for 'copulate'; as still in Lith. *pìsti* (Oettinger, *Stammb*. 327), cf. Ital. *fregare*, etc.

wars(iya)-, 9.37.

- IE *ter- (Gk. τοίβω, Lat. terere, $tr\bar{t}v\bar{t}$, OCS $tr\check{e}ti$, Lith. trinti) appears perhaps, reduplicated, in H. tattarai- 'scrub, scour' (P s.v.).
- 9.32 STRETCH 'Stretch' is a collateral meaning of ispar(r)-, isparriya- 'spread out' (9.34), and GIŠispar(r)uzzi- 'rafter' is an exact semantic match for various technical senses of NE stretcher (P 441-47).
- 9.33 DRAW, PULL The most plausible source of *huittiya-*, also rarely *huit-*, is IE *Awedh- 'lead' (OIr. fedim, Lith. vedù, OCS vesti, Avest. caus. $v\bar{a}\delta aya-$, etc.; IEW 1115-16), although morphological difficulties remain unaccounted for. The spelling -tt- is not explained by a suffix -to- (e.g. EHS 485, n. 2; Goetze, ANET 128), as *-dh- + -t- would yield -zz- /-tst-/ (cf. Sturtevant, Comp. $Gr.^2$ 62). Further, *Awedh- may appear instead in wedai-, widai- 'bring', cf. 10.62.

While it avoids these formal problems, Čop's connection with Skt. *vyáthate* 'totter, stagger', Goth. *wiþon* 'shake' < IE * H_1 wit- H_2 'shake' (*Indogermanica minora* 39-40) is semantically improbable. Cf. T 272-73.

9.34 — SPREAD OUT, STREW — Verbal forms are ispar(r)-, isparriya- (Luw. par[r]iya-), isparnu-. Of the two PIE quasisynonyms *ster-(H-) and *sper-(H-), only the latter survived in Hittite, absorbing the meanings of both, thus 'strew, spread, scatter' (Skt. strnoti, Gk. $\sigma\tau$ oov $\bar{\nu}\mu$, Lat. $stern\bar{o}$, Goth. straujan, OIr. sernad (<*st-) vs. Gk. $\sigma\pi\epsilon$ iow, Arm. sp'rem, OE $spr\bar{e}dan$, etc.) and also 'spray' (OHG $spr\bar{\imath}zan$) and 'stretch' (cf. ispar[r]uzzi- [9.32] : Lat. sparus, NE spear, spar). A further group of words meaning 'kick' and related notions (Ved. sphurati, OE spurnan, Lat. $spern\bar{o}$, Lith. spirti) is probably also involved (cf. 10.51), as is *(s)per- 'fly' (< 'spread [wings]'); see P 441-47.

ishuwa(i)- 'scatter, throw, shed, pour' is likely related to Skt. iṣṇati, iṣitá- 'impel' (IE * $E_1[e]y$ -s- A_1 -), via a noun *ishu(wa)- (Skt. iṣu-, Av. išu-, Gk. τός < *iσFός 'arrow'); cf. P 404-9.

suhha- is still obscure, Oettinger's attempt (*Stammb*. 503) to derive it from *ishuwai-* being unclear.

suniya-, see 8.31 and 9.35.

9.342 — PRESS — sai-, siya- (also 'seal', cf. siyattariya-, denom. fr. siyattar 'seal') has 'press' as a common meaning beside 'throw; shoot'. For derivation (< IE * $s\bar{e}$ -) see 8.31 and Laroche, BSL 58 (1963): 73-76. Pal. si- 'prod, urge; sting' (Melchert, KZ 94 [1984]: 25-27).

damas-, dames- 'press; oppress' has long been recognized (cf. Sturtevant, Comp. Gr. 101, 124, 136) as a cognate of Gk. δαμάω, Skt. dāmyati, Lat. domō, OIr. (3 sg.) damnaid, Goth. gatamjan < IE *dem A_2 - 'tame' (IEW 199).

wesuriya- 'oppress' (HWb. 253-54), from an unknown *wesur-?

9.35 — POUR — Hitt. lahhu(wai)- preserves the original sense 'pour' of IE * leA_1 -w-, * loA_1 -w-, which became 'bathe' in Gk. λούω (Myc. adj. re-wo-te-re-yo [λεγοτοειος]), Lat. $lav\bar{o}$, Arm. loganem, and 'basin' in e.g. OIr. loathar, Gk. λοετοόν (Sturtevant, Comp. Gr. 138; Benveniste, HIE 14-15). Related Hitt. forms are lah- and reduplicated lilhuwai-; CHD 3.4, 13-15, 59-60.

suniya-, secondarily 'scatter; sow', should be kept apart from sunnai- 'fill' (Laroche, RHA 31 [1973]: 91-93), but is otherwise obscure.

sip(p)and- (also spelled ispant-) is 'to pour a libation', whence also 'sacrifice', matching Gk. σπένδω, σπονδή, Lat $sponde\bar{o}$ (Sturtevant, Comp. Gr. 76), and seen also in the Arm. loanword spand 'sacrifice' (Schultheiss, KZ 77 [1961]: 225).

ishuwai- and suhha-, 9.34.

9.36 — WASH — The generic term *arr(a)-, arriya-* is cognate with Toch. A *yär-* 'bathe' (Couvreur, *Hett. Ḥ* 97; P 111-16).

Apart from *arr(a)-*, more specific terms abound. *war(a)p-* 'scrub, bathe' can be compared with OE *sweorfan* 'scrub', MHG *swerben*; W. *chwerfu* 'whirl around, swirl', etc., IE *(*s*)*werbh-*, *(*s*)*wpbh-* (Sturtevant, *Comp. Gr.*² 30, 46, 64).

tattarai- 'scour' may be from IE *ter- 'rub', Gk. τείρω, τρίβω; cf. 9.31.

sanh- 'flush, wash down' is from IE * $senA_1$ - or * snA_1 -, with * $sneA_1$ - in Skt. snāti, Av. $snayeit\bar{e}$ 'bathe', Lat. $n\bar{a}$ - 'swim', OIr. snāti 'swims' (Puhvel, Florilegium Anatolicum 299-300 = AI 367-68).

mutai- refers to ritual flushing, often with mud or urine. This basic meaning of IE *mew-d-, *mew-H- (IEW 741-43) comes through also in OCS myti, Lith. m'audyti 'wash, bathe', Gk. $\mu\nu\delta\acute{\alpha}\omega$ 'be wet', Czech m'ydlo 'soap', Skt. m'atram, Av. $m\~u\theta$ ra-, OIr. m'un 'urine', m'ur,

NE *mud*; Lat. *mundus* 'washed'; cf. *AI* 338-44. Cf. here also Hitt. *mūdan* 'garbage, offal', specified as food for pigs (Goetze, *JCS* 16 [1962]: 30, 33-34; Pisani, *Paideia* 22 [1967]: 404; P s.v.).

Further terms are *hurnai-* 'spray' < * H_1 wrn-yo-, matching Gk. $\dot{\phi}$ αίνω (W. Petersen, *JAOS* 59 [1939]: 178-79; T 305-6), and *pappars* 'sprinkle': Toch. AB *pärs*- (Benveniste, *BSL* 33 [1932]: 142; Puhvel, *Florilegium Anatolicum* 299-300 = *AI* 367-68).

9.37 — SWEEP — *war(a)s-, warsiya-* is related to Lat. *verrō* 'sweep, brush, scrape', ORuss. *vrĕšti* 'thresh', Toch. A *wsār* 'grainheap' and other forms (IE **wers-*); cf. Benveniste, *BSL* 33 (1932): 137; *AI* 246-48.

The source of *an(a)s-, an(as)siya-* 'wipe' is unknown; P 74-76.

9.42 — ARTISAN, CRAFTSMAN — A lengthy and not altogether clear derivational trail leads from the root noun *hant- 'front' (: Gk. ἀντί, Lat. ante, etc.; cf. e.g. Gusmani, Lessico 22), via adv. handa 'correspondingly, accordingly' (cf. Laroche, RHA 28 [1970]: 37), handai- 'arrange, order, fit together', part. handant- 'arranged, built', and denom. handantiya- 'put together, build' to deverb. ha(n)dantiyalli- 'craftsman'.

Ideographic expressions are BĒL GIŠTUKUL 'tool master', BĒL QĀTI 'hand-master', LÚUMMEA.

9.422 - TOOL - GIŠTUKUL.

9.43 — Carpenter — LÚNAGAR is the basic term for 'smith, wright, serving for 'carpenter' when unmarked or as LÚNAGAR $ISS\bar{I}$ 'wood-wright'.

On Gk. τέκτων, Skt. tákṣan, etc. see 6.33.

9.44 — BUILD — The source of *wede*- is probably *u-/we-* 'hither' (cf. *HIE* 32-33) + IE **dheE*₁- 'place', with sense like that of Engl. 'put together' or Rum. *cladĭ* (e.g. Sturtevant, *Comp. Gr.*² 62; Oettinger, *Stammb.* 130 and n. 84-86). A competing derivation from IE * H_2 wedh- 'fasten, bind', Goth. *gawidan*, etc. (e.g. Pedersen, *Hitt.* 118; cf. Y. Arbeitman, *RHA* 31 [1973]: 103-4) is semantically unsatisfactory, as *(H)wedh- means basically 'to yoke' and is probably ultimately identical with *(H_2)wedh- 'lead; marry' (cf. the many senses of NE wed and *marry*); this root is seen in H. *uwate*- 'bring' (10.62) and *pehute*- 'send' (10.63). Other likely Anatolian kin of H. wede-are synonyms in Pal. wete-, Hier. usa-, Lyd. vi - (cf. Arbeitman, loc. cit.; Heubeck, *Lydiaka* 53).

Late Hitt. *parnawai*- is presumably borrowed from a Luw. *parnawayi*- (cf. Lyc. *prñnawa*- 'build', Hier. *parnawayi*- 'serve'; Oettinger, *Stammb*. 382), denominative from *parn*- 'house' (7.12) in the manner of Lat. *aedi-ficare* or Gk. οἰκοδομέω.

9.48 — SAW — URUDU ardala- (also URUDU kuruzzi- < kuer- 'cut', 9.22) is the mythological ancient saw, used to cut apart heaven and earth in the myth of Ullikummi. With the help of the Hesiodic parallel (*Theogony* 180) ἄρπην καρχαρόδοντα, a cogent comparison of the verbal root ard- can be made with Ved. rádati 'cut through, open; gnaw', Lat. $r\bar{o}d\bar{o}$ 'gnaw' and $r\bar{a}d\bar{o}$ 'scrape, scratch', from an IE *Hér-d-, *Hr-éd- (Puhvel, P 175; Bi. Or. 36 [1979]: 58).

9.49 — HAMMER — NÍG.GUL.

9.50 — NAIL — tarma- (Luw. tarmi-) is a wooden peg or plug (GIŠGAG), *tr-mo- fr. *ter(-A)- 'go through, cross over' (IEW 1074, 1075; likely the same as *ter- 'drill, wear out', IEW 1071). Cf. Gk. τ ó ϕ μ ϕ ϕ 'socket; peg, pivot', τ εί ϕ ϕ . The zero-grade form is seen also in OHG drum 'Endstück', and with different suffixes and

complementary meanings in OE *pyrel* 'hole' and *purh* 'through', with many other synonyms, notably Lat. *terminus*, Gk. τέρμα 'boundary' (Laroche, *RHA* 11 [1951]: 66-68). A denom. *tarmai*means 'hammer; fasten; stop, plug up' (*HWb*. 215).

As an alternative to this etymology, Puhvel (P s.v.) adduces Skt. *dhárman-* 'support', Lat. *firmus* (IE **dher*[- A_2]- 'fasten, support' [*IEW* 252-55]), comparing the ritual expression *tarmai- mitai-* 'nail (and) fasten' with Lat. *castra mētāri* 'pitch camp'.

9.51 — BEAM — GIŠ.MAH.

9.53 — MASON — LÚNAGAR NA₄.

- 9.54 BRICK SIG₄ 'brick, tile' has been tentatively read as *kalpassana-, on the basis of the possible allographic pair URUSIG₄-nahila- = URUKalpassanahila- (Goetze, JCS 18 [1964]: 92; EHGl. 29, n. 36; T 470); no etymology is offered.
- 9.55 MORTAR salwina-, of unknown origin, is guessed to be 'Mörtel aus Lehm und Häcksel' (HWb. 180).
- 9.60 SMITH Several sorts of ideographic designation are used: besides ^{LÚ}SIMUG 'gold- and silver-smith' and ^{LÚ}KÙ.DÍM 'gold-smith' (Akk. *kudimmu*), the term ^{LÚ}NAGAR 'wright' is used alone and in combinations ^{LÚ}NAGAR Š*A* KÙ.BABBAR 'silversmith', ^{LÚ}URUDU.NAGAR 'coppersmith'. *EHGl.* 82.

A possible cognate of NE *smith*, etc. is H. *summittant-* 'axe', 9.25.

9.64 — GOLD — GUŠKIN (Akk. hurāṣu).

- 9.65 SILVER Phonetic complements occurring with Sum. KÙ.BABBAR indicate a possible Hitt. reading *harkant-*, reflecting IE * $A_1r\hat{g}$ -nt-om, originally 'shining (metal)', with cognates such as Avest. *ərəzatəm*, OIr. *argat*, *airget*, MW *ariant*, Lat. *argentum* 'silver' and Ossetic *ærzæt* 'bronze' (cf. *EHGl*. 80-81, n. 154; thorough discussion in J. P. Mallory M. E. Huld, KZ 94 [1984]: 1-6).
- 9.66 COPPER, BRONZE The ideogram URUDU is generally read $^{\text{URUDU}}ku(wa)nnan$ (cf. HWb. 300; Laroche, RHA 24 [1966]: 18-81), though the relationship of this term to $^{\text{NA}}4kuwanna(n)$ 'jewel; lapis lazuli' (6.72) is unclear. Perhaps kuwanna(n)- refers primarily to the dark blue or blue-green colors of lazurite, copper carbonate, copper oxide, etc.; cf. Gk. $\kappa \dot{\nu} \alpha \nu \sigma \varsigma$, $\kappa \dot{\nu} \dot{\alpha} \nu \sigma \varsigma$.

A separate term ZABAR denotes 'bronze', the Hitt. *harasu*-possibly from Akk. *hurāṣu* 'gold' (T 172).

9.67 — IRON — *hapalki*- (AN.BAR), an areal culture-word appearing also in Hurrian, Phoenician, and Akkadian, may also be related to Gk. $\chi\alpha\lambda$ κός; cf. the city name URU Hawalkina- and Cretan καυκός (T 160-61; Laroche, *RHA* 15 [1957]: 9-11).

NA₄ KA.GI.NA 'hematite' may be Hitt. *lulluri-*, cf. Laroche, *RHA* 24 (1966): 177, 180, 184.

9.68 — LEAD — *sulai-*, *suliya-* (A.GAR₅) is best taken from IE *(s) $l\bar{\imath}$ - 'bluish, blue color', seen e.g. in Lat. $l\bar{\imath}ve\bar{o}$ 'be blue, shimmer', OIr. li 'color, sheen', OCS sliva 'plum', OE $sl\bar{a}h$, NE sloe (IEW 965), and applied to the metal secondarily in Hittite and Germanic (OHG blio, NHG blei 'lead' : Lith. $bl\acute{y}vas$ 'violet' or $bla\bar{\imath}vas$ 'whitish'). Cf. Knobloch, Kratylos 4 (1959): 41; Neumann, Festschrift J. Friedrich 347-49. A dissenting vote is cast by Laroche (RHA 24 [1966]: 163, n. 8), rejecting Hitt. suli- < * $sl\bar{\imath}$ - (cf. Oettinger, MSS 35 [1976]: 101)

and adducing instead Gk. σόλος 'lump of iron' (adopted also by Gusmani, *Studi ... V. Pisani* 509).

- 9.69 TIN For the name of this metal (AN.NA, NAGGA, Akk. *anāku*) Hitt. used the nominalized adj. *dankui-* 'dark' (15.63); cf. Laroche, *RHA* 24 (1966): 180.
- 9.71 POTTER huprala- (LÚBAHÁR) is formed from the vessel-name huppar 'pot' (5.26) with action-noun suffix -alla-.
- 9.72 MOLD An unexplained verb *epar-*, posited in Neu, *Interpretation* 24, is read rather *ep-* 'smear, mold' in P 272-73, and compared with Gk. oʻt $\phi\omega$, Skt. *yábhati*, Russ. *jebú* 'defile, pollute'.
- 9.73 CLAY Tischler (HDW 66) glosses purut-, purutessar as 'Lehm, Kalk, Mörtel', referring essentially to clay used as plaster or whitewash, with semantics as in NHG Lehm, NE loam, ON leir, Lat. $l\bar{\imath}mus$ vs. NE (bird)lime, NHG (vogel)leim. Various possible cognates have been suggested. A connection with Lith. $pu\bar{\imath}vas$ was advocated by Bomhard (RHA 31 [1973]: 112), and Puhvel (P 273) favors Gk. $\phi \dot{\imath} \phi \dot{\imath} \omega$ 'mix dry with wet', $\phi \bar{\imath} \dot{\imath} \phi \dot{\imath} \omega$ 'mix dough', cf. Aeschylus $\gamma \ddot{\imath} \dot{\imath} \nu$ $\phi \dot{\imath} \dot{\imath} \omega$ (EHS 256); N. Mkrtc'yan (EHS 256); N. Mkrtc'yan (EHS 256); N. Mkrtc'yan (EHS 256); N. Mkrtc'yan (EHS 256); V. Discher the possibility of a loan from Hittite cannot be ruled out.

halina- seems to echo the nasal-present stem in Hes. ἀλίνειν · ἀλείφειν and Lat. $lin\bar{o}$ (pf. $l\bar{e}v\bar{\imath}$) 'smear', though the precise form (* A_1 lino-) is uncertain (G. Neumann, IF 76 [1971]: 265; P s.v.).

H. wilan(a)- remains obscure, possibly of non-IE origin.

9.74 — GLASS — *zapzagai*- (also *zapzaki*-, *zapzigi*-) refers to the material 'glass' and vessels made from it. A culture-word of unknown ultimate origin, it resembles e.g. Ugar. *spsg* 'molten glass' and Hebr. **spsg* 'glaze' (*HWb*. 260).

Certain of the materials added to the basic sand to add color to the glass are known, e.g. URUDU 'copper' and *lulluri-* 'iron', but other names for ingredients and aspects of the glass-making process (e.g. *kirnuzi-* or *pisnuzi-*, *miyani-*, *muhlai-*, *tarzidu*; cf. *HDW* 120) are as yet unidentified.

- 9.75 PLAIT (anda) talupp- seems to mean 'plait' or 'wrap', etym. (and relation to tarupp- 'bring together', Oettinger, Stammb. 227-29) unclear; cf. EHS 479.
- 9.76 BASKET GIŠerhui-, irhui- (GIŠMA.SÁ.AB) is usually viewed as a Hurrian loanword (HWb. 84). But IE origin is defended by Puhvel (AI 353-55, P 283-84), deriving it from IE ${}^*rH_1\acute{u}$ and comparing arha-, irha- 'line, boundary; row, circuit', etc., Lat. $\bar{o}ra$, with a common denominator of 'edge, rim' and 'basket' in the notion of circularity, cf. Gk. $\kappa\acute{\alpha}\lambda\alpha\theta$ o ς 'basket': H. kaluti- 'circle' (12.82).

^{GI}pattar and ^{GIŠ}paddur, although woven or plaited of reeds or wood strips, denote a shallow dish or bucket (5.31).

- 9.82 Sculptor LÚNAGAR NA₄.
- 9.83 STATUE esri- (ALAM) is 'shape, form, likeness, image' (cf. OCS $t\check{e}lo$), from IE *es- 'be' + noun-forming -ri-, and appears also as siGes(sa)ri- '(wool)shape, fleece' (6.22); cf. P 313-15.
- Luw. ALAM-sa = Luw. tarusa(nt)-, Hier. tarusa (Laroche, RHA 23 [1965]: 49); fr. taru- 'wood'?
 - sena- 'icon, puppet, model' or the like, etym. unknown.

- 9.85 Paint guls- corresponds in usage to Akk. eṣēru 'draw', commonly done with paint or (colored) pastes (EHGl. 51, n. 85). The IE root is plausibly *gwel- 'prick' (Hom. βελόνη 'point, needle', Lith. gélti 'sting', etc.; Carruba, Beschwörungsritual 34-38), with semantics as in Gk. γράφω 'scratch' > 'draw, write', γραφεύς 'painter', or Skt. likh- 'scratch, write, draw, engrave, paint'. See further T 627-30.
- 9.87 PAINTING, PICTURE *gulzi* is from *guls* 'draw' (9.85), possibly gul(s)- + -ti- (Oettinger, *Stammb*. 203-4), sumerographically GIŠ.HUR (Akk. *uṣurtu*; *EHGl*. 51, n. 85).
- 9.90 THING *uttar* (INIM) reflects **uk-t-r-* < IE **wek-t-(i-)*, cognate with OCS *vešti*, Goth. *waíhts* 'thing', ON *véttr* (NE *wight*), OE *wikt* 'being', OHG *ni-wiht* > NHG *nicht* 'no-thing, not (at all)'; cf. Marstrander, *Caractère* 141-42; Sturtevant, *Comp. Gr.*² 71; *VLFH* 134; *AI* 221-22. It means also 'matter for discussion, affair', and finally 'word', with semantic shift exactly the reverse of *memiya(n)*-'word; thing' fr. *memai* 'speak' (18.21, 18.26). Cf. Pol. *rzecz* 'thing': OCS *rěčī* 'speech', NHG *sache*: OE *sacu* 'lawsuit', NE *thing*: ON *þing* 'judicial assembly'; also Lat. *causa* vs. Ital., Sp. *cosa*, Fr. *chose*; Lat. *res.* Cf. also *kallar uttar* 'evil spirit, demon', 22.35.
- 9.91 BE Of the two IE roots for 'be', the Anatolian languages inherited only *es-, which survives in Hitt. es-, Pal. as-, Luw. as-, Hier. as-, Lyc. es-, Lyd. -im. P 285-91, T 109-19.
- 9.92 BECOME kis-, iter. kikkis-, functions as the passive to iya- 'make', and seems best compared with Lat. $ger\bar{o}$ 'carry out, do, make' <*ges- (cf. $res\ gestae$) (Laroche, $BSL\ 53\ [1958]$: 179, n. 4). Less

probable connections with Gk. $\kappa i\omega$ 'go away', Lat. $cie\bar{o}$ 'set in motion', and others are discussed T 585-86.

The process of 'becoming' is productively expressed by the inchoative suffix *-es-*, e.g. *parkues-* 'become clean' < *parkui-* 'clean', *salles-* 'grow large' < *salli-* 'large'. The Latin inchoative $-\bar{e}sc\bar{o}$, etc. corresponds formally to the Hitt. iterative in *-ski-*.

No trace of IE *bheu-, *bhu- survives in Hittite.

- 9.94 OUGHT, MUST Modal auxiliaries of any kind are lacking in Hitt., and the notion of obligation is expressed with the simple indicative mood (e.g. ŠEŠ-[SU] NIN-ZU ^{SAL}ānninniyamin $\dot{U}.UL$ [$d\bar{a}i$] 'a brother does not take his sister or cousin') or the imperative (DUMU-YA-ya kuin ^DUTU- $\dot{S}I$ temi $k\bar{u}n$ -wa-za $h\bar{u}manza$ $s\bar{a}kdu$ '[acknowledge] my son, [of] whom I, my Majesty, say "Let all recognize him!"').
- 9.942 DUTY Although a concise terminology for the concept does not seem to exist, the existence of an obligation is emphatically signalled in the texts (e.g. in treaties) by such statements as *nu-tta kāsa kie uddār ŠAPAL NIŠ* DINGIR-*LIM* (= *linkiai kattan*) *tehhun* 'Lo, I have placed these terms under oath (lit. 'life of the gods') for you'.
- 9.95 CAN, MAY tarra- (midd.) 'be able' is allied with tarh'overcome, conquer' (4.81), from * $terA_1$ -o- matching Skt. $t\'{a}rate$ 'cross, overcome', etc.; cf. Stammb. 299.
- 9.97 DIFFICULT *hatku* may have this as a secondary meaning of 'tight, narrow' (12.62) fr. *hatk* 'shut' (12.25); cf. NE "dire straits."

- 9.99 Attempt, Endeavor 'Strive (for)' is one of the attendant senses of sanh-, sah(h)-, basically 'seek, go after' (11.31; AI 367).
- 9.993 HAPPEN kis- is 'occur' as well as 'become', thus 'come to pass' (cf. Lat. $\bar{e}ven\bar{i}re$, NHG eintreffen), 9.92.

Another verb with secondary sense 'occur' is *ar-*, primarily 'stand, be stationed, be present', etc. (12.15), fr. IE **er-*, **or-* 'move, stir'.

MOTION; LOCOMOTION, TRANSPORTATION, NAVIGATION

10.11 — MOVE — $hal\bar{a}i$ - 'set in motion, thrust', from * $H_{l}lloy$ -(pf. stem of root * $H_{l}ley$ -), corresponds to Gk. ἰάλλω 'send forth' (AI 252-62).

Transitive arnu-, 10.61.

10.12-10.13 — TURN; TURN AROUND — nai-, niya-, neya- 'lead, send, turn', also mpsv. 'turn, direct oneself', see 10.64.

Intrans. weh- (iter. weheski-), caus.-trans. wahnu- are best derived from IE *wey H_{I^-} 'turn', cf. Skt. váyati 'plait', vyáyati ($v\bar{\imath}$ -) 'wind', Hes. υἱήν · ἄμπελον, Lat. vieō 'plait, bend', Lith. výti 'turn', etc. (cf. Eichner, MSS 31 [1973]: 54; Götze - Pedersen, MS 74; Oettinger, Stammb. 115).

IE *wert- has an indirect reflex in Hitt. (aika)wartanna- '(one) turn', a technical hippological term, probably from Indic-speaking Mitanni through Hurrian, matching Skt. (éka-)vártana-; cf. also Ossetic äwwärdyn 'train horses' (P 14).

A Hitt. cognate of Lat. *torqueō* 'twist', Toch. B *tärk-* 'turn' is H. *tarku(wai)-* 'dance' (10.44).

10.14 — WIND, WRAP — hul(a)- 'wind, twist' reflects an IE root * $H_1wel(-H_2)$ - denoting the twisting of wool-thread in spinning, as shown by its derivatives meaning 'wool' (6.22) and by ^{GIŠ}hulali-'distaff'. Further verbal relatives include Gk. εἰλέω, Lat. volvere,

Goth. -walwjan (: NE wallow), OCS valiti, Arm. gelum, etc. 'roll; wind; wrap' (DSS 665).

10.21 — RISE — *arai-, ariya-* renders an intransitive pf. (* $E_1r\acute{o}y[H_2]$ -) of IE * $E_1r\acute{e}y$ -(H_2)- 'stir, rouse', etc., cf. Gk. ὀοτνω 'arouse, move', Arm. *ari* 'stand up!'. This -*hi*-conjugation form contrasts with the originally causative -*mi*-forms meaning 'raise' (10.22; Puhvel, *JAOS* 102 [1982]: 178; P 123-27).

Also in this semantic area are deadjectival *parkiya-* and inch. *pargawes-*, *parkes-* < *parku-* 'high' (12.31); the underlying *park-* matches Toch. A *pärk-* 'rise' (Puhvel, *Gedenkschrift Kronasser* 181).

The rising of the sun and moon is expressed by $(sar\bar{a})$ upzi, with upp- possibly from IE $^*(H_2)up(o)$ -; Skt. upa- 'up, hither', Gk. $\dot{v}\pi\dot{o}$ 'under', etc. (Sturtevant, Comp. Gr.² 39). In a similar construction occurs $(sar\bar{a})$ tiya-, lit. 'step up' (tiya- 'step, walk', 10.45).

10.22 — RAISE, LIFT — arai-, ariya- (3 sg. pres. araizzi) appears to be etymologically causative (* E_1 roy[H_2]-éye-ti) from the same verb reflected intransitively in arai- 'rise' (10.21), like Goth. urraisjan (NE rear, ON reisa, NE raise) vs. urreisan (ON rísa, NE rise), Lith. kélti vs. kìlti, or Skt. ut-thāpaya- vs. ut-thā-. P 123-27.

Another causative (factitive) is *parkanu-*, fr. *parku-* 'high' (12.31).

sarā ep(p)-, ser ep(p)- 'pick up', cf. *HWb.* 41-42 and 11.14.

karp- 'pick up, lift; carry off; finish; finish off' (cf. Lat. *tollō*), probably < IE **grbh-* 'grab', cf. Skt. *grbhnáti*, NE *grab*, OCS *grabiti* 'rob' (*IEW* 455; Sommer, in *HWb*. 101; T 513-14).

10.23 — Fall — The Hitt. verb is mau(s)-, mu(wa)-. It has been compared (e.g. Sturtevant, *Comp. Gr.*¹ 103-4; Eichner, *Flexion und Wortbildung* 84) with Lat. $mov\bar{e}re$, thus IE * $mewE_1$ (-s)- (or

* A_2 mew $E_1[-s]-?$; cf. Gk. ἀμεύσασθαι 'make progress'), thus perhaps preserving an early nuance of the PIE verb.

zappanu- and *zappiya*- 'fall drop by drop, drip' point to a verb zapp(a)-, as noted by Laroche (RHA 11 [1951]: 64-66), though his comparison with Gk. τήκω, Lat. $t\bar{a}besc\bar{o}$ 'melt away' is unlikely.

10.25 — Throw — *pessiya*- appears to be formed from *pe*-'away' + *siya*- 'press, shoot', etc. 8.31; cf. Knobloch, *Kratylos* 4 [1959]: 40; Eichner, *Flexion und Wortbildung* 92; Oettinger, *Stammb*. 347-48). A different derivation, from a root **ens*-, meets with the uncertainty of the purported Skt. cognate *ásyati* 'throws' (Pedersen, *Hitt*. 151; cf. Walde - P. 1.134-35).

10.31 - BOIL - Intrans. zeya-, 5.21.

NHG *sieden*, NE *seethe*, etc. have been linked with Hitt. *suwa-* 'swell'; cf. 13.21.

10.32 — FLOW — ar(a)s-, Hitt. and Luw. arsiya-, are to be compared (since Sturtevant, Lg. 8 [1932]: 120) with Skt. $\acute{a}rsati$ 'flow', $r\acute{a}sa$ - 'liquid', etc. Gk. $\grave{\alpha}\pi$ -ερ $\acute{\alpha}\omega$ 'pour out' helps specify the IE form as * $E_1\acute{e}r$ -s-, * E_1r - $\acute{e}s$ - (P 170-72, T 66-67). Derived forms include caus. ar(as)sanu- and nouns arsanu- 'flow', arsarsur-'stream' (1.36).

Skt. sárati, sísarti are echoed in Hitt. *sesar-, found in sesariya-'strain, filter' and sesarul 'strainer' (Goetze, Lg. 30 [1954]: 403).

10.36 — SAIL — To refer to the notion of sailing, for which mode of transportation the Hittites would seem to have had little use, we have only the expression *arunan pariyan* (or *parranda*) *pai* 'go beyond the sea'.

10.37 — FLY — IE * $petE_{1}$ - survives in Hitt. piddai- 'run, flee, fly', with e.g. 3 sg. pres. pittaizzi < *p(e)t(H)- $\bar{a}ye$ -ti, $piddai < pf. *<math>pt\delta E^ye$ -(Puhvel, $Hethitisch\ und\ Indogermanisch\ 212 = AI\ 359$).

Other terms which might have been used secondarily for 'fly' are *isparr*- 'spread' (9.34) and *liliwahh*- 'hurry' (*CHD* 3.61, compared with Gk. $\lambda\iota\lambda\alpha$ ίομαι 'long for, crave' in Petersen, *AO* 9 [1937]: 206-7).

10.38 − BLOW − parai-, iter. pariparai- 'blow, breathe', 4.51.

10.43 — JUMP, LEAP — *watku*- may represent /watkw-/, formed from a preverb *wo*- (Eichner, *Untersuchungen zur hethitischen Deklination*, Dissertation: Teildruck [Erlangen, 1974], p. 59) + IE **tekw*- 'run, rush' (Čop, *RHA* 13 [1955]: 69). Root-relations could include skt. *tákti*, Av. *tačaiti* 'rush', OIr. *techim* 'I flee', Lith. *tekù*, OCS *teko* 'run', Goth. *þius*, OE *þeow* 'servant' (lit. 'runner'; cf. Skt. *takváḥ*), etc. (*IEW* 1060).

10.44 — DANCE — The Hitt. term is very plausibly tarku(wai)- < IE * $terk^w$ - 'twist, turn' seen in Lat. $torque\bar{o}$ 'twist', Toch. B $t\ddot{a}rk$ - 'turn', or perhaps * t_rk -u- (Skt. $tark\dot{u}$ -, Gk. ἄτρακτος 'spindle'); cf. Oettinger, Stammb. 223-26; AI 263). taruwai, if it means the same thing, may be a Luwianism (Götze, Lg. 15 [1939]: 117-18), though it is kept separate by Oettinger, loc. cit.

Gk. ὀοχέομαι is echoed in Hitt. *ark*- 'copulate', 4.67.

10.45 - WALK - For the usual iya- and pai-, see 10.47.

'Walk' or 'step' is rendered by tiya-, apparently from IE *(s) teA_2 - 'stand; place' (Götze - Pedersen, MS 69-70), specifically *(s) tA_2 -(i)ye- (Watkins, Idg. Gr. III/1 57); cf. Stammb. 350).

10.46 — RUN — The most likely reconstruction for *huwai-, huya-* is * A_1 w-éy(- H_2)- (cf. Sturtevant, *JAOS* 50 [1930]: 128), pf. * A_1 wόye (> 3 sg. $huw\bar{a}i$), cognate with Skt. $v\acute{e}ti$ 'set out for', Gk. \H εμαι 'rush', etc. (*IEW* 1123-24). An ultimate connection with * A_1 w-e E_1 - 'blow' (cf. huwant- 'wind', 1.72) is problematic; cf. T 321-23. Related Anatolian forms are Pal. huya-, Luw. huiya-, Hier. 3 pl. pret. hwaya(n)ta or hu(i)ya(n)ta.

piddai- 'run, flee, fly', 10.37.

 $10.47 - \text{Go} - \text{IE } *ey-, *i- \text{ yields } i-, \text{ known in Hitt. and Luw., e.g. 3 sg. pres. } iti, \text{ imper. } idu \text{ (cf. Skt. } \acute{e}ti, \acute{e}tu\text{)}. \text{ In Hitt. the originally iterative-durative } iyan(n)a-, iyan(n)iya- also serves as a basic verb of motion (P 328).}$

The verb iya-, inflected mediopassively, largely replaces i- in Hitt. Though it has long been considered the Hitt. reflex of IE * $y\bar{a}$ -(Hrozný, SH 39, so DSS 693; cf. T 343-44), the exceptionless spelling i-ya- (never i-ya-a-) argues against this approach (e.g. P 334-35), in favor of a thematic, deponential *eye-to- < *i- (cf. Ved. ayate).

Very common in Hittite are *pai-* 'go' and *ui-*, *uwa-* 'come', from *i-* plus the preverbs *pe-* 'thither, "hin"' and *u-*, *we-* 'hither, "her"' (cf. e.g. *HIE* 32-33; Knobloch, *Kratylos* 4 [1959]: 33). A parallel opposition can be seen in Russ. *pojtí* vs. *ujtí*, with unmarked *idtí*.

10.48 - COME - ui-, uwa-, with corresponding Luw. awi-; see 10.47.

10.49 — Go AWAY — The sense is expressed literally by *pai-*, 10.47. Other expressions are compounds, e.g. *arha ar-* 'get away' (*ar-*, 10.55).

10.51 — FLEE — A likely comparison for *pars*- is with Lat. *festīnō* 'hurry' (Knobloch, *Kratylos* 4 [1959]: 34), the latter apparently denominative from a *fers-tiōn, with further cognates in MIr. *bras* 'quick' (*bhṛṣ-to-s), W. brys 'haste', and possibly OCS brŭzo (*bhṛṣ-ós), Russ. bórzyj 'quick' (*IEW* 143).

huwai- 'run' (10.46) and piddai- (etymologically 'fly', 10.37) are also commonly used for 'flee', just as Engl. "run away" and "take flight."

The object of flight, namely 'to escape', is denoted by Hitt. ispart(iya)-, IE *spṛ-dh-; cf. Arm. sprdem 'escape', Skt. spárdhate 'compete', Goth. spaúrds, OE spyrd 'race (course), track', Gk. $\sigma\pi\nu\varrho\theta$ ίζω 'kick up', Lith. spárdyti 'kick' (P 449-50, refs.). The basic sense is thus '(out)stretch', IE *sper- (9.34).

 $10.52 - \text{FOLLOW} - appan \ tiya$ - is literally 'walk behind' (10.45), appan pai- 'go after' (10.47).

10.53 — Pursue — For Hitt. parh-, Oettinger (Stammb. 213-14) reconstructs *bh(e)rA₁-, as a transitive counterpart to intrans. Ved. bhuráti 'jump about, twitch, tremble', etc., rejecting an old comarison with Gk. πορεύω 'convey, traverse' (Hrozný, HKB 110, n. 1) < IE *per(-A)- 'lead, pass over'. Semantically the latter still seems preferable, though not entirely convincing; cf. e.g. Arm. hord 'step on or in', Goth. and OE faran 'travel, get across', Lat. portō, Gk. περάω 'carry (across or through)', Skt. píparti 'lead, excel' (IEW 816).

The sense of 'chase' inheres in *hurna*- 'hunt', 3.79. Another expression is *appan ki*-, lit. 'lie behind', cf. 12.13.

10.54 — OVERTAKE — appan ep(p)-, literally 'seize from behind' (cf. Gk. καταλαμβάνω), 11.13.

10.55 — ARRIVE — *ar-*, *er-* is originally an intransitive perfect of IE **er-* 'move, stir', etc. (*IEW* 326-29), thus corresponding to the Ved. 3 sg. pf. *āra*. The iter. *araski-*, *arsaki-* (/arski-/) may match Ved. *rccháti* 'go to', OPers. *rasatiy* 'come to, arrive at' (cf. P 108-10).

Also very common are compounds of preverbs and verbs of motion, including *uwa-* 'come' (10.48; cf. *HWb.* 238) and *tiya-* 'step' (10.45; cf. *HWb.* 223-34).

10.56 — APPROACH — The usual terminology employs the adverb *maninkuwan* 'near' (12.43), in composition with verbs *pai*- or *tiya*- 'go', or factitively as *maninkuwahh*-.

Also attested is the verb *salik-* 'approach, touch', etymology unknown.

- 10.57 ENTER As with most verbs of motion, the basic expressions are verbal phrases like *anda iya-, anda pai-* 'go in', *anda tiya-* 'step in'.
- 10.61 CARRY A basic sense 'transport, (re)move, deliver' etc. underlies the many shades of meaning apparent in *arnu-*, a caus. (**r-new-/r-nu-*) to IE **er-* 'move', matching Skt. *ṛṇóti* 'arise', Av. *ərənoiti*, Gk. ὄονῦμι 'rouse, set in motion'. Also important is the deriv. *arnuwala-* 'displaced person, deportee'. P 162-67.

In most cases the notion of 'carrying' is expressed by the more directionally explicit verbs for 'bring', 10.62.

10.62 - BRING - The directional preverbs u- (we-, wa-) 'hither' and pe- 'thither' are much in evidence in pairs of verbs for 'bring (here)' and 'send (away)'.

The basis of uda- 'bring' and peda- 'take away' is probably $d\bar{a}$ - 'take' (11.13; HWb. 168-69), less likely dai- 'set, place' (HWb. 236-37).

uwate- and its opposite *pehute-* can be analyzed as the same preverbs + IE *Hwedh-, *Hudh- 'lead' (Pedersen, Hitt. 131; Benveniste, HIE 38-39); OIr. fedid, Lith. vedù, OCS vesti, etc. (IEW 1115-16). This approach is rejected by others (e.g. Watkins, Idg. Gr. III/1 69), who prefer multiple preverbs (pe-)hu- + the verb dai-'place' (12.12); discussion in Oettinger, Stammb. 125-26; Arbeitman, RHA 31 [1973]: 101-9).

wedai-, widai- may be a nonprefixed version of *uwate-* and *pehute-* < *(*H*)*wedh-* (*Stammb.* 373-74), if not simply a variant of *uda-* (*HWb.* 256); cf. 9.33.

'Bring' is also a secondary sense of *piddai-*, primarily 'hand over, deliver, pay', etc.; see 11.21.

10.63 — SEND — pehute- and peda- are counterparts of uwate- and uda-, 10.62.

Another pair oppositionally marked with pe-/u- is piya- 'send away', uya- 'send hither' (-mi-conj.). The underlying verb may be IE * $y\bar{e}-$ 'throw': Gk. $\hat{\imath}\eta\mu\iota$ (Gusmani, $Parola\ del\ passato\ 16\ [1961]$: 107-12; Stammb. 348).

uppiya- also formed with preverb *u-* but lacking the opposite number with *pe-*, is derived on conjugational grounds (*hi-*conj.) from *pai-*, *piya-* 'give', 11.21 (*Stammb*. 489 and n. 80).

10.64 — LEAD — Hitt. *nai-*, *neya-* forms part of a Hittite-Indo-Iranian isogloss reflecting IE **ney-* (Skt. and Av. *nī-*, *nay-*). The original meaning was 'lead, conduct', as opposed to *(*H*)*wedh-* (in Hitt. *uwate-*, *pehute-*; 10.62) 'take away by force' (and often 'marry'); cf. the detailed investigation in Benveniste, *HIE* 33-40.

Verbal compounds of *nai*- with *pe*- and *u*- mean 'drive away' and 'drive hither', 10.65.

10.65 — DRIVE — *penna-* 'drive away' and *unna-* 'drive hither' are from *nai-* 'lead' (10.64), as is the reduplicated (iterative) *nanniya-* 'drive' (*HWb.* 148-49), generally used of animals.

'To drive a chariot' may be the meaning of Luw. *tars(a)i-* (*DLL* 94) or *tarsyai-* (*Stammb.* 383), source unknown.

elaniya- is glossed 'drive (to extremities), assail, plague' in P 268-69, formed from an action noun *elatar (parallel to tiyaniya- < *tiya-tn-iya- < dai-, tiya-, lit. 'beset'), postulating a verb *el(a)-corresponding to Gk. ἐλάω, ἐλαύνω, both 'drive' and 'persecute, plague' (cf. Benveniste, *Origines* 112).

10.67 — PUSH, SHOVE — *suwai-* 'push, push out, expel' is usually compared with Skt. *suváti*, Av. *hav-* 'set in motion, impel', IE * $sew(-H_2)$ - (e.g. *Stammb*. 297-98 and refs.).

A connection of *hurutai-* 'knock over' with IE *(*H*)*wert-* 'turn' is possible (T 314, 312-313); the meaning would be '(over)turn'.

Several quasi-synonyms may also be mentioned, e.g. *sai-*, *siya-* 'press, seal; shoot' (8.31; cf. ON *þrysta*), *pessiya-* 'throw' (10.25), and *elaniya-* 'drive, assail', etc. (10.65).

- 10.71 ROAD *itar* (KASKAL, Akk. *harrānu*) is an ancient heteroclitic neut. **i-tr*, matching Lat. *iter* and Toch. A *ytār* 'way' (Benveniste, *Origines* 10, 104; P 493-94).
- 10.72 PATH KA.GÌR. *urki-* 'track(, path?)' was derived from IE **wer-* 'find' (*IEW* 1160) by Kronasser (*EHS* 211).
 - 10.73 STREET KASKAL GAL.

10.74 — BRIDGE — *armizzi-* (denom. *armizziya-*) has so far been provided with no definitive etymology. Tischler (T 63-64) opts for areal culture-word status, comparing Neo-Babylonian *arammu*

'Erddamm, Landungssteg' (with "Hurrian" -izzi-), and abandoning his promising earlier adduction (KZ 86 [1972]: 277) of IE *rem- 'support, rest on', OHG rama 'prop', Norw. rand 'crossbeam', rande 'embankment' (IEW 864), with parallels in OCS mostй 'bridge': ON mastr 'pole' and ON brú 'bridge': OCS brйvйпо 'beam' (P 161-62). Further suggestions ibid.

For a reinterpretation of Gk. $\gamma \epsilon \varphi \bar{\upsilon} \varrho \alpha$ and connection with Hitt. *epurai-* 'besiege, dam up' see *AI* 293-99, P 282-83.

10.75 — CARRIAGE, WAGON — GIŠhuluganni- apparently refers to the royal 'coach', and is a foreign technical loanword, to judge from OAssyr. hu/ilukannum (T 283).

GIŠtiyarit- (GIŠMAR.GÍD[.DA], Akk. sumbu) is a 'wagon' for carrying loads (*HWb*. 285), formally unexplained, though a connection with tiya- 'step' seems likely; cf. also GIŠGIGIR.HI.A tiyauwas 'standing-chariots', GIŠasannas 'sitting(-chariot)', GIŠasanateyawas 'sitting-/standing-chariot' (P 296, T 84-85).

The war-chariot is GIŠGIGIR (Akk. narkabtu), Hitt. reading unknown.

10.76 — WHEEL — GIŠhurki- (GIŠDUBBIN, GIŠUMBIN) is from $^*H_1wr-g$ -, IE *H_1wer - 'wind, twist, turn' (*IEW* 1154-55), cognate with Skt. vrj- 'twist', OE wrencan 'wind', etc. (*AI* 218, T 303-4). Cf. 21.15.

10.78 — YOKE — *iuga*- (ŠUDUN), nom.-acc. sg. *iugan*, faithfully reflects IE **yugóm* and matches Skt. *yugám*, Lat. *iugum*, Goth. *juk*, Gk. ζυγόν; OCS *igo* 'gate', etc.; cf. also Toch. A *yokäm* 'gate, door' (P 495-96, T 448-49). An etymologically identical homonym is *iuga*-'yearling', *tāiuga*- 'two-year-old', also adj. *iugassa*-; see P 496-99 and T 449-52.

10.81 - SHIP - GIŠMÁ (Akk. eleppu).

10.83 - BOAT - GIŠMÁ.TUR.

10.86 — RUDDER — Virtually the only maritime terminology that survives in the texts of these largely land-bound people (besides *winat*, of unknown meaning) is the (Luwian?) word (acc. pl.?) *pintanza*, probably 'tiller': *n-at-kan* [2]-*el-us-pat ANA* ^{GIŠ}MÁ *sarā pāir* ^pGIŠ.GIM-*as* ¹UR.ŠA.NA.BI-*iss-a nu* ¹UR.ŠA.NA.BI-*is* "*pintanza*" ŠU-*za epta* 'the two boarded the ship, Gilgameš and Uršanabi, and U. took the *p*. in his hand'. Intriguingly, it recalls the Engl. nautical term *pintle* 'rudder-pin' < IE **bend-* (*IEW* 96).

POSSESSION, PROPERTY, AND COMMERCE

11.11-11.12 — HAVE; POSSESS — har(k)- 'have, hold' also functions as the auxiliary verb in the formation of periphrastic perfect and pluperfect tenses. Long connected with Gk. ἀρκέω 'ward off', Lat. $arce\bar{o}$ 'shut in', Lith. rakinti 'shut', etc. (IEW 65-66; e.g. Sturtevant, Lg. 6 [1930]: 215), it reflects IE * A_1erk - (cf. T 173-74). The reflexive -za har(k)- is 'have by or with oneself, possess' (HWb. 56).

The common IE dative(-locative) of possession occurs in Hitt., as does an ethical dative; possession is also indicated by the genitive case; cf. Friedrich, *Elementarbuch* 121.

- 11.13 Take Hitt. $d\bar{a}$ -, Hier. ta- belong etymologically with Gk. δίδωμι, Lat. $d\bar{o}$, OCS dati, Skt. $d\bar{a}$ -, Arm. tam, Alb. $dhan\ddot{e}$, etc. 'give' (11.21), all from IE * deA^w_2 (Götze Pedersen, MS 68; cf. e.g. Puhvel, Evidence 89 = AI 135). On the reciprocal nature of gift-giving among the Indo-Europeans see Benveniste, $L'ann\acute{e}e$ sociologique, 3ème série (1951): 7-20.
- 11.14 SEIZE, GRASP ep(p)-, ap(p)- is almost universally derived from an IE *Eep-, and compared with Skt. $\bar{a}pn\acute{o}ti$ 'reach, obtain', Lat. $ap\bar{i}scor$ 'attain', co- $\bar{e}p\bar{i}$ 'began', etc. (IEW 50-51, T 107-8). Rejecting this etymology, Puhvel (P 281-82) connects $ap\bar{i}scor$ rather with Hitt. hap(p)- 'join, attach' (12.22), and reconstructs for ep(p)-simply IE *ep-.

Constructions with preverbs serve for more nuanced expressions, e.g. $anda\ ep(p)$ - 'capture', lit. 'take in'.

- 11.15 HOLD har(k)-, 11.11.
- 11.16 GET, OBTAIN *arha ep(p)* is a secondary meaning from literal 'take away'; cf. also $sar\bar{a} d\bar{a}$ 'take up, take possession of' (*HWb*. 202).

Doubts on the relationship of Skt. $\bar{a}p$ -, Av. ap-, and especially Lat. $ap\bar{s}cor$ (> $adip\bar{s}cor$), are voiced in P 281-82.

- 11.17 KEEP, RETAIN kurk- 'preserve, retain' may be from IE *kur(-k)-; Avest. $sur\bar{\imath}$ 'skin', Lith. šárvas 'armor', from *kur- seen in ON hvarmr 'eyelid'; cf. Hitt. kurkessar 'surface'? (Čop, Ling.~2 [1956]: 20-22; T 649-50), although neither semantically nor formally compelling.
- 11.21 GIVE With the specialization of IE * deA^{w}_{2} to 'take' in Hitt. $d\bar{a}$ (11.13), the vacated semantic slot was filled by pai-, piya- (Hier. pa-), perhaps from pe- 'away' + an *ai- (* $H_{2}ey$ -) as in Toch. ai- 'give' (Götze Pedersen, MS 63). Addition of the deverbative suffix -anniya- yields piyanniya- 'beschenken' (Stammb. 81).

A further derived form is *piddai-* 'deliver, pay' (11.65).

- 11.22 GIVE BACK, RETURN appa pai-, lit. 'give back'.
- 11.23 RESTORE appa taninu-'set back in order, reestablish', etc., fr. taninu-'arrange, set in order'. Oettinger (Stammb. 29, n. 24) considers it a possible (causative) derivative of taniya- (of unknown meaning), but makes no attempt at an etymology. A

connection with IE *ten- 'stretch, extend, last', etc. (*IEW* 1065) might be considered; cf. Lat. tenēre 'keep, preserve, maintain', etc.

anda sarnink- and parā sarnink- 'set right, compensate', with sarnink- 'atone for, make good', corresponding to noninfixed Lat. sarciō 'mend, make good' (noxiam sarcire); Juret, RHA 2 [1933-34]: 251).

11.24 — Preserve, Keep Safe — pahs- 'protect' is from IE *peA₁-, cognate with Skt. pā- 'protect', Lat. pascō 'feed, support', Goth. fōdjan, OE fēdan 'feed' (also Gk. ποιμήν, Lith. piemuō 'shepherd', Skt. pāyú- 'protector', Gk. πῶϋ 'flock' < *poA₁-i-; cf. IEW 787), with -s-extension (or originally s-aorist) in Lat. pāstor 'shepherd' and OCS pasti 'put to pasture' (Pedersen, Hitt. 187; Oettinger, Stammb. 212). HWb. 153.

sakuwai-'watch over', 15.52.

11.25 - SAVE, RESCUE — *huisnu*- is causative from *huis*- 'live' (4.74), meaning basically 'make live, bring to life'.

huldalai- 'schonen, verschonen' is read as denom. to a *huldala-(EHS 480) seen in Lúhuldala-, speculatively 'protector, watcher' (T 282). The underlying *huld- was compared by W. Petersen (JAOS 59 [1939]: 179) with Gk. ἔλδομαι 'wish, long for', thus * $H_1w(e)ld$ -.

11.27 - DESTROY - harganu- (iter. harganuski-) is a causative to intrans. hark-'perish', cf. 4.75.

hallanniya- 'lay waste, ravage' is from a stem hall(a)-, reflecting *halna- < * A^{w_2} l-n-é A^{w_1} - and comparable with Gk. ὄλλῦμι < *ὀλ-νυ-(P s.v.; cf. A. Bernabé P., Revista española de lingüística 3 [1973]: 435-36). Further connection of ὅλλῦμι with Hitt. hulla- 'strike' (9.21) is unlikely.

The Hitt. and Luw. military term *hasp(a)-* 'destroy, pillage' is etymologically obscure; cf. *DLL* 44, *EHS* 408, 589.

karap- 'devour; destroy', 5.11.

11.28 — HARM, INJURE, DAMAGE — *hunink*- is derived from *huek*- 'slaughter' (4.76), cf. Lat. *nocēre*: *necāre*.

Athematic huwap(p)-, hup(p)- 'treat badly' could be from the same IE * H_1wop - seen in Goth. ubils 'evil' (* H_1up -élo-; Juret, Vocabulaire 58; Watkins, Idg. Gr. III/1 30).

The factitive *idalawahh-* 'treat badly', fr. *idalu-* 'bad' (16.72), parallels such usages as Fr. *faire mal*, as does *idālu iya-* (cf. Engl. "do someone wrong").

- 11.29 SPOIL A verb *kurkuriya-* 'verstümmeln', from the verbal abstract *kurkurai-* 'wound, injury' (Laroche, *BSL* 52 [1967]: 76; *EHS* 204-5), seems to be based on the (reduplicated) root *kuer-/kur-* (9.22; T 652).
- 11.31 SEEK sanh- is from IE *sen-A* $_2$ -, seen also in Skt. $san\delta ti$ 'gain' and Gk. $\dot{\alpha}\nu\dot{\omega}$ 'achieve' (IEW 906; Kuryłowicz, $\dot{E}tudes$ 73; Sturtevant, Comp. Gr.\(^1\) 133; Pedersen, Hitt. 185; cf. Puhvel, Evidence 91 = AI 137; Florilegium Anatolicum 299 = AI 367), with the Hitt. verb perhaps testifying to an original nuance. Corollary meanings of sanh- are matched in the cognate OHG sinnan 'strive for' and OE sinnan 'care about' (T. L. Eichman, KZ 87 [1973]: 269-71). Possibly borrowed in Arm. $\dot{s}ah$ 'win, gain' (Schultheiss, KZ 77 [1961]: 221).
- 11.32 FIND A suggested analysis of *wemiya* is *u* 'hither' + the **em* of Lat. *emō*, Lith. *emù* 'take' (Pedersen, *Hitt*. 82).
- 11.34 Release Notions like 'untie, unbind, detach, set free; remove' are expressed by $l\bar{a}$ -, lai- (DU₈; CHD 3.1-4). Some

connection with IE *lew(-s)- (Gk. $\lambda \dot{v}\omega$; OE $l\bar{e}as$ 'loose', etc., IEW 681) seems possible.

For *tarna-* 'let, allow, permit, st loose', etc. and *tala-*, *daliya-* 'leave (alone)' see 12.18.

tattaluski- may be specifically 'release' or 'ransom', used of prisoners; *HWb*. 219).

11.41 — PROPERTY — 'Property, valuables, wealth', among other things, is denoted by *assu*-, nominalized adj. *assu*- 'good, dear, agreeable, favorable, valuable' (16.28 and 16.71; P 199-202), thus equivalent to Lat. *bona*, Fr. *biens*; NE *goods*.

11.42 — WEALTH, RICHES — assu-, see 11.41.

iyatar, an abstract noun from *iya-* 'go' (10.47), represents 'plenty, prosperity' in the sense of 'fertility'; cf. Puhvel, *AJPh.* 104 (1983): 226-27; P 351-52.

Luw. *happinatt-,* see 11.51. Lat. *ops, opēs,* see 11.51.

- 11.43 Money The standard medium of exchange was silver, hence the name of this metal (9.65) and that of 'currency' were equivalent—cf. Gk. $\check{\alpha}\varrho\gamma\nu\varrho\varsigma\varsigma$. The prices of varous commodities (livestock, meat and skins, land and produce, textiles, and copper) are fixed in terms of the silver standard, and recorded in the Laws; cf. Gurney, *The Hittites* 84-87.
- 11.44 Coin Rather than coinage, trade in early Anatolia was carried on with silver bars or rings, measured by weight by the shekel (GÍN).
- 11.45 Purse A leather bag or pouch (KUŠA.GÁ.LÁ) may have served to carry small amounts of money, as did the 'purse'

denoted by Lat. *bursa*, Fr. *bourse*, MHG *burse*, etc.; cf. Hitt. ^{KUŠ}*kursa*-(4.12).

11.48 — HEIR — IBILA (Akk. aplu).

A term for legally assigned (as opposed to natural) 'inheritance' or 'dowry' is *iwaru-*, probably akin to (Nuzi) Akk. *ewuru* 'heir' (E. Speiser, *JAOS* 55 [1935]: 436); cf. P 502-4.

11.51 — RICH — happina(nt)- matches Lat. opulentus (with dissimilation) < IE * H_1 op-en-o-(nt-), from the stem seen in Lat. ops, RV ápnas- 'wealth', Av. afnahvant- 'wealthy', ON efni 'substance' (pl. 'means'), Gk. ŏμπνη 'nourishment', possibly ἄφενος 'wealth', etc. (IEW 780; refs. T 157-58). Derivs. happinahh- 'enrich', happines-'get rich'; also related are Luw. happinatt- 'wealth' and Hitt. happir-'trade; payment, price' (11.87), happarai- 'trade, sell' (11.83), happir(iy)a- 'town' (19.15).

Lat. *dīves* is cognate with Hitt. *asiwant-* 'poor' (11.52).

- 11.52 POOR Like many of its IE synonyms, Hitt. asiwant-'poor' (asiwante[s]- 'become poor', asiwantatar, Luw. āssiwantattanassi- 'poverty') means literally 'un-rich', reflecting *ŋ-dyew- + -ant- (thus roughly /adžiwant-/ or /ažiwant-/) 'not divinely endowed'; cf. Lat. dīves 'rich' (Jucquois, RHA 22 [1964]: 87-89; AI 266 and n. 34-35; P 211-12). An apt semantic parallel is OCS ubogŭ, nebogŭ 'poor' vs. bogŭ 'god'; cf. OPers. baga 'god', Ved. bhága- 'good fortune; dispenser'.
- 11.53 BEGGAR In sufficiently dire straits the Lúasiwant-'poor man' (LÚMAŠ.EN.KAK, LÚMAŠDÁ) could no doubt be forced to take up this occupation; cf. OE wædla, Lith. ùbagas, Russ. niščij, Skt. dáridra-.

11.56-11.57 — STEAL; THIEF — $t\bar{a}ya$ - belongs with the group of words for 'thief' from IE *(s) teA_2 -y-, Skt. (s) $t\bar{a}y\acute{u}$ -, $sten\acute{a}$ -, Av. $t\bar{a}yu$ -, OCS tati, OIr. $t\acute{a}id$, with OCS tajiti 'hide', etc. (DSS 790; HWb. 203). tayaz(z)il- and dayawar are 'theft, larceny'.

'Thief' is expressed by the genitive tayazilas '(person) of theft'.

11.65 — PAY — *piddai*- 'pay; hand over; bring', etc. is denominative from *pitta* 'gift, giving; grant', neut. pl. of an action noun **piyatt*- from *pai*-, *piya*- 'give' (11.21; Puhvel, *Hethitisch und Indogermanisch* 213-14 = *AI* 360-61).

A root *kus- is suggested by kussan- 'wages' and derivs. (11.78), and may appear in 1 sg. pret. kushahat (cf. T 672).

sarnink- 'settle (i.e. accounts)', 11.23.

- 11.66 ACCOUNT, RECKONING *kappuwawar* 'counting, reckoning', neut. abstract from *kappuwai-* 'count; take into account'. The latter's origin is disputed; perhaps (with Pisani, *Paideia* 8 [1953]: 307-8) *katt(a)* + *puwa- 'mark, designate' (as in *puwatti-* 'label, mark of ownership'; cf. *EHGl.* 56-57, n. 103; Hoffner, *JAOS* 87 [1967]: 300-3), thus 'mark off, tally, count'. Somewhat less plausible is a comparison of a *u*-stem *kapu- with ON kópa 'stare, gape', OE cēpan 'regard, desire, care for' (NE keep), Russ. *zabota* 'care, trouble', IE *ĝeHb- (IEW 349; Duchesne-Guillemin, *TPS* 1946: 77, comparing for meaning Skt. cáṣṭe 'appear, show': Av. *ahaxšta*-'innumerable', Toch. A kaś, B keś 'number'). Further suggestions T 494-96.
- 11.67 SECURITY, SURETY To 'seize as surety, distrain' is appat(a)riya-, from appatar 'seizure' < ep(p)- 'seize' (11.14); similarly Lat. pignoriscapio 'distraint' < capere, OIr. athgabál 'id.' < gab- (P 98-99).

- 11.69 TAX The verbal noun *taksessar* is 'tax, tariff' < *'agreement', from *takk(e)s-* 'agree' (6.33).
 - 11.71 INCOME MELKITU, see 8.41.
- 11.76-11.77 RENT, LEASE; HIRE kussaniya- is denominative from the *n*-stem kussan- 'wages, pay' (11.78), semantically matching Gk. μ ισθοῦμαι, NGk. μ ισθώνω, and possibly providing an etymology for OE hyrian, MHG hūren, etc. (11.78).
- 11.78 WAGES, PAY kussan- 'wages, pay; price' is best compared with OE $h\bar{y}rian$, $h\bar{y}r$, MLG $h\bar{u}ren$, $h\bar{u}re$, etc. '(to) hire' < * $h\bar{u}z$ - $ij\bar{o}n$, IE *kuHs- (cf. Goetze, Lg. 30 [1954]: 403; Čop, Die Sprache 3 [1954]: 135-38; Bomhard, RHA 31 [1973]: 113).
- IE *ĝews- 'choose, enjoy' does not plausibly belong here, but it may be the source of Hitt. *kusata-* 'bride-price', often connected with *kussan-* (cf. T 673-74; see 2.63 and Weitenberg, *IF* 80 [1975]: 66-70).

Derivs. are *kussaniya-* 'hire' and *kussan(iy)atalla-* 'soldier, mercenary' (20.17); cf. also Lyc. *qehñ*.

- 11.81 BUY was- reflects the IE verbal root *wes- 'buy' (IEW 1173) on which are formed Skt. vasná-, Lat. acc. vēnum (*wés-no-), Hom. ὧνος (*wos-no-), Lesb. ὄννα (*wes-neA-) 'price'; DSS 818.
- $11.82 \text{Sell} us(sa)niya- <*w(e)sne-yé-, corresponding to Skt. vasnayáti 'bargain, dicker' (Puhvel, p.c., comparing Lat. vendō 'put up for sale' < *wesnom + dhē-, with Hitt. wa- ~ u- of inner-Hitt. relevance, like iyazi ~ <math>\bar{\imath}zzi$; cf. Oettinger, Stammb. 430).
- 11.83 TRADE *hap(pa)rai-, happirai-, hap(pa)riya-* (cf. Lyc. *epirije-* 'sell') is denominative from *happir-, happar-* 'business, trade',

also 'price, payment', from the stem * H_1 op- found in happina(nt)-, Lat. opulentus, etc. 'rich' (see 11.51). Nominal parallels are Ved. ápas- 'deed', Lat. opus 'work'; cf. E. Sapir, Lg. 12 (1936): 179; T 161-62.

happar iya- 'ply trade' is quotable as well; cf. Puhvel, *Bi. Or.* 36 (1979): 56-57.

11.84 — MERCHANT, TRADESMAN — unattalla- (LÚDAM.GÀR, Akk. damqaru) probably represents an agent noun in *-tel-yo- or *-ter-lo- from unna- 'drive' (> 'bring towards') (EHS 175-76).

11.85 - MARKET(PLACE) - KI.LAM.

'Market, place of trade' was the original meaning of *happir(iy)a-* 'town' (19.15).

11.87 — PRICE — *kussan-* 'wages, payment' (11.78) easily shades over into this meaning; cf. OIr. *lóg*: Goth. *laun* 'wages'; Skt. *arghá-*, Av. *arajah-*, NPers. *arz*: Lith. *algà* 'wages'.

happir- 'business, trade', also 'compensation, price' (11.83, P s.v.).

SPATIAL RELATIONS: PLACE, FORM, SIZE

12.11 — PLACE (sb.) — peda- (KI, Akk. ašru) matches Gk. πέδον 'ground', cf. OCS podŭ 'ground', Lith. pãdas 'sole', etc. (IEW 790; HWb. 168).

12.12 — PUT (PLACE, SET, LAY) — The pf. stem * $dhoE_{1^-}$ < IE * $dheE_{1^-}$ (Hitt. tiya-, Gk. τίθημι, Lith. padeti, Skt. $dh\bar{a}$ -, Toch. A $t\bar{a}(s)$ -, B tes-, etc.) yields Hitt. dai- (cf. e.g. Puhvel, Evidence 91-92 = AI 137-38; Oettinger, Stammb. 482-83); Hier. duwa-, Lyc. ta-. From the zerograde root * dhE_1 -ske- comes iter. zikki- (plus resuffixed zikkiski-) 'lay (to), set (to), begin' (HWb. 260-61; cf. Petersen, AO 9 [1937]: 214, reconstructing * $dh\bar{e}$ -k- and comparing Lat. $f\bar{e}c\bar{\iota}$, Gk. $\check{e}\theta\eta\kappa\alpha$).

tittanu- 'set in, install', if not from IE *dheE₁- (*dhi-dhE₁-; cf. Watkins, Flexion und Wortbildung 376 and Gk. τίθημι, Skt. dádhāmi), may alternatively reflect IE *(s)teA₂- 'stand' (ἴστημι, tíṣṭhāmi; Sturtevant, Comp. Gr.¹ 78), causative like Goth. (ga)satjan, (ga)lagjan (NE set, lay) or NHG stellen < *stall-jan < IE *stel-. Other, inner-Hittite explanations derive it from tittiya- 'set up, establish' (< *dhi-dhE₁-ye- or reduplicative fr. tiya-; Van Brock, RHA 22 [1964]: 142-44, 152; Oettinger, Stammb. 350, 347) or by reduplication from *ta- (EHS 459).

asas-, ases- (caus. asesanu-) is literally 'make sit', causative from es- 'sit' < IE * \bar{e} s- (12.13), cf. Goth. (ga)satjan, NE set; P 207-11, EHS 570. Cf. also Hier. asanuwa-/isanuwa-, 12.13.

sazki- is iter. from a *sat-, *sad-, which was derived from *sod-éye- 'make sit' < IE *sed- by Eichner (apud Oettinger, Stammb. 329); although the text (HAB II 58-59, quoted ibid.) seems to indicate a meaning more like 'push' (cf. HWb. 189), the etymology might still be valid.

12.13 — SIT — IE * $\bar{e}s$ - (* $E_1e[E_1]s$ -) survives in Hitt. stative es-, as'sit', (esp. -za es-) 'sit down', also trans. 'settle, inhabit' (Hier. as- vs. caus. asanuwa-/isanuwa- 'establish, install'), with numerous derivs.; T 110-11, P 291-300.

The complementary IE root *sed- may appear in Hitt. sisd-'rest', if from si-sd-e- (O. Carruba in HWb. Erg. 3 s.v.; Oettinger, Stammb. 216).

12.14 — Lie — Stative ki- (Pal. $k\bar{\imath}$ -) functions as passive to dai'put' (12.12), as its cognate Gk. κε $\bar{\imath}$ ται (= Skt. $\acute{s}\acute{e}te$) does to τίθημι, in a suppletive relationship limited to those IE branches (Anatolian, Greek, Indo-Iranian) that also exhibit the root * $\bar{e}s$ - 'sit' (Hrozný, SH 35; cf. Gusmani, Lessico 47, refs. T 568-69).

A survival of IE *legh- is probably Hitt. lak- 'fall over' and 'turn', especially in phrases such as istamanan (parā) lagan hark, lit. 'hold (your) ear turned toward', i.e. 'listen!'; cf. caus. laknu- 'knock over, fell, bend', etc., lilak- 'fell, cut down', lagan 'bent, inclination, disposition' (CHD 3.17-18, 19-20, 58; Sturtevant, Comp. Gr. 118).

12.15 — STAND — Stative/intrans. 'stand' is expressed in Hitt. by the middle verb ar- < IE *er- 'move, stir, raise', e.g. pres. arta < *r-to (augmented in Gk. $\tilde{\omega}$ oto 'moved, rose', Ved. $\tilde{a}rta$ 'went'). P 104-8; cf. ar- 'arrive' (10.55), arai- '(a)rise' (10.21), ariya- 'raise' (10.22).

IE *steA₂- may have a cognate in Hitt. tittanu- 'install', 12.12.

12.16 — REMAIN, STAY; WAIT — The sense 'stay, remain in place' is included in *es-*, *as-* 'sit, reside', etc. (12.13), and also in *ar-* 'stand (by), be stationed' (12.15).

huski- 'wait (for), await' is variously analyzed. Connection with Skt. ávati 'observe, notice', Gk. ἀῖω 'perceive', Lat. aveō, etc. (Götze - Pedersen, MS 51) is precluded because the latter belong rather with Hitt. au(s)- 'see', * A_2ew - (15.51). An etymology based on IE * A_1ows - 'ear' (Gk. οὖς, OIr. au, Goth. $aus\bar{o}$, Lat. auris, Lith. ausis, OCS ucho, Avest. $u\check{s}i$, Arm. unkn, etc.) is workable (cf. Eichner, MSS 31 [1973]: 87; Oettinger, Stammb. 328; perhaps * $A_1[e]w$ - 'listen', PAnat. *h[e]u-ski- 'keep listening [for]' = 'wait for'), but it is undermined by the Anatolian loss of * A_1ows - in favor of istaman- (4.22). T. Schultheiss (KZ 77 [1961]: 221) compares instead Arm. hskem 'look after, wait on, attend to', thus * A^w_2sk -.

12.17 — REMAIN — A connection of as(s)- 'be left over, remain' (only secondarily 'stay') with es- 'be' or es- 'sit' (Bechtel, *Hittite Verbs* 92-93; T 75) is unlikely on formal grounds (P 189). The only other suggestions so far proffered are tentative comparisons with Lat. $in\bar{a}nis$ 'empty' (*in- $\bar{a}s$ -no-; Čop, Ling. 9 [1969]: 196) and Skt. $\bar{a}sa$ - 'ashes', Lat. $\bar{a}ridus$ 'dry' (Stammb. 187).

12.18 — LEAVE — tarna- 'abandon, turn loose', compared early on with Toch. A $t\ddot{a}rn\bar{a}s$, B $t\ddot{a}rkanam$ 'leave' (Benveniste, BSL 33 [1932]: 142; cf. LIEV 26), is now most commonly reconstructed *tr-ne-A-, from IE *ter-A₁-, *tr-eA₁- seen also in Hitt. tarh- 'overcome' (see 4.81), though the semantic development is not clear (cf. Hrozný, HKB 77, n. 9; Hendriksen, Untersuchungen 67; Oettinger, Stammb. 155).

The standard etymology for tala-, daliya- 'leave (alone)' is IE *tel- A_2 - 'endure, bear, suffer' : Lat. $toll\bar{o}$, esp. * $t_l^{\dagger}A_2$ - as in Gk. $\tau\lambda\tilde{\eta}\nu\alpha\iota$, Goth. bulan, Latv. iz-tilt 'suffer', W. tlawd 'poor, wretched'

(Petersen, AO 9 [1937]: 210). Unconvincingly rejecting this comparison ("Die Verbindung mit *telh₂- ... wird den heth. Lautverhältnissen nicht gerecht"), Oettinger and Eichner (*Stammb*. 487-88 and n. 78) offer an analysis as a (nonexistent) preverb da-(: Lat $d\bar{e}$) + $l\bar{a}$ - 'release' (11.34).

(arha) pittalai- 'set free, leave alone, neglect' is apparently denominative from a *pitta-la- 'renderer' or *pi(ya)tt-ala- 'grantor', based on pi(y)ett-, pitt- 'gift, grant' (cf. piddai- 'pay', 11.65) fr. pai- 'give', 11.21 (Puhvel, Hethitisch und Indogermanisch 214 = AI 361).

- 12.19 QUIET The adverb *duddumili* 'quietly, silently' seems to be related to *duddumi-* 'deaf', *duddu* 'silence!' (4.95), thus perhaps 'so as not to be heard' (cf. also Goth. *dumbs*, NE *dumb*); *HWb*. 230-31.
- 12.21 COLLECT, GATHER IE *les- (Goth. lisan 'pick, gather' [NHG lesen also 'read'], Lith. lèsti 'pick up', etc., IEW 680) yields also Hitt. less-, lisa-, lisai- 'pick, gather' (P s.v.).

Intrans. tarupp- 'gather, assemble; wind or twist together', possibly the source of Gk. τολύπη 'ball of yarn', may be from IE *(s)trew-p-, parallel to *(s)trew-d- > NHG strotzen 'abound in, teem with' (Tischler, Kratylos 20 [1975 (1977)]: 213-14); discussion of this and other suggestions in B. D. Joseph, Glotta 60 (1982): 230-34.

12.22 — JOIN, UNITE — hap(p)- 'join, attach', also impers. 'work out, succeed', is reconstructed * A_1ep - and connected with Lat. apere 'seize, arrest', aptus 'joined, fitted', $c\bar{o}pula$ 'bond' (*co-apula), $ap\bar{s}scor$ 'attain', etc. by Puhvel (P 282), thus rejecting the standard connection of the latter with ep(p)-, ap(p)- 'seize' (contrast 11.14). Cf. also happessar (UZUÚR) 'joint, limb, body part' (like Skt. $p\acute{a}ru\dot{h}$ 'knot, joint, limb').

damenk- 'fasten, attach' can reflect a *tm-n-(e)k-, seen also in Skt. tanákti 'contract, congeal', root *tem-k- (*tm-k-) in takrám 'curdled milk', Av. taxma- 'solid', etc. (IEW 1068; cf. Van Brock - MacGregor, RHA 20 [1962]: 32-33; Oettinger, Stammb. 144-46), similar to hamenk- 'bind' (9.16).

For *takk(e)s-* 'join together, weave', etc. see 6.33.

12.23 — SEPARATE — The verb *harp*- appears to mean both trans. 'separate, remove' and medial-intrans. 'join up with' or similar. If homonymous roots are not involved, some common base-meaning must be assumed, e.g. 'pile up separately' or 'pick out and set aside' (cf. Neu, *Interpretation* 49-50; T 179-80), taking into account the ostensibly related noun *harpa*- 'heap, pile'. The attendant uncertainty obscures precise meaning-relationships among the Hitt. forms and the widely accepted cognates Gk. ὀφφανός, Lat. *orbus* 'bereft', Arm. *orb*, IE * H_1 *orbh*(-o)- or * A_1 *vbh*(-o)- (E. Polomé, *Ogam* 6 [1954]: 159-60). The usual further adduction of Skt. *árbha*- 'small; young, weak' was rejected on semantic grounds by Benveniste (*HIE* 11-12); also to be kept apart are Hitt. *arpa*-, *arpu*- 'bad luck, misfortune': Ved. *raphitá*- 'overcome, wretched' (cf. P 168-70).

tuhs-'cut apart', see 9.22.

12.232 — DIVIDE — The basic meaning of *sarra*- seems to be 'divide, part', though it takes on various other senses, e.g. midd. 'transgress an oath' (cf. Neu, *Interpretation* 152-54; they are assigned to separate verb stems in *EHS* 531-33). A connection with *sarhu-'thieving' (in sarhuntalli-'id.') < *srA- and comparison with Gk. ὁωομαι 'move quickly or violently' (*sroA-), IE *ser(-A)-(Stammb. 288-90) is unconvincing. Perhaps sarra- represents *sor-éye- < IE *ser- 'set in a row, line up', Gk. εἴοω, Lat. serō, Osc. aserum; Lat. seriēs, OIr. sreth (*sr-tā; cf. Lat. sors, sortis 'lot') 'row', Goth. pl.

sarwa 'armament', ON sørvi 'string of beads', etc. (IEW 911; cf. Eichner apud Oettinger, Stammb. 290, n. 63).

The probable sense 'mark off, set apart' of ark- (separate from ark- 'mount, copulate', 4.67) leads to comparison with Hes. ἔρχατος · φραγμός, town name Ἐρχομενός, Ὀρχομενός; ὄρχατος 'garden, plantation', etc., IE *ergh-, *orgh- (AI 290-91, P 140-42, T 58-59).

mark- 'divide, apportion, distribute; butcher' is used particularly in connection with animal sacrifice, appearing often in association with ark- 'mark off' (cf. CHD 3.187-88). Comparison with Skt. marcáyati 'destroy' (Stammb. 425-26) proceeds from an incorrect base-meaning 'zerwirken'. More apposite are OE mearc, Goth. marka (LLat. marca) 'border, boundary', Lat. margō 'margin', ON mork (OFr. marche), Avest. marəza-, OIr. mruig, W., Corn. bro (*mrog[i]-) '(border) region', etc. (IEW 738).

12.24 — OPEN — No agreement has been reached on an etymology for *has(s)-, hes(s)-* (iter. *haski-,* intensive *hashas-*). Most commonly adduced are Hitt. *has-* 'beget, give birth', Toch. B ās-'bring forth' (Kronasser, *VLFH* 222, T 194) and, little better, Lat. ōs 'mouth' (e.g. Petersen, *AO* 9 [1937]: 203; Bernabé P., *Revista española de lingüística* 3 [1973]: 425-26). Puhvel (P s.v.) suggests instead Skt. ásyati 'throw (open)', toch. A āsuk 'widely, beyond'.

As opposed to the nuance of normal, legitimate 'opening' in has(s)-, kenu-/kinu- usually connotes forced or illegal entry (Laroche, BSL 58.1 [1963]: 58-59). Causative 'make gape' from *ki-'be open', it reflects IE * $\hat{g}heyA_2$ -, * $\hat{g}hy$ - eA_2 - 'stand open', Lat. $hi\bar{a}re$ 'gape' (functionally parallel, vs. $pat\bar{e}re$), OE ginan, geonian 'yawn', Gk. $\chi\alpha$ (v ω 'gape' (* $\hat{g}hA_2$ -n-y-), χ (α) α (chasm' (* $\hat{g}hA_2$ -s- $m\eta$) and extended forms (IEW 419-21; Laroche, loc. cit.; T 579 and refs.)

12.25 — Shut, Close — istap(p)- 'shut (in), plug up', etc. (caus. istappinu-, deverb. istappulli- 'lid, stopper') is from IE *step- (OCS stopiti 'tread', stopa 'footstep'), with variants *stebh- (Gk. στέφω 'entwine', ἀστεμφής 'firm', Skt. stabh- 'support, make firm', stámbha- 'post, pillar', Lith. stãbas 'post', stambas 'stump', OE stap 'staff', ON stefja 'restrain, stem') and *steb- (OE steppan, stempan; Gk. στέμβω 'kick around'); cf. Benveniste, BSL 33 (1932): 139; Oettinger, Stammb. 419-20; T 432-33; P 471-75.

The source of *hatk-* 'close; squeeze' (with adj. *hatku-* 'narrow' and further derivs., 12.62) is uncertain; Benveniste (*Origines* 156) reconstructed **Héd-* 'enclose, contain', comparing Skt. *átka-* 'mantle', Av. *aδka-*. His further connection of Gk. δέκομαι and Lat. *decet* is more questionable. T 225-226.

sah- 'plug, clog, stop up; cram' (with neut. abstract sahessar, concretized 'closed area; fortress, stronghold') may be related to sehur 'urine', etc.; see 4.65.

12.26 — COVER (VB.) — A cogent etymology for *kariya-* 'cover, hide' (iter. *kāriski-*) compares Skt. *cárman-* 'skin, hide', Lat. *cortex* 'bark, rind', *corium* 'leather', *scorium* 'hide', OHG *skirm* 'cover(ing), shelter', from IE *(*s*)*ker-* 'cover, hide', homonymous with *(*s*)*ker-* 'cut' (Puhvel, *Bi. Or.* 38 [1981]: 353). Earlier attempts in T 504-5. *istap(p)-*, see 12.25.

12.27 — HIDE, CONCEAL — A comparison of *munnai*- with Gk. μύω 'close one's eyes' (as *mu- $n\acute{e}A^w$ - <* $mewA^w$ -; Stammb. 161-62) is semantically tortured. Cf. rather Skt. $m\acute{o}sati$, $mus\rlap. n\~{a}ti$ 'steal', Gk. αμύνω 'fend off', midd. 'defend oneself', Frank. (Lex salica) chrēo- $m\~{o}sido$ 'corpse-robbery' < * $(A_2)m(e)uE_1$ -s- (Petersen, AO 9 [1937]: 208), and Eichner's connection with Hitt. maus- 'fall' (Flexion und Wortbildung 84).

With sanna- (* $s\eta$ -n-A-), Oettinger (Stammb. 159-60) compares Gk. $\check{\alpha}\nu\varepsilon\upsilon$ 'without' (* $s\eta A$ -ew) and Skt. sanutár 'aside' (* $s\eta A$ -u-), Lat. sine 'without' (*senA-[e]i) and OIr. sain 'different' (* $s\eta A$ -i-), with a root *sen-A- but difficult semantics.

kariya- 'cover, hide', 12.26.

- 12.31 HIGH parku- matches Arm. barjr as a u-stem adj. (cf. Puhvel, Gedenkschrift Kronasser 181), from IE *bherĝh- 'high', Skt. bṛḥant-, Av. bərəzant-, MW bry 'high, great', MIr. brí, W. bera, OE beorg, NE barrow 'hill, mound', ON berg, etc. (IEW 140; cf. HWb. 161). Luw. parrai-, parri-.
- aru- is from IE *er-, *or- 'move, raise', etc. (*rrú-?); cf. 10.21 and P 177-78. It occurs mainly in the phrase aru(-)suwaru- 'high-and-mighty'; cf. Puhvel, Bi. Or. 36 (1979): 57, JAOS 101 (1981): 214.
- 12.32 Low *kattera* (adj.) 'lower' is from *katta*(n) 'down, under' (+ IE comparative *-*ero*-); cf. Gk. κατά, κάτω, etc. (*IEW* 534; cf. T 545-46, 539-42).

Suffixless loc. dagan 'on the ground', cf. 1.212.

- 12.33 TOP Skt. *ágra* (or Gk. ἄκρον, ὄκρις) may have a cognate in Hitt. NA4hekur '(mountain) peak' (Pedersen, Hitt. 183), IE * E_2eg -r- (* E_2 suggested in Puhvel, Evidence 88, 92 = AI 134, 138); cf. discussion and refs. T 235-37.
- 12.352 POINT dampu- 'pointed' may be from a primary 'rough', 15.76.
- 12.353 EDGE *arha-, irha-* is 'edge, rim, boundary, etc., from an original sense 'line' (cf. 19.17); cf. also *erhui-* 'basket', 9.76.

12.36 — SIDE — *tapu(wa)s-* 'rib; side', with adv. and postpos. *tapusa, tapusza* 'sideways, beside', remains unexplained (*EHS* 260, 328, 341-42, 343).

Luw. *parta-/i-* 'side, part' is compared by Ivanov (*Etimologija* 1977: 145) with Lat. *pars* < **parts*.

12.37 — MIDDLE — *istarniya*-, from adv. *istarna*, *istarni* 'between, among'. The standard comparison (Hrozný, SH 96) with Lat. *sternō*, Skt. *stṛṇāti* 'spread', Gk. στέρνον 'breast', OCS *strana* 'area', OHG *stirna* 'forehead' (IE **ster-H2*-) is semantically weak, and is not helped by unrelated and secondary examples like ŠÀ 'middle' vs. Akk. *libbu* 'heart, middle', OCS *srěda* vs. *srŭdice*, Brit. *kreiz* vs. OIr. *cride*, etc. (cf. T 436). Instead it should be retired in favor of the connection with Lat. *inter*, IE **en*(*s*)-*ter* (P 482), with more convincing parallels in usage.

For the noun taksan cf. 6.33.

12.41 — RIGHT — Besides the basic sense of 'right hand' (e.g. kunnas kessaras), kunna- (ZAG-a-) intimates 'rightness, correctness, strength, success', etc., like Gk. δεξιός, Russ. právyj, the Gmc. words (NE right, NHG recht, etc.), and most of the IE terms (DSS 865), supporting a comparison with Avest. spənta-, Lith. šveñtas, OCS svetŭ 'holy' (Duchesne-Guillemin, TPhS. 1946: 89-90; Bomhard, RHA 31 [1973]: 113; T 632). Particularly common in personal names, e.g. Kuna-, Kunni-, Kuniya-ziti-, DKuniyawani-. also compare the derivs. kunnes-, kunnahh- 'be successful', ZAG-(na)tar 'correctness', etc.

Luwian employs the term *isarwili*- from *issari*- 'hand' (4.33), lit. 'pertaining to the (sc. right) hand'.

 $12.42 - \text{LEFT} - \text{The full form of the Hitt. } l\text{-stem reading of } G\dot{U}B\text{-}la\text{-} \text{ is unknown.}$

- 12.43 NEAR maninku(want)- 'near, close' represents a specialization of the primary meaning 'short'; cf. NGk. κοντά < κοντός 'short'.
- 12.44 FAR $t\bar{u}wa$ (adj. $d\bar{u}wala$ -) belongs with Skt. $d\bar{u}v\acute{a}$ (comp. and superl. $d\acute{a}v\bar{\imath}yas$ -, $d\acute{a}vi\underline{\imath}tha$ -), Av. $d\bar{u}va\bar{e}$, OPers. duvaiy < IE * $dewA_2$ (Götze Pedersen, MS 71; Benveniste, BSL 33 [1932]: 142-43). Further cognates include Gk. δήν 'long' (< * δ F $\bar{\alpha}$ ν), Lat. $d\bar{u}dum$ 'long ago', OCS $dav\check{e}$ 'once upon a time', OIr. doe 'slowly', MHG zouwen 'hurry', etc.
- 12.45 EAST \sqrt{SET} PUTU-as (= Istanuwas), lit. 'start(ing place) of the sun'. The Hitt. allographic reading may be marri-, if the Akkadian (\sqrt{SI} -TUM, \sqrt{SI} -TI) is read as \sqrt{s} it 'rising', with the solar reference understood by implied opposition to \sqrt{SU} - $\sqrt{S$

The east wind and its direction are IM KUR.RA, lit. 'mountain wind' (Akk. IM $\check{s}ad\bar{u}$).

12.46 — West — ipat(t)arma(yan)- can be dissected into -tarma 'nail, peg; point' (9.50) + ipa- (Hier. ipami-) 'west', comparable with Gk. ζόφος 'dusk, (north)west' (cf. Ζέφυρος 'west wind') as * A_2ibho - vs. * A_2yobho - (Puhvel, AJPh. 104 [1983]: 224-26; P 365-77).

The competing designation is ŠÚ.A ^DUTU-as 'seat (setting place of the sun' (cf. ^{GIŠ}ŠÚ.A-hi- = Hitt. kishi- 'chair', 7.43).

IM MAR.TU (Akk. amurrū) 'west (wind)'.

12.47 — NORTH — IM SI(.SÁ), Akk. IM $ELT\bar{A}NU$ 'north (wind)'.

- 12.48 SOUTH IM GAL stands for IM GÀL(.LU) 'south (wind)', Akk. IM šūtu; cf. EHGl. 35, n. 44.
- 12.51 FORM, SHAPE es(sa)ri- is from es- 'be' (9.91) plus the verbal noun-forming suffix -ri- seen also in edri- 'eating, food', auri-'lookout, watch' < au(s)- 'see, look' (15.51), etc.; cf. P 313-15. It commonly appears as siGes(sa)ri-'fleece', lit. 'wool-shape'; see 6.22.
 - 12.52 Size sallatar, verbal abstract fr. salli- 'large', 12.55.
- 12.53 GROW The basic notion 'to grow in size' is expressed by *parkiya- < park-* 'rise' (10.21) and *salli- kis-* 'become large' (12.55). *huwai-*, primarily 'run' (10.46), commonly means 'spread, grow profusely' when used of vegetation.

mai-, miya- (inch. miess-, iter. meski-) connotes 'ripen, grow to maturity', used of plants, animals, and human beings, with numerous derivs.: e.g. Lúmayant- 'grown man, mature youth', mayantes- 'grow to manhood', mayandatar 'mature strength', miyahuwantes- 'grow old', miyahuwandatar 'old age', miyant- 'ripe, in bloom', m(i)essa- 'thrive'. The standard etymology (E. Risch, Corolla Linguistica 195, Flexion und Wortbildung 253; Puhvel, LIEV 55) connects IE * mE_1 - 'measure' (Skt., Av. $m\bar{a}$ -, Gk. μέτρον, Lat. $m\bar{e}$ tior, etc.; IEW 703) and * meE_1 -ro-, * moE_1 -ro- 'large' (Gk. -μωρος, OIr. mór, W. mawr 'great', OE $m\bar{e}$ re, Slav. [Vladi-]měrŭ 'fame', etc.; IEW 704), and the basic sense is 'attain full measure, maturity'. An alternative (suggested by Puhvel, p.c.) derives mai- < * $m\bar{a}$ - and compares Lat. $m\bar{a}$ tūrus, a good semantic match. See also 14.11.

A comparison with Toch. B *maiyyā* 'strength', *maiwe* 'young man' is also possible (Gusmani, *Lessico* 59, following Bailey, *Proceedings of the 23rd International Congress of Orientalists* [London, 1956], p. 227), but further connection of Skt., Av. *māyā*- '(magical)

power (IE **meA*-) is less plausible. Derivations of *mai-, miya-* from **meyH-* 'mild' (e.g. Eichner, *MSS* 31 [1973]: 57-60; Oettinger, *Stammb*. 471-72) arise from confusion with the homonymous *miess*-'be soft, mild, gentle' (15.75; cf. *CHD* 3.115).

IE *Aweg-, *Aug- (Lat. augēre, Gk. αὐξάνω, OE weaxan, Toch. A oks-, B aukṣu-, etc.) is reflected in both Hitt. ukturi- 'firm, lasting' (14.252) and hatuka- 'terrible' (16.53).

- 12.54 MEASURE IE * meE_1 'measure' is shifted to 'grow' in Hitt. mai-, miya- (12.53).
- 12.55 LARGE, BIG *salli* (GAL) corresponds apparently to Lat. *soli-dus* 'heavy, massive', *salvus*, OIr. *slán*, Arm. *orj* 'whole, hale, healthy', Skt. *sárva*-, Av. *haurva*-, Gk. ὅλος, Ion. οὕλος, OLat. *sollus*, OIr. *uile*, etc. 'whole, entire' (e.g. *EHS* 204).

A complementary conception of 'bigness' appears in *ura*-(Luw. *ura*-, cf. Laroche, *RHA* 11 [1950]: 43-45), cf. Skt. *urú*-, Av. *vouru*-, Gk. εὐούς 'wide' (e.g. Gusmani, *Lessico* 51, 106).

12.56 - SMALL - am(m)iyant- is lit. 'not grown, immature', from *n- + -miya- (mai- 'grow', 12.53) + -nt- (P 47-48).

kappi- (TUR) has been compared with Avest. kamna-, Sogd. kβn, NPers. kam 'small, few'; Anat. *kmbh-i- vs. Iran. *kmbh-na-(Szemerényi, Die Sprache 12 [1966]: 27 and n. 94); consistent -pp-points rather to IE *-p- (though not as far as IE *kapro-, Lat. caper 'he-goat', etc., adduced by Sturtevant, Lg. 10 [1934]: 266). T 491. A deriv. may be kappant-, if 'diminished, waned' (referring to the moon); cf. Puhvel, Bi. Or. 38 (1981): 353.

tepu- 'small, insignificant' matches Skt. *á-dbhu-ta-* 'not to be slighted'; cf. Hitt. *tepnu-* 'to slight, make small' : Skt. *dabhnóti* 'damage' (Gusmani, *Lessico* 96).

- 12.59 SHORT maninku(want)-, Luw. mannahuwan- 'near; short', compared with OHG mangōn 'lack', MHG manc 'deficiency', Lat. mancus 'defective, crippled', noninfixed OE mæger, ON magr, OHG magar (Goetze, Lg. 30 [1954]: 403) suggests an original meaning 'scant, lean, (long and) thin; short, lacking' for IE *meAk-, *mA-n-k-(u-) (IEW 699). Cf. maninkwes- 'grow short', maninkuwa(nda)hh- 'shorten'.
- 12.61 WIDE, BROAD palhi- is clearly from IE *pel-A₁-, corresponding to *pl-eA₁-(no-) in Lat. plānus, Latv. plāns 'flat' (cf. Gaul. Mediolānum), Lith. plónas 'thin', and to *pl-t- in Hitt. paltana-'shoulder' (4.30) and palzasha- 'base, stand' (/paltsha/, P s.v.), Gk. $\pi\lambda\alpha\tau\dot{\nu}\varsigma$, OIr. lethan, Lith. platùs, Skt. pṛthú-, Av. pərəθu- 'wide', etc.; cf. e.g. Benveniste, Origines 151; Kuryłowicz, Études 73; Puhvel, Bi. Or. 36 (1979): 58. 'Width' and 'breadth' are variously referred to by palhatar, palhessar, palhasti-, and cf. Luw. palhai- 'widen, extend'.
- 12.62 NARROW *hatku* is the *u*-stem adj. from *hatk* 'close, squeeze' (12.52), and signifies 'narrow, tight' and metaphorically 'difficult, pressing' (like NE *strait*); cf. *hatkues* 'become difficult', *hatkiesnu* 'beset'.
- 12.64 THICK (IN DENSITY) Lat. $d\bar{e}nsus$ and Gk. δασύς are matched by Hitt. dassu(want)- 'strong, solid, heavy, difficult', see 4.81.

12.65-12.66 — Thin — From a basic meaning 'thin, light' (referring e.g. to olive oil), pittalwa(nt)- also means 'plain, mere, unseasoned' and the like. It can be compared with OLat. petilus 'slender, meager' and Gk. πέταλον, IE *petA-l(w)o-, from the root *petA- 'spread' (Gk. πετάννυμι, Lat. patere, OE fæþm, etc., IEW 824), with semantics ('spread [thin]') paralleling the group of Lat. tenuis, OIr. tana, OE pynne, OCS tinŭkŭ, Skt. tanu-, etc., lit. 'stretched (thin)' < *ten- 'stretch'. Cf. Puhvel, tethitisch tethitisch

maklant- 'thin, emaciated' (vbl. abstract maklatar; CHD 3.121-22), if cognate with Lat. macer, Gk. μακρός (Benveniste, BSL 33 [1932]: 140), probably belongs further with Hitt. maninku(want)- 'short', etc. (12.59), thus here *mAk-ro-, *mAk-lo-.

- 12.67 DEEP halluwa-, both 'hollow' and 'deep' (halluwanu-'deepen, lower'), matches Lat. alveus 'hollow, cavity', alvus 'bowels, womb', IE * A_1 l-wo- vs. * A_1 ul-ó- in Gk. αὐλός 'pipe', αὐλών 'hollow place' (Čop, Indogermanica minora 32-33). Not related to halluwai- 'quarrel, strife'; cf. Puhvel, Bi. Or. 36 (1979): 57.
- 12.71 FLAT taksan 'level, even, equal', taksatar 'flat, level surface, plain', see 6.33.

'To flatten' is *istalk(iya)- < *stel-g-,* cognate with OCS *stīlati* 'spread', Lat. *lātus* 'wide' (< **stlāto-*); P 451-52.

- 12.72 HOLLOW halluwa-'hollow' and 'deep', 12.67.
- 12.73 STRAIGHT *handant-*, primarily 'right, upright, true', etc., 16.73.
- 12.74 CROOKED lak-, midd., 'fall over, be out of line', etc.; 9.14.

- 12.75 HOOK Skt. $ά\bar{n}kas$ -, Gk. $\check{\alpha}\gamma$ κος 'bend', and Gk. $\check{o}\gamma$ κος 'barb' = Lat. *uncus* 'hook' match the Hitt. plant-name *ankis* (P 73).
- 12.76 CORNER halhaltumar(i)- 'corner', by extension also 'corner of the universe, cardinal direction', is most likely a parallel form to halhalzana- 'shoulder' (4.30), as $*(H_{t}l-)H_{t}lt$ -wr vs. $*(H_{t}l-)H_{t}lt$ -no-. So P s.v., comparing for meaning Gk. $\gamma\omega\nu$ i $\bar{\alpha}$ 'corner, angle': $\gamma\acute{o}\nu\nu$ 'knee', Lat. angulus, OCS $\varrho gl\breve{u}$, Arm. ankiun 'angle, corner, nook': OHG anchal 'heel, knuckle, ankle'.
- 12.82 CIRCLE Words for 'circle' in Hittite are those with primary meanings of 'line, limit, boundary', etc.; see *kaluti* 12.84 (cf. Gk. κάλαθος 'basket') and *arha-, irha-* 'boundary' 19.17 (cf. *erhui-* 'basket', 9.76; and *arahza, arahzanda* 'around; outside', *irhai*-'circulate, make the rounds', etc. [P 129-35, *AI* 353-55]).
- 12.84 LINE *kaluti*-, also 'row, series; circle, group' shows the same semantic development as the widespread Lat. *līnea*, from an original sense 'thread, spun line', as shown by the comparison with Gk. κλώθω 'spin', κλῶσις, κλωστήρ 'line', IE * klA^w_2 -dhi-(Puhvel, *Studies ... Whatmough* 235 = AI 37, *Evidence* 90 = AI 136, AI 353-55.
- 12.85 HOLE *pattessar* is probably to be read *petessar*, in view of its identity as a verbal noun fr. $p\dot{e}$ -da-'dig' (8.22), formerly read *padda*-; cf. Puhvel, *Hethitisch und Indogermanisch* 214-16 = AI 361-63.

Another original verbal abstract is *hattessar*, *hantessar*, fr. *hattai*'chop' (9.22), thus referring to holes in things other than the ground.

'Pits' for specific purposes are also mentioned, eg. the Hurrian-derived (< Akk. *apu*) *api-* 'sacrificial pit' used to call upon infernal beings (P 99-102, T 47), and *akkus*(*s*)*a-*, a pit for trapping animals, etymologically obscure (P 25, T 12).

12.91 - EQUAL - taksan sarra- 'split equally, in half', see 6.33. 'Of equal rank' is annawali-, annauli-, from demonstrative anna-

'self, same' (P 51-55) + -wali- (cf. walliwalli- 'strong') and comparable with Lat. aequi-valens, lit. 'of the same strength' (P 64-65); cf.

16.79

12.92 — LIKE, SIMILAR — The notion of 'similarity' can be found in $t\bar{a}kk$ - 'resemble, correspond, conform to', probably causative from IE *dek- 'accept, take on'; cf. Gk. δέχομαι 'accept', δοκέω, Lat. decet 'be fitting' (E. Tichy, Glotta 54 [1976]: 71-73; Watkins, Idg. Gr. III/1 117; Oettinger, Stammb. 427-28.

12.93 — CHANGE — 'Change' or 'falsify', used of words, is *wahnu*-, primarily 'turn' (10.12), thus 'turn into something else' (cf. Engl. "twist someone's words").

The strange-looking *tameuma-*, usually glossed 'changed; different; foreign', etc. (cf. *damai-* 'other'?), e.g. *HWb.* 208, yields factitive *tameumahh-* (trans.) and inch. *tameumes-* (intrans.) 'change, alter' (?); the form is unexplained.

OUANTITY AND NUMBER

13.12 — NUMBER — The closest approximation is *kappuwawar* 'counting, reckoning', 11.66.

mekki- 'many, great in number', 13.15.

13.13 - WHOLE - Besides the obscure dapiya(nt)-, which most closely matches the collective sense of Gk. $\delta\lambda$ o ς , etc., humant- is commonly used; see 13.14.

The etymon of Gk. ὅλος, Lat. sollus, salvus, OIr. uile, Skt. sárva-, Arm. ołj, Toch. A salu, B solme, etc. becomes Hitt. salli- 'large', 12.55.

Opinion is divided on the etymology of panku- 'total, united; general, in common; each', also noun 'totality'. From a formal point of view the simplest comparison is Skt. $bah\acute{u}$ - 'much, abundant', Gk. $\pi\alpha\chi\dot{v}\varsigma$ 'fat, thick', IE * $bh\eta ghu$ - (HWb. 157). The notion of totality or completeness, together with the social class designation panku-, variously interpreted as a 'body of nobility' or the like (Goetze, Kleinasien 86-88), has led several scholars to connect it instead with IE * $penk^we$ 'five', seeing an ancient link between 'five' and 'totality', originating in the PIE system of counting on the fingers and applied widely to social groupings such as the Indic $pa\~nca j\'an\=as$, OIr. coiced, Umbr. puntis, and the five Spartan demes. For discussion see e.g. E. Polomé, $Pratid\=anam$ 98-101, RBPhH 44 (1966): 229-33; W. P. Lehmann, Indo-European and

Indo-Europeans 3-10 and refs.; F. Crevatin, *Incontri linguistici* 4 (1978): 7-11.

13.14 — EVERY; ALL — humant- 'each, every', also collective 'all'. A comparison with the isolated Lat. omnis is semantically plausible, perhaps IE * A^w_1m-n- vs. * $A^w_1\acute{e}m-ni-$? (cf. refs. T 284-85). An alternative connection is Goth. iumjōns 'crowd', OHG wiuman 'swarm' (*we-wm-), IE * E_2wem- , * E_2um- (Knobloch, Kratylos 4 [1959]: 35).

kuissa- 'every, any' (Pal. *kuis-a*, Luw. *kuisha-* 'whoever', neut. Lyd. *qida* 'whatever', Hitt. *kuitta* 'everything') is the relative-interrogative pronoun *kuis* (IE $*k^wis$) + enclitic -a 'and', thus an exact parallel to Lat. *quisque* (T 614-15).

- 13.15 MUCH; MANY *mekki* is cognate with Goth. *mikils*, OE *micel*, NE *much*, and Toch. A *māk*, B *māka*, thus 'large (in number)' fr. IE **meĝh*-, Skt. *mah*-, Av. *maz*-, Arm. *mec*, Alb. *madh* (*DSS* 878-79). The Luwian equivalent is *mai* < **makki* (Laroche, *BSL* 58 [1963]: 77-78).
- 13.17 FEW; LITTLE *kappuwant* may be the participle of *kappuwai* 'count' (*EHS* 257; see 11.66), thus 'countably few' vs. *mekki* 'beyond number', or perhaps < **kapp* (: *kappi* 'small' [12.56]) + denom. -*want*.

tepu-, see 12.56.

- 13.19 MULTITUDE, CROWD pangarit, instr. sg. 'with a crowd, in force' may be from a *pangar- 'crowd', vbl. noun from panku- 'whole, together, collective', 13.13 (HWb. 157).
- $13.21 \text{FULL} \text{The basic adj. is } s\bar{u}$ -, with deriv. verbs suwai- (Hier. suwa-, susu-) and (nasal-infixed) sunnai- 'fill' yielding

participial adjs. suwant-, sunnant- 'filled'. These forms plus mpsv. suwa- 'swell' and sumrai- 'be pregnant' (cf. 4.73) suggest IE * $sew(H_2)$ - 'be full, swell, be pregnant' (cf. IEW 913-14; HWb. 197-98, 200-1; Laroche, RHA 31 [1973]: 91-93; Watkins, Flexion und Wortbildung 378 [* $sewA^w$ -, * suA^w -u-]; Stammb. 159, 298). Cf. also suttati 'swell' (< *su-to- < * suH_2 -to-; Oettinger, Eide 12, 114). Neumann (Die Sprache 8 [1961]: 206, n. 6) may have been ultimately right to tie in also NHG sieden (ON sjoða, NE seethe) < *seu(-t)-, which might be interpreted 'bubble, boil, effervesce' (cf. IEW 914-15).

13.22 — EMPTY — dannara- and dannatta-, dannatti- (Hier. tanata-) point to a stem *danna- (EHS 186, 190, 249) of unknown origin; perhaps *dhn-no-; cf. Skt. dhánvan- 'desert, wasteland'? (Knobloch, Kratylos 4 [1959]: 35).

sannapili-, traditionally glossed 'empty; alone; unmarried, single' (*HWb*. 181), is from *sannapi (sannapi sannapi) 'scattered, isolated, here and there') < sani- (or sanna-?) 'one and the same' (*HWb*. 181, 182; Goetze, *Lg*. 11 [1935]: 185-90); see 13.33.

13.23 — PART — *sarra*- (HA.LA, Akk. *zittu*) would seem to belong with the verb *sarra*- 'to part, divide', 12.232.

Lat. pars has been compared with Luw. parta-/i- 'side, part', 12.36.

- 13.24 HALF taksan sarra-'equal part', cf. 13.23 and 6.33; ideogr. MAŠ.
- 13.31 NOTE ON NUMERALS Though most of the numerals in Hitt. texts are hidden beneath logographic symbols, the few recoverable details are mostly consistent with extra-Anatolian data. An interesting exception seems to be *meu* (nom. *meyawas*),

Luw. *mauwa-* 'four', possibly connected with Gk. μείων, Lat. *minor*, OCS *mĭnĭsĭ* 'less, smaller', as 'less than the full hand' in counting (cf. Heubeck, *Die Sprache* 9 [1963]: 201-2).

On attestations of 'two' in Hitt. (basic form $d\bar{a}$ - < *dwoyo-) see AI 389-98, and on Hitt. numerals generally EHS 362-65; Friedrich, Elementarbuch 71-73 and HWb. 301-4. To the bibliography on the IE numeral system should now be added O. Szemerényi, Studies in the Indo-European System of Numerals (Heidelberg, 1960).

13.32 — ONE — The reading of 1-as, gen. 1- $\bar{e}l$ is not known for certain. Götze (AO 17.1 [1949]: 296-97) argued for $\bar{a}sma$, which was connected with IE *sem- (Gk. $\epsilon \bar{\iota} \varsigma$, Toch. A sas, Skt. sama-, Lat. semel, etc.) as *o-smo- by Neu (Anitta-Text 98). Any interpretation of $\bar{a}sma$ as 'one', 'first', or 'firstly' (cf. T 84) is, however, firmly rejected by Puhvel (P 216-18), in favor of 'lo, behold', *asa-ma fr. demonstrative a-. On Götze's earlier reading as sanna- cf. 13.33.

The IE stem *oi-ko- appears in Hitt. aika-wartanna-, but from an Indic (Mitannian) source and not inherited (P 14, T 6).

13.33 — Alone — minu- may be an original u-stem from IE *men- 'small; isolated'; cf. Arm. manr, gen. manu 'small', Hes. μάνυ · πικρόν (for μικρόν; Weise, BB 6 [1881]: 233), μαναύεται · παρέλκεται, Att. μόνος, Dor. μῶνος, Ion. μοῦνος < *μονξ-ος 'alone'.

*sannapi-'alone, single' (in sannapi sannapi 'isolated, scattered') < *sani- or *sanna- < *sm-ni-, *sm-no-(bhi-) 'one and the same', a likely cognate of Skt. sama-, Lat. semel, Goth. sama, Gk. $\epsilon i \varsigma$, etc. (DSS 937). Cf. Götze, Lg. 11 (1935): 185-90, taking sanna- as 'one', = 1-as.

wannumiya- 'widowed' and 'orphaned', hence primarily 'bereft, alone', 2.75; cf. also Güterbock, *IF* 60 (1950): 205, n. 1.

- 13.34 FIRST hantezzi(ya)- is most probably formed from a suffix *-tyo- (cf. appezzi- 'last', 13.35) on the stem hanti-, dat.-loc. * A_1 (e)ntei of * A_1 ent- 'front' (cf. hant- 'front; forehead', 4.205 [T 155-56]), semantically parallel to Gk. πρῶτος, Skt. prathamá-, OCS prǔvǔ, Lith. pìrmas, OE fyrmest, forma, ON fyrstr, etc. With NHG fürst 'prince' cf. Lyc. χ ñtawata 'leader'.
- 13.35 Last Analogous to hantezzi(ya)- 'first' is appizzi(ya)-, appezzi-, etc. 'last'. The IE suffix *-tyo- is added to appa (EGIR[-pa]) 'behind, after, back', etc., cognate with Myc. o-pi, Gk. ἐ π ί; thus appizziya- = Gk. ὀ π ί σ (σ) ω 'backwards; hereafter' (P 91-94, T 46-47). Cf. Goth. aftumists; SCr. zadnji; Skt. $uttam\acute{a}$ -, Gk. ὕ σ τ α τ σ ς ; Fr. dernier fr. derrière ($< d\bar{e}$ $retr\bar{o}$), etc. (DSS 940-41).
- 13.41 THREE Together with nom. 3-es, the attested gen. teriyas /triyas/ bears witness to the inheritance of IE *treyes (> *tres), gen. *triyos.
- 13.42 THIRD 3-anna is read teriyanna /triyanna/, with the regular ordinal form x-anna < *o-no- vs. *-to- or *-tyo- elsewhere in IE (?; otherwise EHS 365).

A derivative ^{LÚ}tarriyanalli- means 'third in command' (cf. Lat. triārius 'third-rank soldier'), as ^{LÚ}duyanalli- is 'second officer'; cf. *AI* 390 and n. 3 (with refs.; add Kronasser, *Studi ... V. Pisani* 615-18).

13.44 — Three Times — 3-is, 3-kis, with 1-anki-, 2-anki-, 5-anki-, etc., point to a regular multiplicative -(a)nki(s), cognate with Gk. -άκις (Rosenkranz, KZ 63 [1936]: 249; Sommer, Zum Zahlwort 21-22).

TIME

14.11 — TIME — Hittite *mehur* is clearly to be compared with time-words such as Goth. mēl 'time', Lith. mētas, Alb. mot 'year, season', and probably IE *mēn(es)-, *mēnot-, etc. 'moon, month', from *mē- (e.g. Kretschmer apud Hrozný, SH 70, n. 3; Sturtevant, Lg. 7 [1931]: 119). The ancient base-meaning is generally taken to be 'measure(ment)', thus tying in Indo-Iranian mā-, Lat. mētior, Gk. μέτρον, etc. (*IEW* 703) as well as -μωρος, OIr. mór, W. mawr 'great', OE *m* \bar{x} re 'fame', etc. < **m* \bar{e} -ro-, **m* \bar{o} -ro- (*IEW* 704). Yet this standard view conflicts with the derivation of mai-, miya- 'grow, ripen, mature' $< *meE_1$ - 'measure' (see 12.53), as it is difficult to see how * meE_{1} - (i.e. [* mex^{y} -]) could yield mai- in one case but *meh- in the other. As the IE form *me- is secured by the cognate forms from other branches, and the Hitt. spelling with single -h- suggests voiced $-E_2$ - (unless graphic for -hh- after long $-\bar{e}$ -; cf. Pedersen, Hitt. 189), it may be preferable either to derive the IE time-words from a separate *meE2- meaning either 'measure' or simply 'time' (reinterpreting * meE_1 - > mai-, - $\mu\omega\varrho o\varsigma$, OIr. $m\acute{o}r$ etc. as '[be] great', 'attain full measure'), or perhaps to reassign mai- (< *mā-) to *meA-, comparing Lat. mātūrus (cf. 12.53 and Eichner, MSS 31 [1973]: 53-107) and preserving IE * meE_1 - 'measure'.

14.12 — AGE — miyahuwandatar 'old age', fr. mai- 'grow, mature', 12.53.

- 14.13 New IE *newo- (Skt., Av. nava-, Gk. νέος; Toch. A ñu, OCS novŭ, Lat. novus) yields Hitt. newa- (GIBIL), fact. newahh- (cf. Lat. novāre); HWb. 150-51.
- 14.14 Young The strong resemblance of Hitt. huelpi- to IE $*g^welbh$ fuels repeated attempts to connect it with Skt. gárbha-, Gk. δελφύς 'womb', etc. (thus Hrozný, SH 111, n. 5; cf. T 259-60), despite the unexplained initial phonetics. The possible existence of a parallel stem $*k^welbh$ in ON hvelpr, OHG welf 'young pup, whelp' complicates the picture, and the weakness and labiality of gutturals in Luwian (cf. mannahunna-, mai-, issari-: Hitt. maninkuwant-, mekki-, kessar) emphasizes the need for better understanding of Anatolian and Indo-European labiovelars, as already well known from Germanic, Celtic, and Italic data. An alternative comparison with Gk. (F)έλπω 'cause to hope', Lat. volup 'pleasantly', lepōs 'pleasantness' is formally plausible; the root would be $*H_1wel-p$ or $*E_2wel-p$ (cf. Benveniste, Origines 155 and Van Windekens, BHD ... Kerns 339-40).

ummiyant- is glossed 'young' at P 48, presumably reading **up*-(10.21) + *miyant*- (< *mai*-), lit. '(barely) grown up'.

14.15 — OLD — *wezzapant-*, *wizzapant-* is an embedded nominative *wizza panza* 'the year (is) gone', used attributively as a possessive compound (cf. *Stammb*. 392). Possibly Luw. *waspant-* (P. Meriggi, *OLZ* 1962: 259).

*miyahuwant- 'old' is inferrable from miyahuwandatar 'old age' and miyahuwantes- 'grow old', fr. mai-, miya- 'grow', 12.53.

14.16 — EARLY — The central meaning of *karū* (Hier. *ruwan*) is 'formerly, previously, of old; already, hitherto', and of adj. *karuwili-* 'former, ancient'. A connection with *karuwariwar* 'at

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dawn, early in the morning' (14.43) is generally assumed, prompting comparisons such as that with ON *grýjandi* 'dawn', OSwed. *gry* 'to dawn', etc., with Hitt. *karū* < IE **ghrēw* (Čop, *Indogermanica minora* 5-6). T 526-28 records several other suggestions.

- 14.18 Now kinun represents IE *ki- 'this' (or loc. *kei) + * $n\bar{u}$ 'now' (Gk. $\nu\bar{\nu}\nu$, OE $n\bar{u}$, Lith. $n\dot{u}$, OCS $nyn\check{e}$, Skt. $n\bar{u}[nam]$, Av. $n\bar{u}$ [Toch. A $n\bar{u}$, B no 'but']), lit. 'this now'. Analogues are found in SCr. sada (OCS $s\check{i}$ 'this') and OIr. indorsa (*ind orsa), and an exact match, with elements reversed, in Lat. nunc < *num-ce (DSS 962-63, T 480-81). The Luw. equivalent nanun is similarly formed (DLL 74), with obscure na-.
- 14.19 SOON; IMMEDIATELY *lammar* 'this moment, right away' is an adverbial specialization of the primary meaning 'hour, instant', much like its cognate OLat. *numerō* 'in time, right away'; see 14.51 (cf. Puhvel, *Kratylos* 25 [1980]: 135-36).

hudak 'immediately', adv. from huda- 'haste', is most likely related somehow to huya-, huwai- 'run' (10.46), though the details are unexplained (T 318-19).

1-*anki* 'once' parallels Engl. "at once"; cf. 13.44 for formation. *hantezzi* 'right away, first (thing)', cf. 13.34.

14.21 — SWIFT, FAST, QUICK — *piddalli-*, *pittiyali-* 'swift, quick, fleet' (e.g. *pittiyalis* GÌR-as 'fleet of foot') is from *pittai-* 'run, flee, fly' (10.37), with a nuance of speed or agility in escaping (cf. Lúpittiyant-'fugitive'); see Puhvel, *Hethitisch und Indogermanisch* 212 = AI 359.

Adj. nuntariya-, cf. 14.23.

liliwant- 'swiftly flying' is from *liliwahh-* 'go quickly, hasten; fly' (CHD 3.61-62), of unknown origin.

- 14.23 HASTEN, HURRY *nuntariya* and caus. *nuntarnu*-, with adj. *nuntariya* 'swift' and the adverbial gen. sg. *nuntaras* 'quickly', arise from *nuntar* 'haste', possibly **nun-tr* from *nun* 'now' as in *kinun* (14.18; *EHS* 274).
- 14.24 DELAY *istantai-* 'linger, delay, put off' (caus. *istantanu-*) is from IE * $steA_2$ 'stand', probably via a noun * stA_2 -nt-like OE, ON *stund* 'while', and thus parallel to NHG *stunden* (P 464-65).

zalukess-, dalukess-, caus.-trans. zalug(a)nu-, factitive from daluki- 'long' (12.57) and cognate with Czech prodlévati 'delay', cf. OCS prodĭliti 'prolong', dlŭgŭ 'long'.

- 14.25 BEGIN 'To begin' doing something is expressed by the supine of the verb (normally the iterative-durative stem) plus dai-, e.g. memiskiuwan dais 'he began speaking'.
- 14.252 LAST (vb.) A verb is lacking; the notion appears in *ukturi-* 'firm, (ever)lasting, durable' from IE **Aéw-g-* 'be strong, grow', Skt. *ójas-*, Lat. **augus-* 'strength', Skt. and Av. *ugra-* 'strong', etc.; cf. *AI* 224.
- *maz(z)-, manz-* 'withstand, endure, offer resistance' (*CHD* 3.213-14), etym. unknown.
- $14.27 \text{FINISH} \text{'To finish, bring to an end' is a secondary development of the basic sense 'pick up, carry off, carry out' of <math>karp$ -, 10.22.

zinna- 'stop, cease; finish', 14.28.

14.28 — CEASE — *zinna*- (iter. *zinniski*-), used especially with inf. for 'stop, cease' doing something; also absolutely 'be finished,

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be ready'; cf. *EHS* 567. Comparison with Lat. *sinere* 'let alone, allow; cease' (Eichner apud Oettinger, *Stammb*. 151-52), as a nasalinfixed form from IE *seyE₁-, is conceivable. Also to be considered is Skt. *kṣināti*, *kṣināti* 'destroy', Gk. $\phi\theta$ ίνω 'wane, decay, perish; destroy', $\phi\theta$ ινόπωρον 'autumn' (Petersen, *Mélanges H. Pedersen* 471). Still other suggested cognates include IE *sen- 'grow old' (Benveniste, *BSL* 50 [1954]: 33-34), Gk. $\theta\alpha$ νεῖν 'die' < IE *dhwen- 'expire, disintegrate' (Carnoy, *Orbis* 1 [1952]: 426), and Gk. σίνομαι 'damage; rob, plunder', OE *þwīnan* 'grow soft, fade away' < *twin-y- (Georgiev, *KZ* 92 [1978]: 94-96, positing general IE *tw- > Hitt. *z*-).

- 14.31 ALWAYS kuwapiya- 'always, everywhere' is formed from kuwapi 'when; where' plus the "generalizing" enclitic -a 'and' (cf. Lat. -que in quisque, etc.; EHS 349, 351). kuwapi in turn comprises IE * k^wo (Lat. qui, Osc. púi, etc., IEW 648) and the adverbial suffix *-bhi, thus paralleling Osc. puf 'where; when' (= Lat. ubi, by false division in alicubi, sicubi, etc.); cf. T 693-94.
- 14.32 Often The sense of frequent or repetitive action is regularly given by the iterative morpheme *-ski-* (e.g. *apiez-kan uddanaz arha akkiskanzi* 'on account of that matter people are often killed'), from IE *-*sk-* seen in Skt. *gácchati*, Gk. βάσκω; Lat. *crēscō*.
 - 14.34 NEVER *пūmān*, *nūwān*, etym. ?
- 14.35 AGAIN *appa*, adverb, postpos. and preverb 'back; behind; after(wards); again', etc. (EGIR[-*pa*]); Luw. *appa*(*n*)-, Hier. *apa*(*n*), Lyc. *epñ*. From IE **epi*-, **opi* (Gk. ἐπί, Myc. *o-pi*), with final variation as in Hitt. *katta*(*n*) (Gk. κατά) vs. *katti* (κασι-); cf. Skt. *ápi* 'also', Gk. ὄπισθε(ν) 'behind, after', etc. (*IEW* 323-25, P 91-94, T 41-43).

- 14.41 DAY The Anatolian representative of IE * $dy\bar{e}w$ -, *diw- (Lat. $di\bar{e}s$, $I\bar{u}$ -piter, Gk. $Z\varepsilon\dot{\nu}\varsigma$, Skt. $dy\bar{a}us$, diva-, OIr. dia, Arm. tiw; Lith. $dien\grave{a}$, OCS $d\check{t}n\check{t}$, Goth. sin-teins, etc.) is Hitt. siwat(t)- 'day', Luw. Tiwat-, Pal. Tiyaz 'sun, sun-god', *dyew- with abstract-forming suffix -at(t)- (HWb. 195). The fateful connotations of (attas) $annas\ siwaz$ '(father's and) mother's day' = 'day of death' are discussed by Puhvel in $Studia\ ...\ A.\ Pagliaro\ 3.169-75 = AI\ 198-204$ and $AI\ 205-9$.
- 14.42 NIGHT Hitt. *ispant* (and deified ^D*Ispant*-, ^D*Ispanzasepa*-), the normal term for 'night' (GE₆[.KAM]), is thought to reflect *(k)spnt- or *(k)spon-t-, comparable with Skt. kṣap-, Av., OPers. xšap-, NPers. šab (*ksep-), Av. xšapar-, xšapan-, xšafn-(*ks[e]pr-/n-), and possibly also Lat. vesper, Gk. ἑσπέρα, W. ucher, OCS večerŭ, Arm. gišer 'night, evening' (e.g. Götze Pedersen, MS 60; Goetze, *Lg.* 30 [1954]: 357; E. P. Hamp, *Revue des études arméniennes* N.S. 3 [1966]: 13.15). While agreement on the root is general, further formational details are in dispute; cf. P 431-35, T 409-11 and refs.

The large group including Lat. nox, OIr. nocht, W. -noeth, Goth. nahts, Lith. naktìs, Gk. νύξ, Alb. natë, Ved. nakt-, etc. is joined by Hitt. nekuz, indicating IE *nekwt-, *nokwt-, and occurring in the petrified phrase nekuz mehur 'night', lit. 'the time (is) night' (DSS 992), nekuzzi 'evening falls'.

14.43 — DAWN — The most convincing analysis of the neut. kariwariwar 'daybreak, early morning' (also commonly adverbial 'at daybreak') is *kariw- (< * $ghr\bar{e}w$ -, see 14.16) + denom. -ariya- (cf. gimmandariya- 'spend the winter') + abstract -war (P s.v.) Folketymology based on $kar\bar{u}$ 'early, former(ly)' and arai- 'rise'

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produced variants such as karuwar(i)war and $kar\bar{u}$ ar(r)iwar, interpreted as 'early rising'.

Other explanations, taking the forms with *karu-* as primary (e.g. Hrozný, *SH* 79, n. 5) or comparing RV *śárvarī* 'dusk, night' (Benveniste, *BSL* 50.1 [1954]: 41), fail to account for *kariwariwar* (T 530-31, P s.v.).

Beneath adverbial lukat, luk(k)attar, luk(k)at(t)i 'at dawn, toward daybreak' (directional dat.-loc. forms) lies a *lukkat- < *lewkot- (cf. siwat-), matching Goth. liuhap 'light' and cognate with Skt. roc- 'shine', Gk. λευκός 'bright', Lat. $l\bar{u}x$, etc.; cf. Hitt. luk(k)- 'grow bright, dawn' and for meaning SCr. svanuće, Pol. świt 'dawn': OCS světŭ 'light' (CHD 3.74-79; Puhvel, Kratylos 25 [1980]: 138).

14.44 - MORNING - lukat, lukkatta, etc.; see 14.43.

14.45 — NOON — Adv. UD.HI.A-ti istarna pidi, lit. 'on the day at mid-point'; similarly istarna UD.HI.A-ti and istarni UD.KAM-ti; cf. P 480-81.

'It is mid-day' appears as UD-az taksan tiyazzi, lit. 'the day approaches the mid-point' (see 6.33); cf. Lat. $mer\bar{\iota}di\bar{e}s$, OIr. $med\acute{o}n$ lái, OE middæg, Gk. μεσημβοία, etc., and esp. Latv. dienasvidus 'day's middle' (DSS 996).

14.46 - EVENING - See 'night', 14.42.

14.47 — TODAY — Hittite forms two compounds of demonstrative pron. + *siwat(t)*- 'day'. With the oblique stem *ked*- of *ki*- 'this' is *kedani siwatti*, matching Gk. σήμερον, Lith. *šiañdie(n)*, OCS *dĭnĭsĭ*, NHG *heute*, Goth. *himma daga*. Hitt. *anna-*, *ani*- 'that' < IE **ono*- + (suffixless) loc. gives *anisiwat* and *a-ni*-UD.KAM-*ti* (*KBo* XXIV 126 Vs. 27); cf. Skt. *adyā*, OIr. *indiu* (T 563-64, P 51-52).

14.48 — TOMORROW — *lukat, luk(k)atta,* etc. 'at daybreak' can mean by extension 'on the morrow, (early) the next day', see 14.43 (*CHD* 3.76-77), as in Sp. *mañana,* OE *tō morgen,* Lith. *rytój,* Pol. *jutro,* etc. (*DSS* 999).

parā siwatt-'next day' (cf. Skt. pra-dívi 'forever') and appasiwatt-'after-day, the future' provide clues to the Hittites' conceptions of the directionality of time; cf. Puhvel, Kratylos 25 (1980): 138; JAOS 100 (1980): 168; P 97-98.

- 14.49 YESTERDAY Interestingly enough, there is no attested Hittite expression for 'yesterday' or 'the day before', despite the existence of a common PIE $*(dh)\hat{g}h(y)es$.
- 14.51 HOUR *lammar* denotes a small unit of time, less than a whole day, something from 'hour' to 'moment' (cf. the adverbial use *lammar* 'momentarily, on the instant'), much like e.g. Goth. *hweila* or ON *stund*. It also means 'appointed time' (cf. *lammar handai* 'fix the hour'), and *lammar lammar* is approximately 'every minute' or 'constantly' (cf. *CHD* 3.36-37; Puhvel, *Kratylos* 25 [1980]: 135-36). The form itself is from IE *nómṛ (with dissimilation as in *laman* 'name' [18.28]); cf. Lat. *numerus* 'number, measure, time' (*IEW* 763-64; cf. e.g. Duchesne-Guillemin, *TPhS* 1946: 85).
- 14.52 MINUTE, SECOND In addition to *lammar* 'moment, minute; hour' (14.51), Hitt. had *pantala* to indicate a very short interval or instant of time, or perhaps 'Zeitpunkt' vs. a measurable time-span. To derive this from *pant*-, part. of *pai* 'go' (as N. Van Brock, *RHA* 20 [1962]: 92; Oettinger, *Stammb*. 392) is unconvincing. Also to be considered is a connection with Lat. *pend* 'hang (on scales, weigh)', comparing *mōmentum* 'decisive movement, dipping of scales' (P s.v.).

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- 14.71 MONTH The general term is the same as that for 'moon', *arma* (1.53), Sum. ITU. Lyc. *rm̃mazata* 'monthly prestation (?)' probably belongs here, but Lyd. *ora* 'month' (Gusmani, *Lyd. Wb.* 61-62, 178) is not cognate (cf. P 153).
- 14.72 NAMES OF THE MONTHS The names of several months are attested, but only ideographically: ITUBÁR.ZAG.GAR (the 'first month' of the year in spring, Akk. *Nisannu* [*Alimenta* 61]), ITUŠU.NUMUN.NA, ITUNE.NE.GAR, ITUKIN.DINANNA, ITUDU₆.KÙ (*EHGl.* 59).
- 14.73 YEAR witt- (MU[.KAM]) attests the PIE root noun *wet-, found peripherally in Skt. par-út 'last year', Gk. πέουσι, and extended to an s-stem in ἔτος, Lat. vetus, Alb. vit, vjet, etc. (Gusmani, Lessico 22). The variant wettant- may contain a nuance something like that of Fr. année vs. an; cf. also H. gem-, gimmant-'winter', hamesha-, hameshant-'spring', zena-, zenant-'autumn'.
- 14.74 WINTER Gk. χειμών, Skt. hemantá- are matched by H. gimmant- (ŠE₁₂, $KUṢṢ\bar{I}$), with a short form gem- corresponding to Avest. zyam-, Lat. hiems, OIr. gem-red, Lith. žiemà, OCS zima, etc. (HWb. 109).

'To spend the winter', referring to troops, was OHitt. denom. *gemiya-*, classical *gimmandariya-* (*Alimenta* 13, 50).

14.75 — SPRING — hamesh(a)-, hameshant- (also hameskant-; ideogr. Ú.BURU₇, TE-ŠI = Akk. $d\bar{\imath}$ šu) has steadfastly resisted all attempts at explication. Connection with Gk. $\check{\epsilon}\alpha\varrho$, Lat. $v\bar{e}r$, Skt. $vasant\acute{a}$ -, etc. (e.g. Pedersen, Hitt. 197) requires a reconstruction on the lines of *hmesh- η - < * $H_1wes(H_1)$ -r-, with questionable shift of -w-to -m-. Phonetic difficulties are only multiplied by the assumption

of a *hant-wesha- (Goetze, Lg. 27 [1951]: 469-71), and while Hoffner (Alimenta 15) adduces Akk. $p\bar{a}n$ šattim in support of the prefix *hant-, his own suggestion *hant-miyasha- fr. mai-, miya- 'grow' does not escape them. Comparison with Gk. $\alpha\mu\alpha\omega$, Lat. $met\bar{o}$, OHG $m\bar{a}en$ 'harvest, mow' (e.g. Sturtevant, Lg. 4 [1928]: 163; Benveniste, Origines 157), if correct, would make this month equivalent to the harvest season, BURU_x (contrast Alimenta 15-16), indicating a three-season system of autumn, winter, and planting/harvest. See T 143-44.

14.76 — SUMMER — The summer season was designated with the sumerogram for 'harvest', BURU_x-a- (cf. *Alimenta* 24-30); see 14.75.

14.77 — AUTUMN — *zena-, zenant-,* cf. IE **sen-* 'grow old' (Benveniste, *BSL* 50 [1954]: 33-34) or IE **es-en-,* **os-en-* 'harvesttime' (Russ. *ósen'*, etc.; *IEW* 343) (Puhvel, p.c.).

14.78 — SEASON — *mehur* 'time', 14.11.

SENSE PERCEPTION

15.11 — PERCEIVE — The underlying meaning of Hitt. *istanh*- < IE **stem-H*₁- is 'perceive with the senses', as shown by its specialization in several different directions: cf. *istanh*- 'taste', Gk. $\sigma \tau \acute{o} \mu \alpha$ 'mouth', etc. vs. H. *istaman(a)*- 'ear' and IGI.HI.A-*as istamassuwar* 'eyesight' (see 4.22).

The nearest thing to an Anatolian terminology for the physical senses may be found in such designations as *DIstamanassas* and *DSakuwassas*, deities of hearing and vision (P 459).

- 15.25 FRAGRANT Probably *sanezzi-* 'sweet', 15.35 (*HWb*. 181).
- 15.31 TASTE The only quotable Hitt. form is *ista*(*n*)*h*-, used solely in the "subjective" sense, and seemingly more that of NHG *kosten* than *schmecken* (P 463-64), and ^{SAL}*istahatalli* 'taster'. For etym. see 4.22 and T 420-21.
- 15.35 SWEET A suffix *-tyo- seems assured for sanezzi-, sanizzi-, as suggested by Lohmann, IF 51 (1933): 324-26 and EHS 168-169. The identity of the first part depends on the precise meaning; a proposed 'first class, excellent; extraordinary' prompts comparisons with sannapi- 'alone, single' (13.33; cf. EHS 168) or Skt. sanutár, Goth. sundrō, OIr. sain 'apart, separate', Gk. ἄτεϙ, ἄνευ, Lat. sine 'without' (cf. Lohmann, loc. cit.).

maliddu-, adj. from *milit-* 'honey' (5.84); cf. W *melys* (> OIr. *milis*) fr. *mel*, also Skt. *madhurá-* < *madhu-*.

- 15.38 ACID, SOUR Akk. emsu (HWb. 308, Alimenta 197).
- 15.41-15.42 HEAR; LISTEN istamas(s)-, isdammas(s)- 'hear, listen', also 'obey', Luw. tumma(n)tai-, tum(m)anti(ya)- 'hear', are related to the words for 'ear' from a verbal root * $stemH_1$ 'perceive' (see 4.22).
- 15.43 HEARING *istamass(uw)ar*, vbl. noun fr. *istamas-* 'hear', 15.41, also means 'obedience'.
- 15.51 SEE au(s)-, u(wa)- ($AM\bar{A}RU$) is 'see, look, observe, inspect', also 'read'. The mi-conjugation forms with aus- (e.g. 3 sg. pres. auszi) and further iter. uski(ya)- arose from paradigmatic restructuring of an original au-/u- $<*A_2ew$ -/ A_2u -; cognates are Skt. $\acute{a}vati$ 'observe, notice' and $\bar{a}v\acute{s}$, Av. $\bar{a}v\acute{s}$, OCS $jav\check{e}$ 'openly, clearly', Gk. $\grave{\alpha}\~i\omega$ 'perceive', OCS $um\breve{u}$ 'intelligence' (IEW 78; cf T 95-98, P 234-44). Iter. uski- may have been borrowed as Arm. skem 'guard, watch' (Schultheiss, KZ 77 [1961]: 222).
- 15.52 LOOK Besides au(s)-, u(wa)- (15.51) is also used sakuwai- 'to eye, watch (over)', denominative from sakuwa- 'eye' (4.21); cf. Gk. fut. ὄψομαι, Avest. aiwi-akš- 'watch over' < *okw-.

For *suwaya-* 'peer, look out' (*HWb.* 200), Oettinger (*Stammb.* 296-97, 396) posits * swA_2 - $y\acute{e}$ -, root-connection?

15.53 — SIGHT — uwatar, vbl. abstract fr. au(s)-, uwa- 'see', 15.51.

15.55 — SHOW — Comparison of *tekkussai-, tekkus(sa)nu-* 'show, present' with Lat. *dīcō*, Skt. *diśáti*, etc. < IE **deyk̂-* 'point, show' (*HWb*. 220) is unconvincingly defended (*Stammb*. 354-55) by calling it an *-us-*stem and comparing *nakkussiya-* 'be unclean' (< 'stigmatized'). A more cogent approach compares Avest. *daxš-* 'teach', *daxšta-* 'sign, characteristic' (Goetze, *Lg.* 27 [1951]: 471; *AI* 263).

15.56 — SHINE — The basic IE *lewk- (Lat. lūcēre, OE leohtan, Skt. roc-, ruc-, etc.) is reflected also in H. luk(k)- 'grow bright' and especially the reduplicated derivs. lalukki- 'be luminous' (cf. lalukkima- 'source of light', 1.61), lalukkes- and lalukkesnu- 'shine, glow, gleam', etc. (CHD 3.28-30, 74-76). Cf. Knobloch, Kratylos 4 (1959): 38.

misriwess- (fact. *misriwahh*-), fr. participial adj. *misriwant*-'shining' (*Stammb*. 241 and n. 5), may be from an IE **meys*-'glimmer, shimmer' (*IEW* 714; cf. Skt. *miṣáti* 'open one's eyes', LG *mīs* 'cloudy, rainy weather', possibly ON *mistr*, OE *mist* 'fog, mist') + -*ri*- (Neumann, *KZ* 75 [1957]: 88).

15.57 — BRIGHT — *lalukkiwant-* and *misriwant-* 'shining'; see 15.56.

asara- and harki- 'white', see 15.64.

15.63 — DARK — The basic term is *dankui-* 'dark, black' (GE₆), cognate with NHG *dunkel*, ON *dokkr* (NE *dank*), etc.; cf. 1.62. Verbal derivs. include intrans. *dankues-*, *dankuiski-*, and trans. *dankunu-*, *dankunai-*.

kappant-, meaning 'dark' when referring to the moon, is best interpreted as 'waning' and derived from *kappi-* 'small', 12.56; cf. Puhvel, *Bi. Or.* 38 (1981): 353 vs. T 489.

15.64 — WHITE — With harki- 'white, bright' (BABBAR) are to be compared Gk. ἀργός, ἀργι-, Skt. árjuna-, Toch. A ārki, B ārkwi, etc. (IE * $A_1r[e]g$ -, IEW 64-65; standard since Sturtevant, Lg. 6 [1930]: 127-28), and also many of the IE words for 'silver' (9.65). Regular derivatives are inch. harkes- 'turn white', caus. harganu- 'whiten'. T 177.

asara-, esara- 'white, bright', referring specifically to strands of wool, has been reconstructed *ays(k)-ro- (with common -ro- color suffix) and compared with OCS iskra 'spark', Lith. άiškus, iškùs, OCS jasnŭ (< *ays[k]-no-) 'clear' < *ays(k)- 'bright, clear' (Puhvel, JAOS 100 [1980]: 167, BHD ... Kerns 239, P 206-7); cf. 17.34.

15.65 − Black − dankui-, see 15.63.

A supposed *hanzana-* 'black' (e.g. Laroche, *RA* 47 [1953]: 41) is dismissed by Puhvel, *BHD* ... *Kerns* 237-40.

15.66 — Red — The Hitt. pronunciation of SA₅, *mida-/midi-*, is probably a Mediterranean culture-word, as shown by the $d \sim l \sim n$ variation in Gk. μίλτος and Lat. *minium* 'red ochre' (Puhvel, *BHD* ... *Kerns* 238).

Adj. *ēsharuil*, *isharuil* (qualifying KUŠ 'hide') refers to the familiar dark red color of blood (4.15), cf. **esharu-*, **isharu-*'bloodiness, blood-color' > denom. *isharwai-*, *isharwiya-* 'to bloody, redden', part. *isharwant-* (P 311-12).

15.67 — BLUE — *antara-* (ZA.GÌN), with frequent color-suffix -*ro-*, belongs with SCr. *modar*, Cz.-Slovak *modrý*, being from **md*(*h*)-*ró-* (V. Machek, *AO* 17.2 [1949]: 131-32). A variant *antarant*-also exists, as do denom. *antariya-*, *antareski-* 'make blue'. P 77-78, T 35.

- 15.68-15.69 GREEN; YELLOW This middle range of the visible spectrum is designated *hahlawant-*, *hahliwant-* (SIG₇[.SIG₇]), *HAZERTI*) from a basic adj. *hahli-/hahla-* (cf. *midi-/mida-* 'red'), connected with *hahhal-* 'greenery, vegetation' (*hahhaluwant-* 'verdant'), of unknown origin (T 121-22).
 - 15.71 − TOUCH − Possibly *salik-*, etym. unknown.
- 15.74 HARD The sense is included in *ukturi-* 'firm, durable', 14.252.
- 15.75 SOFT *miu* (and redupl. *miumiu*-) is approximately 'smooth, soft, mild; supple', etc. (cf. *HWb*. 144, *EHGl*. 82), though Kronasser (*EHS* 121) preferred simply 'smooth'. Etymology unknown.
- 15.76 ROUGH The most generic term is *warhui-* (*HWb*. 245). Etym. unknown—none of the many variations of IE **wer*(*H*)-seems to offer possibilities.

A basic sense 'rough, untreated' developed into 'prickly, sharp; pointed' and also 'unrefined, uncouth' in *dampu*- (and *dampupi*-) according to Puhvel, *AI* 345-48, who revitalizes the comparison (by M. Popko, *JCS* 26 [1974]: 181-82) with OCS *topŭ*, Russ. *tupój* 'blunt, dull, stupid', also originally 'rough, uncouth'.

15.77 — SMOOTH — *alpu-* 'smooth, rounded, dull, blunt' (inch. *alpue*[*s*]- 'become blunt') matches Lith. *alpùs* 'weak', which preserves the original meaning also in the verb *alpti* 'become weak, swoon'; cf. the Hitt. part. *alpant-* 'weakened, swooned', also 'mild' (of cheese). See Puhvel, *Al* 345-48, *Gedenkschrift Kronasser* 181, P 39-41.

miu(miu)-, 15.75.

15.78 − SHARP − *dampu*-, see 15.76.

Skt. tigma-, Av. $ti\gamma ra$ -, etc. < IE *(s)teyg- are cognate with H. $t\bar{e}kan$ 'hoe'; cf. 8.25.

15.79 — BLUNT, DULL — *alpu-*, 15.77. On OCS *topŭ*, Pol. *tepu*, Russ. *tupój*, etc. see 15.76.

15.81 — HEAVY — *nakki*- (DUGUD, Akk. *kabtu*) means 'heavy' and by extension 'difficult' and 'important' (Luw. *nahhuwa*-'consider important'), with corresponding verbal senses in inch. *nakkes*- and fact. *nakkiyahh*- (act. and mpsv.) and the abstr. *nakkiyatar* 'weight, importance' (*HWb*. 148). The source is unidentified, beyond Kronasser's tentative connection (*EHS* 210) with *ninink*- 'raise'.

A more archaic and basic term is *suwaru-*, adj. 'heavy, weighty, mighty' and adv. 'heavily, mightily, greatly', preserved perhaps through Palaic influence and cognate with OE *swær*, NHG *schwer*, Lith. *svarùs* (with matching *u*-stem) 'heavy', *sverti* 'weigh', Goth. *swērs* 'honored', Lat. *sērius* 'grave, serious' (Puhvel, *Bi. Or.* 36 [1979]: 57; *JAOS* 101.1 [1981]: 213-14).

'Heavy; difficult' is also a secondary meaning of *dassu-* 'solid', etc.; 4.81.

- 15.82 LIGHT Hitt. uses *pittalwa(nt)-* 'thin, light'; see 12.65-12.66.
- 15.83 WET, DAMP Though the adj. is masked by the akkadograph *LABKU*, inherited terminology survives in verbs for 'wet, moisten, sprinkle'. *hurnai-*, *hurniya-* (Pal. *huwarninai-*) and *hurnu-* match Gk. $\dot{\varphi}\alpha\dot{\imath}\nu\omega$ 'sprinkle' < IE * $H_{1}wr$ -n-, fr. the root * $H_{1}wer$ seen in Ved. $v\bar{\imath}r$ 'rain', Toch. A $w\bar{\imath}r$, B war, ON vari 'water',

úr 'drizzle', etc. (*IEW* 80-81), and also in H. warsa-, Skt. varṣám 'rain', Gk. ἔρση 'dew' (1.75).

hapai- 'wet, moisten' or similar is likely connected with *hapa-* 'river' (1.36), as T 160.

15.84 — DRY — * A_1 ed- 'dry' (Lat. ador 'far tostum') appears in hat- 'be dry', inch. hates-, caus. hatnu- 'dry up', and hadant(i)- 'dry land, shore' (1.26).

tepsu- (verbs tepsawes-, tepsanu-) is not likely allied with tepu-'small' (EHS 252), but perhaps IE *tep- 'warm'; cf. OIr. tess 'heat' < *teps-tu- (DSS 1077).

Su. HÁD.DU.A.

15.85 — HOT, WARM — $\bar{a}nt$ -, participial adj. of \bar{a} -, ay-, \bar{e} - 'be hot' (inch. ayis-, caus. enu-), from IE *ay-(dh-) 'burn, be hot' and akin to Gk. $\alpha \ddot{\iota} \theta \omega$, Skt. $inddh\bar{e}$ 'kindle', etc., IEW 11 (Sturtevant, Lg. 14 [1938]: 70; T 3-4, P 10-12).

wantai- (and wantes-) 'be hot', also 'be angry', forms wantais 'heat' and wantiwant-, wantemma-, etc. 'lightning' (1.55). Positing a base-meaning 'scorch, dry up (with hot coals)' for the reconstruct IE *wendh-, Carruthers (Lg. 9 [1933]: 158-59) compared OCS uvedati 'wither', Skt. vandhya- 'unfruitful' as well as Gk. ἄνθραξ 'coal, ember' (< *fανθ-ρο-ακ-) and ἄνθρυσκον, ἀνθγίσκος 'wild chervil', also considering OE wundor (originally *'glowing, dazzling object'?).

The synonym *hantai*- (with *handais* 'heat'; *handaisi mehuni* 'in the hot time' = 'during the day') was compared with OIr. *and*-'kindle' by Pedersen (*Hitt.* 48), but may be merely a rhyme-word to *wantai*-.

15.86 — COLD — The adj. ekuna(nt)- (KASU), noun ekunima-, and verbs egai-, ikunes-, ikunahh-, are all from eka- 'ice, frost, cold' < IE *yeg-; 1.77.

15.87 — CLEAN — parkui- (vbl. noun parkuessar, inch. parkues-) reflects IE *bhrH \hat{g} -w(e)i- fr. the root *bherH- \hat{g} -, *bhreH- \hat{g} - 'white, shining' (IEW 139), seen in e.g. Skt. bhr \hat{a} jate 'shine, glimmer', Lith. br \hat{e} ksti 'break (of the day)', Goth. baírhts, ON bjartr, OE beorht, NE bright, etc., and in the name of the birch tree (Sturtevant, Comp. Gr.¹ 122). Similar semantic development can be found in Ital. netto, Fr. net fr. Lat. nitidus 'polished, shining' and possibly OE $cl\bar{e}$ ne: OIr. gel 'bright', Gk. $\gamma\lambda\eta\nu\eta$ 'eyeball'.

halali- is a Luwianism, from a Semitic source as in Akk. ellum 'clean', Hebr. hll 'shine' (Laroche, DLL 38, RHA 23 [1965]: 45; Otten, Bestimmung 110-11; T 126).

suppi-, suppiyant- '(ritually) pure', with vbl. abstract suppiyatar, factitive suppiyahh- (> Arm. šphem 'rub, cleanse', Schultheiss, KZ 77 [1961]: 222); origin unknown.

15.88 — DIRTY — *saknuwant-* 'filthy, (ritually) unclean, befouled' is denom. from *sakkar* 'excrement' (4.66).

iskunant- (referring to stained cloths in GAD.HI.A iskunanta), part. from a verb variously attested as ishuna(hh)-, iskuna(hh)- 'stain, stigmatize, demean', etc. and possibly 'demote', from an original meaning 'make ugly', and thus both a formal and semantic match for Gk. αἰσχόνω 'dishonor, put to shame' < *'make ugly' (Puhvel, AI 373-78 + 417-18; Bi. Or. 38 [1981]: 350-52; Gedenkschrift Kronasser 181, 183; P 426-28).

EMOTION; TEMPERAMENTAL, MORAL, AND AESTHETIC NOTIONS

- 16.11 SOUL, SPIRIT For *istanza(n)* (ZI), a reconstructed IE *s(t)ent-to-, similar to *sent-no- in OHG sin(n) 'sense, mind', Lith. sintéti 'think' and *sent-tu- in Lat. sensus (IEW 908), provides the best available etymology (P 471), a comparison compelling enough to overcome the phonological peculiarity of *st- vs. *s- (P 471) and supersede previous suggestions (as in T 431-32). The range of meanings is wide; besides 'soul, spirit; mind; will', i.e. the seat of both emotions and intellect, it is also used in pl. for 'living things, persons' (like Russ. dúši and NE souls).
- 16.14 CARE (sb.) Perhaps the closest Hitt. equivalent to the notion of 'serious mental attention, concern' is the verb hantiyai-, from adv. hanti 'firstly, especially' or the like (cf. hantezziya- 'first', 13.34 and hant- 'forehead', 4.205), with a base-meaning 'grant priority, attach importance to'.
- 16.18 GOOD FORTUNE 'Good fortune' was for the Hittites the natural by-product of the 'favor of the gods' (or the king!), siunas assul (SILIM-ul ŠA DINGIR-LIM), with assul(a)- 'favor, friendship; greetings; well-being' < 'good(ness), well-being, wealth' < ass-, assiya- 'be favored, dear, good' (16.71; cf. P 202-4). A more generic term for 'fortune, fate, luck', good or bad, has not been found, and is not reflected in the Hitt. terminology for (good

vs. bad) luck as it is e.g. in NE (*good* vs. *mis-*)*fortune* (cf. *DSS* 1096-99).

- 16.19 MISFORTUNE In this meaning are found several derivatives of a single basic root, the primary form being *arpa-* 'bad luck, misfortune, setback' (denom. *arpai-* 'be unlucky, turn out badly'), with parallel **arpu-* seen in *arpuwai-* 'be unlucky, troublesome, or hazardous', Luw. arpuwan(n)i- 'unlucky', and further related forms Hier. MOUNT Arputawanas 'living on Mt. Arpuwant', epithet of a storm-god, and possibly Lyc. *erbbe* 'defeat' (see P 168-69). The underlying *arp-* points to an IE * $H_2(e)rp-$, with the alternate form * H_2rep- found in Ved. *rápas-* 'defect, injury', *raphitá-* 'overcome, wretched' (Couvreur, *Hett.* H_1 105); the question of a further link with IE *rep- 'snatch', Lat. rapere (IEW 865) remains open (cf. *KEWA* 3.41 vs. T 65-66).
- 16.21 PLEASE The sense of 'be pleasing' is central to H. ass-, assiya-, and especially caus. as(sa)nu-, assiyanu-, and is also expressed as assus es- 'be pleasing, be favorable'; cf. P 189-204 and 16.71 below.
- 16.22 JoY *dusgaratt* and *dusgaratar*, verbal abstracts fr. *duski* 'be happy' < *t(e)us-ski-, cognate with Skt. tusyati 'be delighted with' < IE *t(e)us- (Petersen, AO 9 [1937]: 211; Sommer, HH 73) but separate from tusynim 'quietly', Russ. tusit' 'extinguish', Lith. tausytis 'die down' (of wind), OSw. thyster 'silent', OIr. tuae 'silence', MW taw 'be quiet!', H. tuhus(s)iya- 'look on quietly' < * tuH_1 -s- (Stammb. 326).
- 16.23 JOYFUL, GLAD duskarawant-, fr. dusgaratar 'joy', 16.22.

- 16.24 HAPPY; HAPPINESS The modern Engl. senses are rendered by H. *duskarawant* and *dusgaratar* (16.22-16.23), while the older meaning 'fortunate, favored' is found in such Hitt. forms as assiyant-, as(s)anuwant-, asnu(w)ant- 'dear (to the gods)'; cf. 16.18, 16.71.
- 16.25 Laugh; Smile hahhars- is clearly imitative in origin, and may be ultimately related to Gk. $\kappa\alpha\chi\dot{\alpha}\zeta\omega$, Skt. kákhati, Lat. cachinnō, OHG kachazzen (IEW 634; cf. T 122-23 and refs.). The caus. part. hahharsanant- 'scoundrel; bad' (EHS 258, 395, 561) apparently prompts the gloss 'höhnisch lachen' (HDW 136), cf. classical Gk. $\gamma\epsilon\lambda\dot{\alpha}\omega$ > NGk. $\gamma\epsilon\lambda\dot{\omega}$ 'cheat', via 'laugh at, deride, despise' (DSS 1106).
- 16.26 PLAY The source of *hinganiya-*, iter. *hinganiski-*, vbl. noun *hinganiyawar* 'play' (Akk. *mēlultu*) is uncertain. A connection with *henkan* 'death', via 'fated death' (cf. Benveniste, *Origines* 155; Puhvel, *AI* 203-4) > 'allotment' > 'property' > 'enjoyment' (R. Anttila, *Die Sprache* 18 [1972]: 43, comparing NHG *genug* : *Vergnügen*) is far-fetched; slightly less so is derivation from *hink*-'bow, show reverence', caus. *hinganu-* (9.14; T 251).
- 16.27 LOVE genzu-'love, friendship', denom. genzuwai-'love, be friendly to', metonymically from genzu-'lap, womb' (4.47).

The vbl. noun assiyatar < assiya- 'be dear', etc. (16.71) refers to conjugal love and related meanings, as in $\check{S}A^{\text{L}\check{U}}MUDI$ D(A)M $\bar{a}ssiyatar$ 'love of husband (and) wife' (P 190-91); cf. also $\bar{a}ssiyauwant$ - 'lover'.

ON *unna* and *ást* are probably to be compared with H. *ass-*, 16.71.

- 16.28 DEAR This is the basic sense of assu-, assiyant-'good, favored', etc.; see 16.71 and Puhvel, KZ 94 (1980): 65-70; P 189-206.
- 16.29 KISS kuwas-, iter. kuwaski- has been connected for some time (since Sommer, OLZ 33 [1930]: 755 and Benveniste, BSL 33 [1932]: 139; cf. DSS 1112) with ON kyssa, OE cyssan, etc. and Gk. κυνέω, (Hom.) aor. κύσ(σ)αι, though the details and time-depth of the relationships are disputed; cf. discussions in T 695-96, Strunk, IF 78 (1973): 73-74.
- 16.31 PAIN, SUFFERING a(y)i- is primarily an interjection, concretized to mean 'pain', and appears especially in the rhyming phrase *ayin wayin* 'pain and woe' or the like; cf. Akk. ai (P 13-14).
- maz(z)-, manz-, Luw. mazzallasa- 'endure, withstand, tolerate, suffer, condone', of unclear origin (*CHD* 3.213, 215). Laroche (*RHA* 23 [1965]: 51-52) compared Goth. ga-motjan, OE $m\bar{e}tan$ 'meet' (IE *meHd-), and for meaning Gk. απανταω 'meet, oppose; attempt'.
- 16.32 GRIEF, SORROW uwai-, a frequent rhyming partner of ai-, a(y)i- (16.31), is plausibly likewise an original expressive interjection, like Lat. uae, Goth. wai, etc. (HWb. 239).

hazziyassar, vbl. noun 'affliction' from *hazziya-* 'strike, afflict' (*EHS* 289), from *hattai-* 'chop, strike' (9.22), probably * A_1 ét-ye-(Oettinger, *MSS* 34 [1976]: 125; T 231-32).

Also here is Luw. *luppasti-, lumpasti-* (*DLL* 64), connected with Gk. $\lambda \acute{o}\pi \eta$ by Hoffner (*EHGl.* 76-77, n. 148; *JNES* 27 [1968]: 65, n. 31).

A possible ideographic reading is DIRIG (Akk. *ašuštu*); cf. *EHGl.* 77, n. 149).

- 16.33 Anxiety *pittuliya* is explained as a noun corresponding to denominative *pittuliya* 'constrict, cramp, make anxious' < *pittula* 'noose' from a **pittul*-, and compared with Goth. *faþa* 'fence', IE **pet*-(*A*-), **pot*-(*A*-) by Puhvel (*Hethitisch und Indogermanisch* 211 = AI 358), rejecting a tie-in with OE *fetel* 'belt', OHG *fezzil* 'fetter', Lat. *pedica* 'shackle' (by Duchesne-Guillemin, *TPhS* 1946: 83). The semantics parallel Lat. *anxius* 'anxious', *angere* 'throttle, torment', *angustus* 'narrow'; OE *angnes*, OHG *angust*: OE *ange*, OHG *angi* 'narrow'; SCr. *tjeskoba*: *tijesan* 'narrow, tight'; Czech úzkost: úzký 'id.' (DSS 1121-22).
- 16.35 PITY Avest. *marždika-*, *mərəždika-* 'pity; compassionate' (Skt. *mṛḍīka-* 'favor'), *mərəžda-* 'pardon' might be considered as possible cognates of Hitt. *maz(z)-*, Luw. *mazzallasa-* 'tolerate, endure' (16.31); cf. e.g. Cz. *útrpnost* 'pity', (*u*)*trpĕti* 'suffer, endure' and Du. *medelijden*, NHG *mitleiden* : *leiden* 'suffer'.
- 16.36 SAD Perhaps closest to the meaning is *pittuliyawant*-'depressed, oppressed, anxious', part. of *pittuliya* 'make anxious, oppress' (16.33).
- (anda) impai- 'be depressed, be burdened' is denom. from (a)impa- 'weight, burden', comparable with Gk. ἶπος 'weight', fut. ἴψομαι 'oppress, vex, harm', of unknown ultimate origin (P 14-15).
 - Cf. also the terms for 'sorrow, grief', 16.32.
- 16.37 CRY, WEEP Denom. ishahru(w)ai- fr. ishahru- 'tear(s), weeping' (16.38), as Gk. δακρύω, Lat. lacrimare.
 - Cf. also wāi-, wiyai-, wiwiya-, 18.13.
- 16.38 TEAR Attempts to link *ishahru-* 'tear(s), weeping' with IE *dakru-, *draku- require positing a shift *-k- > -h- (e.g. Stammb. 367) and reconstructions with initial-variation *s- A_1kru -

(Hitt. *ishahru-*), **d-A*₁k̂ru- (Gk. δάκου, OLat. *dacruma*, Goth. *tagr*, OIr. *dér*, W. *dagr*, etc.), * \emptyset -A₁k̂ru- (Skt. *aśru-*, Lith. *ašarà*, Toch. A *ākär*, etc.), the latter perhaps ultimately related to **ak̂ri-*, **ak̂ro-* 'sharp, pointed', i.e. 'bitter' (P 390-94).

16.41 — HATE — A *kappila- 'hatred' or 'rage' seems to underlie kappilahh- 'be furious', kappilai- 'incite, instigate', with kappilalli- 'hated' (Hier. kapilali- 'enemy, inimical'). Probably to be compared with Skt. śápati 'curse' (Eichner, Hethitisch und Indogermanisch 61), pace T 493 ("semantisch bedenklich") and Čop, Ling. 2 (1956): 19.

Something like 'hatefulness' resides in *pukkanumar*, from the caus. *pukkanu*- to *pukk*- 'be hated' (*HDW* 65). Petersen (*AO* 9 [1937]: 208) derived it from an originally expressive * $p\bar{u}$ -(k-) and compared Skt. $p\bar{u}yati$ 'stink', Gk. $\pi \acute{v}\theta o\mu \alpha \iota$ 'become rotten', Skt. $p\acute{u}tih$, Lat. $p\bar{u}tidus$, Goth. $f\bar{u}ls$ 'rotten, foul'.

sawar 'anger; hatred', 16.42.

Lat. odium is comparable with H. hatuka-'terrible', 16.58.

16.42 — ANGER — kartimmiyatt- (TUKU[-TUKU]-att), from kartimmiya- 'be angry', is patently related to ker, kard- 'heart' (4.44), in a relationship seen in many languages; cf. Russ. serdít'cja 'be angry': sérdce, Lith. širdýtis: širdìs, Alb. zëmëronem 'anger': zëmëre, Arm. sart-num 'be angered': sirt, Akk. libbātu 'rage': libbu (Pedersen, Hitt. 40; DSS 1137; T 524-26). The form is generally thought to be denom. to a *kartimma-, a midd. part. *karti-mna- of kard- (thus Pedersen and EHS 179) or deverb. from a kartai- or kartiya- (P s.v.). Another possibility might be *karti + miya 'grow in the heart'; cf. OHG belgan 'swell', refl. 'be angry', OE, OS belgan 'be angry': OIr. bolgaim 'I swell'.

sawar 'anger, ill will' is from sai- 'be angry at, resent', from IE $*séA_2-y-$, $*sA_2-éy-$, compared with Lat. saevus 'raging', Latv. sievs

'biting, harsh', ON sárr 'painful', OIr. sáeth 'affliction' (P s.v.; cf. Juret, Vocabulaire 52; Čop, Ling. 10 [1970]: 100-1; Eichner, Hethitisch und Indogermanisch 61).

karpi- 'anger, rage', karpes- 'get angry', karpiya- 'be angry' is compared with Skt. $k\acute{r}pate$ 'lament' or Gk. καοπάλιμος 'swift, impetuous' by Puhvel, P s.v.

harsallant- 'angry' (Hier. ANGER-i- 'be angry'), etym. unknown.

16.43 - RAGE, FURY — The only attested noun is *karpi-'*anger, rage'; see 16.42.

argatiya- is in origin a compound meaning 'stoop to rage, come to violence', from *tiya*- 'step, go' (10.45) plus a dat.-loc. *arga 'frenzy, passion', related to ark- 'mount, copulate' (4.67) and hence cognate with Skt. rágha- 'anger, rage', rghāyáte 'rage, be impetuous', etc. (P 147-48).

lelaniya- 'become furious, become enraged' (CHD 3.58-59) is unexplained.

16.44 — ENVY, JEALOUSY — The etymon of Skt. $\bar{\imath}rsy\bar{a}$ -, Av. arasia-, araska- is found in H. arsaniya- 'envy, begrudge; be angry at', arsanant- 'angry, envious', IE * $E_1(e)rE_1$ -s-; also cognate are OE eorsian 'wish ill', yrre 'angry', Hom $\alpha qeu \eta$ 'threats' (= Skt. $irasy\bar{a}$ 'ill will'), Arm. $he\dot{r}$ 'anger, envy', Toch. A rse, B rser 'hatred' (Benveniste, BSL 33 [1932]: 139; cf. P 172-73; T 67-68).

With Goth. *aljan 'ζῆλος'* Puhvel compares *halwammar 'zeal'* (P s.v.). Cf. Eichner, *Die Sprache* 24 (1978): 69.

16.45 — SHAME — *tepnumar*, vbl. noun < *tepnu-* 'humiliate, make small', from *tepu-* 'small' (12.56).

kusduwai- 'disdain, scorn; slander' is compared with Avest. gaoš- 'hear' and derived from an IE *ghéws-tu- by Eichner

(*Hethitisch und Indogermanisch* 55, n. 42), dubiously positing a meaning roughly '(bad) reputation'; besides the semantic difficulty, Tischler (T 675) notes the problematically unusual *-tu-suffix*.

The basic meaning of Gk. αἰσχόνη is 'ugliness', αἰσχόνω 'make ugly', cf. 15.88.

- 16.46 HONOR Terms for 'to honor' in Hitt. are from verbs meaning 'know', in the sense 'recognize (the authority of)', *sak*-and *kanes* (17.17). A common locution, e.g. in treaties, is (*assuli*) *pahs* 'protect (in friendship)', applying reciprocally to lords and vasals, as well as to oaths.
- 16.48 PROUD sallakartant-, part. of denom. sallakartai- to sallakarta- 'arrogance, pride' in a negative and harmful sense, from salli- 'big' (12.55) + kard 'heart' (4.44) (details of formation unclear), like e.g. Goth. haúhhaírts, OE hēahheort 'pride', with negative connotations as in Goth. mikilþūhts ὑπερήφανος', OE ofer-mōdig, NHG hochmütig. Cf. Güterbock, Corolla Linguistica 65-68; Gusmani, Studi ... V. Pisani 514.
- 16.51 DARE The source of *handalliya* is most probably *hant* 'front, fore' (cf. *hantezzi[ya]* 'first', 13.34), via an adj. **handalli* 'foremost' and meaning 'go first, be foremost' (T 154-55); cf. ON *frami* 'boldness, courage' < *fram* 'forward' < **pro-mo*-.
- maz(z)- 'tolerate, endure, suffer', etc. (16.31) develops an offshoot in this direction, via 'withstand' (*CHD* 3.214); cf. Gk. τολμάω 'bear' beside τλῆναι 'bear, suffer, undergo' : Lat. $toll\bar{o}$, Goth. pulan.
- 16.52 BRAVE *tarhuili-* 'strong, mighty, brave, masculine', etc.; 4.81.

An adjectival sense 'strong, sturdy, brave' underlies *hastali* 'hero', fr. *hastai*- 'bone'; cf. 4.81 and 4.16.

16.53 — FEAR, FRIGHT — With a meaning distinction perhaps resembling that of Gk. δεῖμα 'fear, terror' vs. φόβος 'fright', Hitt. has the pair *nahsarat*- and *weritema*- (cf. *AI* 379-82). For the former, a vbl. noun *nahsar*- produced the further nominal deriv. *nahsarat*- along with *nahsariya*- 'to fear', and arose in turn from *nahh*- 'be afraid, be timid', with both root * neA_1 - and suffix -sr-comparable with MIr. $n\acute{a}r$ 'modest' (* neA_1 -sr-o-), $n\acute{a}ire$ 'shame, modesty' (Pedersen, *Hitt*. 187; Oettinger, *Stammb*. 411-12).

weritema- 'fright', from weritē- 'be frightened', probably formed of elements corresponding to Lat. vereor 'watch fearfully', OE warian 'beware', Gk. οὖοος 'watcher, lookout', etc. (widely attested IE *wer-, IEW 1164; Benveniste, BSL 33 [1932]: 138) plus IE *dheE₁- 'put, set, place' (12.12; see Eichner, Flexion und Wortbildung 88).

Luwoid kuwayati-, vbl. noun from kuwaya- 'be afraid', has been linked with IE *dwey- (Gk. δείδω, δεῖμα 'fear', Avest. $dva\bar{e}\theta\bar{a}$ 'threat', IEW 227), via a "Lycianism" *dwey- (or *dwoy-; cf. δείδω < *δέ-δϝοι-α) > *kwai-1 (Laroche, DLL 78-79, BSL 62 [1967]: 50); T 685-86.

hatugatar 'terror' is from hatuk- 'be terrible'; cf. hatuka- 'terrible, fearsome', hatukes- 'become terrible', hatuganu- 'terrify'. The verb matches Hom. ὀδύσσασθαι 'be wroth' and Crim. Goth. atochta 'malum', and is analyzed by Puhvel (Bi. Or. 37 [1980]: 203) as IE * $A^{w_2}e^{-1}$ (Lat. odium, ōdī, Arm. ateam 'hate', OE atol 'fierce, terrible', etc.; IEW 773) + * $A^{w_2}e^{-1}$ (grow' (* $A^{e}w^{-1}e^{-1}$), thus 'grow in terror'; cf.

^{1.} A parallel to this sound-shift is NHG *Quark* < MHG *twarc, zwarc* (Russ. *tvorog*); NHG *quer* < MHG *twër* (Swed. *tvär*).

- Götze Pedersen, MS 50-51; Tischler, KZ 92 (1978): 108-11, T 227-29.
 - 16.54 DANGER harga, primarily 'ruin, destruction', 4.75.
- 16.61 WILL, WISH *wek-* 'wish, ask for, desire' is cognate with Skt. *vaś-* and Gk. ἑκών 'willing' (Sturtevant, *Comp. Gr.*¹ 89), providing an Indo-Greco-Anatolian isogloss. Intensive reduplication yields *wewakk-* 'demand; long for' (*HWb.* 254).
- 16.62 Desire An early connection of *ilaliya* with Gk. $\lambda\iota\lambda\alpha$ ίομαι (Juret, *Vocabulaire* 22) is phonetically insupportable (cf. T 354); some native expressive origin must be assumed—P 356-57 points out Gk. ἐλελίζω, ἀλαλάζω, ὀλολύζω. It appears commonly in personal names; cf. *Ilalia-, Ilaliashu-*, divine names ^D*Ilaliyandus*, Pal. Dilaliyantikes, perhaps Lyc. *Eliyāna*, and possibly as Hier. *alana* 'covet' (F. Steinherr, *MSS* 32 [1974]: 108).

wewakk-, 16.61.

16.65 — FAITHFUL — Perhaps the nearest equivalent of Engl. 'faithful' is *handant-* 'ordered, true, straight, upright', etc. (16.73); cf. the vbl. abstract *handat-* 'fidelity, loyalty' (T 154).

alsant- 'allied, loyal', part. of als- 'owe fealty, give allegiance', derived from ${}^*A_2\acute{e}l$ -s- or ${}^*H_2\acute{o}l$ -s- and compared with Ved. $r\acute{a}sn\ddot{a}$ 'girdle' (cf. H. ishanittarātar '[marriage] alliance' < ishai- 'bind', 2.81, 9.16) in Puhvel, IAOS 97 (1977): 599 and P 41.

A meaning 'be loyal' is suggested for anda aus-, lit. 'look inward', vs. damedani aus- 'look towards another, be disloyal' by Hoffner (EHGl. 56, n. 101), noting Akk. pānī dagālu 'be obedient, respectful'. A similar notion resides in sakuwassara- (sakuwa- 'eye', 4.21) 'full, complete, right, righteous, legal, loyal', sakuwassarit ZI-it 'in loyaler Gesinnung' (HWb. 178).

16.66 — True — asanza-, part. of es- 'be', lit. 'existing, real', equivalent to Skt. satyá-, Goth. sunjis, ON sannr, OE sōð, ME (for)sooth, Gk. ἐτεός 'true' (DSS 1169, P 289).

karsi- 'honest, frank, uninhibited', possibly from kars- 'cut', 9.22 (Sturtevant, Lg. 10 [1934]: 267; Laroche, RHA 28 [1970]: 54). handant-, cf. 16.73.

16.67 — LIE (sb.) — *marsatar* 'fraud, treachery, deception, deceit, dishonesty' (*CHD* 3.199) is from *marsa(nt)*- 'unholy; false, treacherous, dangerous' or the like (cf. Laroche, *RHA* 10 [1949-50]: 23-25; Goetze, *JCS* 13 [1959]: 68); cf. also verbal *marsahh*- 'make false', *marses*- 'become false', *marsai*- 'be false'. The adj. can be compared with Skt. adv. *mṛṣā*- 'falsely', as in T. Burrow, *Archivum Linguisticum* 16 (1964): 76 (Watkins [*TPS* 1971: 74, n. 25] also connected *mṛṣyate* 'forget', explicitly kept apart by Burrow, thus tying in Goth. *marzjan* 'anger', OE *mierran* 'disturb', Lith. *maṛṣās* 'forgetting', Arm. *moṛanem*, Toch. *märs*- 'forget').

16.68 — DECEIT — marsatar, 16.67.

astayarat(t)ar is interpreted 'deceit, guile, trickery, fraudulence' in P 219, linking it with marsastarri- 'religious fraud' and supporting Neumann's comparison (in T 86) with Lat. astus 'craftiness, cunning, guile', astūtus 'crafty, tricky'.

Luw. kukupalatar is most probably an abstract formed on an agent noun *kukupalla- (Čop, Die Sprache 3 [1957]: 147-48; Oettinger, Stammb. 204; T 618). For the basic verb (here reduplicated) kup- 'plan, plot' three etymologies have been proposed, all formally plausible but none semantically compelling. Best may be an IE *kewb-, *kub- seen in Germanic, e.g. OE hopa 'hope', hopian 'hope, expect, trust' (Čop, Die Sprache 3 [1956]: 146-47); also of interest are IE *kw-ep-, *ku-p- in Lat. cupiō 'desire', OIr.

ad-cobra 'wish', milchobor 'bear', Skt. kupyati 'be agitated' (e.g. Pedersen, AO 9 [1937]: 205) and IE *ghewb(h)-, *ghub(h)-, cf. Lith. gaubiù 'cover up', OCS gunoti 'fold' (Trautmann, Baltisch-Slavisches Wb. 100-1). T 638-40.

appali dai- and denom. appalai- 'set a trap, ensnare' (appala- 'trap' 3.79), also 'trick, mislead, deceive' (P 95).

16.69 — FORGIVE — haratar lā- 'release, let go an offense' (haratar 'fault, offense; guilt', 16.76; lā- 'release', 11.34), semantically like terms for 'forgive' in other languages; cf. Lith. atléisti < léisti 'let go', Goth. af-lētan, Lat. dī-, re-mittere, Gk. ἀφίημι. parkunu-, 21.34.

16.71 — GOOD — Friedrich's connection of assu- with Skt. su-, Av. hu-, OCS sŭ-, OIr. so-, Gk. $\varepsilon \tilde{v} < IE *(e)s\hat{u}$ - (IF 41 [1923]: 370-72; cited in DSS 1176) should now be retired. The consistent -ss- and base-meaning of the primary verb ass-, assiya- 'be favored, be dear' (parts. assuwant-, assiyant-) support instead a derivation from IE *ans-, η s- (cf. dassu- < *d η su- [4.81]) and comparison with Goth. ansts 'grace, favor', ON ást 'love, affection', unna, OE, OHG unnan 'grant, bestow, be ungrudging' (IEW 47; cf. G. Jucquois, RHA 22 [1964]: 89-91; Puhvel, KZ 94 [1980]: 65-70; P 189-206). assu-, assuwant-, assiyant- is centrally 'favored, dear; agreeable; good' (like Lat. bonus < *duenos vs. beātus < *dweyā-, Ved. dúvas- 'favor') (SIG5), vs. 'inherently good, sound' (DÙG.GA) in the obscure lazz(a)i-, denom. lazziya- 'set straight; be good; recover', etc. (CHD 3.50-53).

Skt. vásu-, Av. vaŋhu-, vohu-, Gmc. Wisi-[Gothae], Gaul. [Bello-, Sigo]-vesus 'good', OIr. *feb 'excellence' (dat. sg. feib < *weswāi), W. gwych 'fine, splendid', etc., on the other hand, are cognate with Pal. wasu- 'well', Luw. wasu-, Hier. wasu 'well-being', similar in meaning to Hitt. assu- but etymologically separate. Cf. Puhvel's

refinement of this etymology (*KZ* 94 [1980]: 69-70), comparing Ved. *vas-* 'shine', Lith. *aũšta* 'it dawns', OCS *veselŭ* 'joyous' fr. an IE **Aw-és-*, **Aéw-s-* 'shine, be radiant' (cf. *KEWA* 3.173-74; Kammenhuber, *KZ* 77 [1961]: 169-70, n. 3).

16.72 — BAD — *idalu*- (HUL) (Luw. *adduwali*-) forms numerous derivatives, e.g. nouns *idalawant*-, Luw. *adduwal*-, abstr. Hitt. *idalawatar*, Luw. *adduwalahit*, Hier. *atuwati*-, *aduwari*-, inch. *idalawes*-, fact. *idalawahh*-. The basic Hitt. and Luw. forms provide for a reconstruction (Laroche, *RHA* 23 [1965]: 41-42) from PAnat. **edwal* (with -*d*- < *-*dw*- as in *ta*- 'two' < **dwo*-), IE heteroclitic **edwl* vs. **edwn*-, **edun*- in Gk. ὀδύναι 'pain, distress', Arm. *erkn*, OIr. *idain* '(birth) pangs', and further analysis **ed-wl* 'eating, gnawing (pain, trouble)' < **ed*- 'eat' (P 493).

huwappa- 'bad', cf. huwap(p)-, hup(p)- 'treat badly', 11.28. marsa- 'false, treacherous', etc., 16.67.

hahharsanant-, possibly 'contemptuous' or the like, fr. *hahhars-* 'laugh (derisively?)', 16.25.

kallar(a)- 'inauspicious, monstrous', 'bad' in the sense of 'nefarious' (NU.SIG₅), cf. kallaratar 'unfavorable oracle', may be related to OIr. galar 'disease' (Pedersen, Hitt. 29, 46), with ON galli 'defect, flaw', Lith. žalà 'damage, destruction', etc. (IEW 411; cf. T 464 and refs.). Other suggestions have been Gk. κηλέω 'charm, bewitch', Lat. calvor 'scheme, deceive', Goth. hōlōn 'defame, slander' (Goetze, Lg. 30 [1954]: 403) and Lat. clādēs 'destruction' (Bernabé P., Revista española de lingüística 3 [1973]: 436). A later survival is Lesb. Γέλλω, a female evil spirit; cf. Hitt. kallar uttar 'evil spirit' and the cognate NHG bösewicht.

 $16.73 - \text{Right} - \text{The negative } \bar{\textit{UL}} \; \bar{\textit{ara}} \; (\textit{natta \bar{\textit{ara}}}) \; '\text{not right,}$ impermissible, socially unacceptable' contains ara-, $\bar{\textit{ara-}} \; '\text{proper,}$ acceptable, correct', seen also in nominal $\textit{ara-} \; '\text{comrade,}$ peer,

friend' and aral(l)ai- 'join, associate', with further arawa- 'free' (Lyc. arawā), arawes- 'become free', arawahh- 'make free', etc. It belongs with Ved. rtá- 'right, suitable', rtám '(social) order' (Av. arata-), arí-, aryá- 'righteous, loyal', ārya-, Av. airyō 'belonging to the community, Aryan', etc.; cf. Puhvel, Études mithriaques (Leiden, 1978), p. 336-41 = AI 323-289, comparing OIr. aire 'noble, free', Eremon, Gaul. Ariomanus, with further discussion. The root is thus IE *ar- 'fit, arrange' (Gk. ἀραρίσκω; Ved. áram, Av. aram 'fittingly', etc.; IEW 55-61), with very wide morphological and semantic ramifications. Cf. Laroche, Hommages à Georges Dumézil 124-28; Benveniste, HIE 108-10; Gusmani, Lessico 51-52; P 116-21.

The sense of moral rectitude is included among the connotations of *handant-* 'right, upright, just, true, straight', etc., probably part. of *handai-* 'set in order arrange', ultimately f. *hant-* 'front' (cf. *hant-* 'forehead', 4.205) via adverbial and postpos. (orig. directional dat.) 'in front, opposite; correspondingly, in order' (T 149-53). Cf. also *menahhanda* 'opposite', 4.204.

 $16.74 - WRONG - \bar{U}L \bar{a}ra$ 'not right, antisocial', etc., with $\bar{a}ra$ (16.73), is similar in meaning to cognate Skt. $\acute{a}n\bar{a}rya$ - 'indecent, vulgar, vile, base, not respectable, un- or non-Aryan'.

16.75 — SIN — The primary meaning of wasta(i)- 'sin', with substantive wastul, wasdumar, is 'fail, fall short, miss the mark' (like Gk. άμαρτάνω), cf. sallis wastais 'great vacancy' or 'desolation' = 'death of the king'. Hence the comparison is with Lat. $v\bar{a}stus$, OIr. $f\acute{a}ss$, OHG wuosti, OE $w\bar{e}ste$, NE waste 'empty, desolate' (Laroche, RA 67.2 [1973]: 119-21). A 'capital offense' is SAG.DU-as wastul, with SAG.DU 'head' (4.20).

hurkel 'crime, serious offense', 21.41. haratar 'fault, guilt', 16.76.

16.76 — FAULT, GUILT — Hitt. and Luw. haratar, harātar appears mostly in the phrase $\bar{U}L$ haratar '(there is) no offense', and means basically 'offense' or 'outrage' with emphasis on culpability. It has the appearance of an abstract noun from harr-'crush, ruin, destroy' (5.56), although the (possibly Luwian) nonassimilation in obl. haratn- and haratnant- 'scandal' plus the somewhat unclear semantic development leave room for doubt (as in EHS 296); T 172, P s.v.

16.77 — MISTAKE, ERROR — wastul, 16.75.

16.78 — BLAME — Luw. hanhaniya-, possibly 'to blame', has been compared with isolated Gk. ὄνομαι 'blame, find fault with, reject' (Van Brock, RHA 22 [1964]: 139-41) or less probably (αν)αἴνομαι 'refuse, deny' (Čop, KZ 85 [1971]: 26-30); the probable reduplication makes likely a relation to hanna- 'decide, judge' (21.162); T 148-49.

16.79 — PRAISE — *sarlatt-* 'praise, exaltation (ceremony)', from *sarlai-* (Hier. *sasarla-*) 'praise, honor' (lit. 'elevate, exalt', as in parts. *sarlant-*, Luw. *sarlaim(m)i-* 'exalted'), denom. from *sarli-* 'higher, upper' < *ser*, *sarā* 'up, above, on top of' (Laroche, *Festschrift J. Friedrich* 291-95; cf. Oettinger, *Stammb*. 379-80), perhaps related to Gk. ὁίον 'peak, promontory' (*sṛ-o- vs. *sr-iyo-?; A. Heubeck, *Orbis* 13 [1964]: 264-66; Gusmani, *Lessico* 86).

walliyatar, fr. walliya- (Luw. walli), walla- (also wallu- [< *wal-nu-?]) 'to praise', possibly related to (walli)walli(ya)- 'strong', cf. lat. valeō 'be strong', Osc. valaimo- 'best', Goth. waldan 'rule', OIr. flaith 'dominion', Toch. B walo 'king', etc., IEW 1111-12 (Stammb. 490-91).

16.81 — BEAUTIFUL — Perhaps *misriwant-* (15.56), *EHGl.* 21.

16.82 - UGLY - Gk. ἀισχρός is cognate with H. iskunahh-'stain'; cf. 15.88.

MIND, THOUGHT

- 17.11 MIND istanza(n)- (ZI), 16.11; cognate with NHG sinn.
- 17.12 INTELLIGENCE, REASON *hattatar*, vbl. abstract of *hatta-* 'think, understand' (17.13).

hazzizzi- 'understanding', also 'ear', borrowed from and congruent in meaning with Akk. *hasīsu* (T 233-34).

17.13 — THINK (REFLECT) — A *hatta- 'think, understand' is inferred from hattatar 'wisdom, intelligence', part. hattant- 'wise', fact. hattahh- 'make wise'. Conceivably identical to hattai- 'cut, chop', etc. (9.22); cf. NE discern < OFr. < Lat. dis-cernere 'sift apart', also NE "be incisive," "be sharp," etc.; T 214-15.

kappuwai- 'think about, take into account', 11.66.

- 17.15 BELIEVE hai- was linked to Lat. $\bar{o}men~(*A^we-m\eta)$ by Benveniste (HIE~10-11, reading $h\bar{a}$ -), stressing the necessity of belief in such signs for their efficacy ($\bar{o}men~accipere$); cf. also Oettinger, Stammb. 361 and n. 212 ($*A_1eA^w$ -). Reconstructing *hay- $\bar{a}ye$ < IE $*A^w_2ey$ -, Puhvel (P s.v.) compares rather Goth. $\acute{a}ips$, OIr. $\acute{o}eth$ 'oath', with original sense 'trust, have faith in'.
 - 17.16 UNDERSTAND hatta(i)-'think, understand', 17.13.

17.17 — KNOW — The root of *kanes-* (/gnes-/) 'know, recognize, discover' is evidently IE *gn(e)H-, *genH-, attested in nearly all branches (*IEW* 376-78, *DSS* 1209-10). The origin of the unique Hitt. -s- is disputed, but it is most generally thought to be an original aorist marker (e.g. Laroche, *RHA* 19 [1961]: 27-29; further refs. T 478-80).

sak(k)-, sek(k)- 'know, recognize; learn', with sagai- 'sign, omen', sakiya- 'presage', sakiyahh- 'pronounce an oracle', is related to Lat. $s\bar{a}gi\bar{o}$ 'have knowledge', Dor. ἀγέομαι 'lead', Goth. $s\bar{o}kja$, OIr. saigim 'I seek'. IE $*s(e)A_2g$ - thus had connotations of preternatural wisdom, foreknowledge, second sight, etc. (cf. Lat. $s\bar{a}ga$ 'prophetess, fortune teller'); Benveniste, BSL 33 (1932): 140-41.

17.21 — WISE — *hattant-'understanding, insightful'* or the like, part. of *hatta-'think'*, 17.13. Verbal abstract *hattatar'* knowledge, wisdom'.

For Gk. σοφός see sakui- 'eye', 4.21.

- 17.22 FOOLISH, STUPID marlessant- 'foolish, idiotic, demented' is a likely part. of inch. *marles- from a *marla- of the same meaning (Sommer, AU 184): cf. marlant- (LúLIL) 'fool, idiot', marlatar 'foolishness, stupidity', possible marlahh- 'make foolish', and marl(a)iski- 'become crazed, go mad' (CHD 3.191-92). Origin unknown.
- 17.23 INSANE, MAD, CRAZY *marl(a)iski-*, lit. 'keep acting like an idiot', fr. **marla-* 'foolish', 17.22.
 - 17.24 LEARN sak(k)-, 17.17.
- 17.25 TEACH annanu-'train, educate', caus. to an(n)iya-'work', 9.11 (Pedersen, *Hitt*. 145; P 59-62), cf. annanuhha-'trained'.

- *walkissarahh-* 'make expert', fact. fr. *walkissara-* 'skilled, expert' (*HWb*. 243), obscure.
- 17.28 SCHOOL É.DUB.BA.A 'tablet-house' (*HWb.* 270); cf. DUB = tuppi- 'tablet', 18.55.
- 17.31 REMEMBER kappuwai- 'think about, take note of', etc., 11.66.
- 17.32 FORGET Possibly (arha) paskuwai- (Götze Pedersen, MS 20; HWb. 165).
- 17.34 CLEAR, PLAIN Lith. áiškus, OLith. iškùs may be cognate with H. iskunahh- 'proclaim' (like Lat. dē-clārō), if the latter is not to be translated rather 'demote, rusticate' (in which case cf. 15.88); see Puhvel, Bi. Or. 38 (1981): 351-52, Gedenkschrift Kronasser 182 and n. 7, P 426-28. IE *ays(k)no- 'clear, bright' also yields OCS jasnŭ 'clear', iskra 'spark', and parallel *ays(k)ro- gives H. asara-, esara- 'white, bright'; cf. 15.64.

On Gk. σαφής 'clear', Hom. σάφα 'clearly', cf. H. sakui- 'eye' (4.21) and AI 265-66, 313-21.

17.36 — SECRET — Several attempts at an etymology for adj. harwasi- are recorded in T 190; the least objectionable relates it to Egypt. ha-ra-ŝi-ŝ(i) 'secret' (W. Helck, Die Beziehungen Ägyptens zu Vorderasien im 3. und 2. Jahrtausend v. Chr. [Wiesbaden, 1952], p. 565.

Adv. munnanda is from munnai- 'hide, conceal', 12.27.

Luw. *kugurniya-* 'secret'? (*DLL* 56, vs. T 618 'verleumden'), vbl. noun *kugurniyaman*, Hitt. *kuggurniyauwar*; obscure.

- 17.38 EXPLAIN *arkuwai-* 'plead, argue, explain oneself, make excuses', etc., is to be compared with Lat. *arguō* 'assert, accuse, prove' (cf. Laroche, *École Pratique des Hautes Études, Sciences religieuses, Annuaire* 72 [1964-65]: 13-20; *RPh.* 42 [1968]: 242-43; von Schuler, *JCS* 22 [1968]: 4-5; Puhvel, *AI* 264, P 148-51).
- 17.42 CAUSE *uttar* (INIM) 'affair, matter, thing', etc., 9.90. *memiya(n)* 'speech, word, thing, matter', fr. *memai*-'speak', 18.21.

VOCAL UTTERANCE, SPEECH; READING AND WRITING

18.12 — SING — ishamiya-, ishamai- 'sing' (SÌR-RU, ZAMĀRU), ishamai- 'song' (SÌR), ishamatalla- 'singer' (LÚSÌR, Akk. zammaru), all from an *ishama-, from the same root as in ishiya- 'tie, bind' (9.16) and ishiman(a)-, ishamin(a)- 'cord, line, rope' (9.19). The semantic key to the connection lies in the sense of Gk. ὑαψωδός 'weaver of songs' (ὑάπτω 'stitch together') and Skt. sūtra- 'thread; aphorism, rule, canon', Gk. ὕμνος. Thus while *sE₂-(o)m- > Hitt. ishama-, Ved. sāman- 'song', *sE₂-oy-mo- > Gk. (psilotic) οἴμος, οἴμη 'song', *sE₂-oy-tos > ON seiðr 'line, rope; magic (spell)' (EHS 178, T 378-80, P 394-95).

The reduplicated *galgalinai*- is undoubtedly related to *galgalturi*- 'cymbal, tambourine' or other metallic musical instrument. Imitative origin seems likely (*EHS* 481); cf. Arm. *getget-el* 'trill, warble' (N. Mkrtč'jan, *Acta Antiqua* 22 [1974]: 318, comparing also Hebr. *kilkel*, Arab. *qalqal/ğalgal*; T 467). Possibly of similar ultimate origin Lith. *galsas* 'echo', OCS *glagolŭ* 'word', *glagolati* 'speak'.

^{LÚ}GALA 'singer' covers ^{LÚ}halli(ya)ri- and ^{LÚ}sahtarili-, both of Hattic origin (P s.v.).

18.13 — SHOUT, CRY OUT — *halzai-, halziya-* is 'call out, shout, exclaim', and secondarily 'proclaim, call on, summon, invoke; invite', etc., as in Lat. *clāmō, calō* (: H. *kalles-,* 18.41); OIr. *gairm, gáir*

'a cry', gairim 'I summon, name'. Reflecting * A_1 lt-yó- fr. * A_1 élt-, * A_1 lét-, it is cognate with Goth. laþōn, OE laðian 'summon, invite', with the original sense perhaps maintained in OLat. lessus 'wailing, lamentation' (cf. Juret, *Vocabulaire* 20; Puhvel, *Evidence* 88 = AI 134; P s.v.; Čop, Ling. 10 [1970]: 96-97).

alalamniya-, whether derived from alalam(ma)a- 'rushing of water' (EHS 559, 571; doubtful, as alalamma- is probably 'ditch'; Puhvel, JAOS 97 [1977]: 598; P 28) or haplologically with lamniya- 'call, name' (18.42; P 27), attests the expressive vocable found in Gk. ἀλαλαί, ἐλελεῦ 'alas', ἀλαλάζω, ὀλολύζω 'cry out', Arm. alalak 'cry, scream', RV alalābhávantīr 'loud-sounding (waters)'. Attestation may not be restricted to Eastern regions; cf. OE walawa (< wā lā wā 'woe!'), arch. NE wellaway.

wāi-, wiyai-, wiwiya-, wiwiski- are various verbalizations of the interjection **wai-* 'woe!' (*IEW* 1110).

taskupai- is obscure.

18.14 — VARIOUS CRIES — The only animal noise suggested in the texts is *huntarnu-* 'grunt'; cf. *huntari-* 'swine' (3.31) and *huntariya-* 'fart' (4.64).

18.21 — SPEAK, TALK — *memai-* 'speak' (Luw. *mam[m]an[n]a-*), with *memiya(n)-* 'speech, word, matter, thing', etc. and denom. *memanu-*, *memiyanu-* 'cause to speak'. Compared with Ved. *mímāti* 'bellow', OCS *mǐmati* 'stammer, mumble', with original imitative origin (Benveniste, *BSL* 33 [1932]: 140), and with ON *mál* 'speech' < **ma-tlom* (Götze - Pedersen, *MS* 59).

A verb *lala(i)-* 'speak (clearly)', denom. from *lala-* 'tongue; speech' (4.26) is questionable; cf. *CHD* 3.25-26 and refs.

te-/tar- 'say, speak', 18.22.

- 18.22 SAY The suppletive Hitt. verb *te-/tar-* 'say' preserves two ancient and sparsely attested usages within Indo-European. The stem *te-*, whose etymon IE **dheE*₁- is practically ubiquitous in the meaning 'put; do' (including Hitt. *dai-*), mirrors the semantic shift seen otherwise only in Slavic: OCS *děti* 'put, say', Slovene *dem* 'I say' (= Hitt. *temi*), ORuss. *dě* 'he said' (H. *tet*). *tar-*, on the other hand (1 pl. pres. *tarweni*, 3 pl. *taranzi*, part. *tarant-*, iter. *taraski-*, *tarsik*[*k*]*i-*), attests a basic verb 'speak', as shown by Lith. *tariù*, *tarti* 'say', *tarmê* 'utterance', thus indicating an important Baltic-Anatolian isogloss. Cf. Puhvel, *Gedenkschrift Kronasser* 183-84).
- 18.23 BE SILENT *karussiya-* 'be silent, be indifferent', caus. *karussiyanu-* 'silence', as well as *kariya-* 'stop, pause, rest', caus. *kariyanu-*, reflect *gwr(-ew-s)-y- or similar, from an IE *gwer-. Cognates include Arm. (aor.) *koreay* 'die out', Toch. A *kur-*, B *kwär-* 'age, become enfeebled', Lith. *gùrstu* 'die down, subside', Goth. *qaírrus* 'gentle, meek', ON *kvirr* 'quiet, peaceful' (Čop, *Univerza v Ljubljani. Zbornik Filozofske Fakultete* 2 [1955]: 393-97; T 529-30; *AI* 263).
- 18.24 LANGUAGE Directions for an official or celebrant to speak in a particular language are given using the adj. suffix -ili, thus *luwili* 'in Luwian', *nesili*, *nāsili* 'in Hittite', etc.
- 18.26 WORD Whereas a meaning 'thing, matter', etc. developed secondarily from *memiya(n)* 'word' (fr. *memai* 'speak', 18.21), conversely *uttar* 'thing' came to mean also 'word'; see 9.90.
- 18.28 NAME *laman* (MU, ŠUNU) reflects IE *nōmn- (cf. Lat. nōmen; DSS 1264, IEW 321), with dissimilation as in *lammar* 'hour'.

- 18.31 ASK (QUESTION, INQUIRE) punus- 'ask, inquire; investigate', iter. punuski- (LI.TAR, Akk. ša'ālu). Connection is generally assumed (e.g. IEW 839, GEW 509, 566) with Gk. π έπν $\bar{\nu}$ μ α ι 'be wise, prudent', π νέ ω 'breathe', OE fn \bar{e} osan 'sneeze', etc. (unnecessarily split into two separate roots in Stammb. 214-15), IE *pnew- 'pant, gasp, breathe; be conscious'; the sense of the Hitt. verb might be from something like 'come to, regain consciousness'.
- 18.32 ANSWER (vb.) appa mema- 'speak back' (cf. 18.21), like OIr. fris-gair, Lith. atsakýti, OCS otŭ-věštati, SCr. ot-govoriti, Skt. prati-vac-, prati-bhāṣ-, etc. (DSS 1266-67).
- 18.33 ADMIT, CONFESS Possibly *arkuwar iya-*, lit. 'make a plea', from *arkuwai-* 'plead, argue, explain oneself', 17.38 (P 149).
 - 18.35 ASK, REQUEST wek-, 16.61.
 - 18.36 Promise mald-, 22.17.
- 18.37 REFUSE memma-, mimma- is analyzable as a stative pf. *me- moE_1 of a verb * meE_1 'hold back' or the like, the (suffixless) imperative of which gave prohibitive * $m\bar{e}$ as in Gk. $\mu\dot{\eta}$, Ved. $m\bar{a}$ (cf. Stammb. 497).

natta memai- 'say no', with memai- 'speak', 18.21.

markiya- 'disapprove, reject, refuse, find fault', etc., also 'forbid' (*CHD* 3.189-90), probably belongs with Corn. *moreth* 'anger', Bret. *morc'et* 'souci, malheur', IE **merk-* (*IEW* 740; Knobloch, *Kratylos* 4 [1959]: 39).

18.38 — FORBID — markiya-, 18.37.

18.41 — CALL (SUMMON) — weriya- 'call, summon' matches Gk. εἴοω 'speak, tell' < IE *Hwer-yo-, from a variably suffixed root seen e.g. in Goth. waúrd, OE word, Lat. verbum, Lith. vardas 'name'; Avest. urvāta- 'prayer'; Gk. ὁῆμα 'word, phrase, speech' (Sturtevant, JAOS 50 [1930]: 128; T 308-12 and refs.). Cf. hurt-'curse', 22.24.

halzai-, halziya-, see 18.13.

kalles- 'summon, invite' is comparable with Gk. καλέω, Lat. clāmō 'call', OE hlōwan 'roar, low' (IEW 548), with stem-final -s-perhaps an extension parallel to OPruss. kelsāi- 'read, sound out' (Neu, Anitta-Text 88). Cf. T 465-66 and refs., Stammb. 197.

- 18.42 Call (Name) lamniya-, lammaniya- 'name, call by name; appoint, assign' (CHD 3.37-39), denom. fr. laman 'name' (18.28) and hence analogous to Goth. namnjan, OE nemnan, NE name, Gk. ὀνομάζω.
- 18.43 ANNOUNCE *tarkummai-,* Luw. *tarkummiya-,* evidently a loanword; cf. Akk. *targumānu* 'interpreter' (*HWb.* 214). *isiya*(*hh*)- 'announce, betoken, reveal'; cf. 22.47 and P 409-13.
- 18.45 BOAST -za walla-, with refl. -za; see walla- 'praise', 16.79.
- 18.51 WRITE The physical act of writing is expressed as (*tuppi*) *anniya-* 'inscribe, make (a tablet)', 9.11; cf. abl. *tuppiyaz anniya-*/hatrai- 'record by means of a tablet, put in writing'.

hatrai- 'write, communicate, decree' (ŠAPĀRU), iter. hatreski-, vbl. noun hatressar 'message, written order'. Seemingly denom. from an instrument-noun *hattra- < *hat-tro-, derived from hattai-'chop, cut' (9.22); cf. tuppi hazziyan harzi 'he has written (lit. "cut") a

- tablet' (Čop, Slav. Rev. 11 [1958]: 52-54; Oettinger, MSS 34 [1976]: 126; T 226-27).
- guls- 'paint, draw, inscribe', gulzi- 'drawing' (GIŠ.HUR), 9.85-9.86.
- 18.52 HEAD Simply tuppi aus- 'look at a tablet' (15.51), or (tuppi) halzai- (iter. halzeski-, durative halzessa) 'call out, read aloud' (18.13), analogous to Goth. (us)siggwan 'ἀναγιγνώσκω'.
- 18.54 Letter (Epistle) Verbal nouns *hatressar* or *gulzatar* 'writing'; cf. 18.51.
 - 18.55 TABLET *tuppi-* 'clay tablet' (DUB), Akk. *tuppu*.
- A wooden tablet may be referred to by GiŠ/GiŠ.HUR*gurta-*, Akk. GiŠ*LE-U* (T 661), though the etymology is obscure (cf. T 663 s.v. GiŠ/Gi*kurtal[li]-*).
- IM.GÍD(.DA) 'long tablet' (*HWb.* 277-78); GIŠ.HUR 'picture'; cf. 9.87 and *EHGl.* 51, n. 85.
- 18.57 PEN 'Stylus' is ^{URUDU} sepikkusta- 'pin' (6.63) or GI É.DUB.BI (GI 'reed', cf. Gk. κάλαμος), according to EHGl. 85.
- 18.64 PRINT Vbl. noun *siyattal-* 'seal', denom. *siyattalliya-*'to seal' (also *siyatar*, *siyattariya-*), a secondary meaning of *sai-*, *siya-*'throw, shoot; press' < IE * $s\bar{e}$ -.

TERRITORIAL, SOCIAL, AND POLITICAL DIVISIONS; SOCIAL RELATIONS

- 19.11 COUNTRY Normally KUR; the Hitt. reading is *udne*-, see 1.21.
 - 19.12 One's Native Country As 19.11.
 - 19.13 COUNTRY (VS. TOWN) gim(ma)ra, 1.23.
- 19.14 REGION, TERRITORY KUR (Hitt. *udne-*), 1.21; cf. also URU 'city' (*happira-*), 19.15.

The plural of Hier. *arhi-* 'boundary' (19.17) may mean 'territory', like Lat. $f\bar{\imath}n\bar{e}s$; e.g. pl. $Atanwani^{CITY}$ $arh\bar{\imath}$ 'the territory of Adana' (P 134).

maniyahhai- 'administrative district', fr. *maniyahh-* 'administer', 19.31.

- 19.15 CITY, TOWN *happira-*, *happiriya-* (URU), originally adjectival fr. *happir-* 'business, trade' (see 11.82, meaning 'place of trade, trading-post, market', etc. (*EHS* 186; Neu, *Anitta-Text* 106-9; P s.v.). There is also URU-*riasessar*, probably *happiriya-* 'town' + *asessar* 'settlement' < *asas-* 'settle' (12.12).
 - 19.16 VILLAGE happir(iy)a- (URU), as 19.15.

- 19.17 BOUNDARY OHitt. arha- (Hier. arhi-), class. irha-'line, rim, limit, boundary' (ZAG) is from $*orH_1o$ or $*_rH_1o$ and cognate with Lat. $\bar{o}ra$ 'edge, boundary, coast, region; rope'. Numerous derivs. include arhai-, irhai- 'circulate; list; finish up', arha 'off, away, out of', arahza, arahza(n)da- 'around', arahziya-'alien', arahzena(nt)- 'bordering, external, foreign', etc. Possibly Lat. re(d)- <* rE_2e also belongs here. Cf. P 129-35, T 55-56.
- 19.21 PEOPLE (POPULACE) antuhsatar (UKÙ[MEŠ]-[a]tar) and antuhsannant- (UKÙ[MEŠ]-annant-), fr. antuhsa-'man', 2.1.
- 19.23 TRIBE, CLAN, FAMILY *hassatar* 'family, clan', also 'procreation, generation; womb', is a verbal abstract from *has* 'beget; give birth' (see 4.72), and the parallel *hassana-* 'familiaris' is a hypostatic thematic form from gen. *hassannas* (T 198). The *-n-* in variant *hansatar* is anticipatory or analogical; T 149.

On panku- (perhaps 'community, collectivity') see 13.13.

19.31 — RULE, GOVERN — The primary sense of maniyahh- is 'hand over, distribute', whence 'allocate, administer, govern' (also maniyahhai-), with derivs. such as maniyahha-, Lúmaniyahhatalla-'deputy, administrator, governor', etc., maniyahhai- 'administrative district; administration' (EHS 432, CHD 3.163-70). Denominative origin in $*m(a)n-y\acute{e}- < IE *mAn- 'hand' (IEW 740)$ is plausible, cf. Oettinger, Stammb. 458 (comparing Lat. $mand\bar{a}re$ 'entrust, order').

tapar-, tapariya- 'rule, govern', Lútapariyalli- 'commander' are obscure and thought to be of Luwian origin (*HWb*. 21-11; *Stammb*. 384). Cf. also the dynastic name *Tabarnas*, *Labarnas*.

hassuwai- 'rule', denom. from hassu- 'king' (19.32); T 211.

19.32 — KING — Rather than an unsupported link with has-'beget' (in Sommer, Hethitisches II [= Boghazköi-Studien 7 (Leipzig,

- 1922)], p. 9, n. 2; *EHS* 251; etc.; cf. T 207), the source of *hassu* is best sought via a reconstruction * H_1 onsu- (cf. dassu- <*dnsu-), as in Polomé's comparison with ON áss (pl. Æsir, Run. a[n]su-) 'god', Avest. ahū 'lord', Skt. ásura-, Av. ahura- (Études Germaniques 8 [1953]: 36-38; cf. Oettinger, Eide 24, n. 8). Usually written LUGAL.
- 19.33 QUEEN *hassusara-* (SAL.LUGAL), formed from *hassu-* 'king' with fem. suffix *-sara-* (T 210-11).
 - 19.34 EMPEROR Cf. LUGAL.GAL 'great king'.
- 19.35 PRINCE DUMU.LUGAL (Akk. *mār šarri*) 'king's son'.
 - 19.36 NOBLE, NOBLEMAN *isha* (EN), 19.41. *panku* may be 'body of the nobility'; see 13.13.
- 19.37 CITIZEN The inhabitants of a town are referred to simply as e.g. LÚ^{MEŠ URU} *Taptina* 'the men/people of T.'.
 - $19.38 SUBJECT \hat{I}R$, 19.43.
- 19.41 MASTER isha-, esha- (EN, BELU, BELTU) 'master, lord', ishassara- 'lady, mistress' (GAŠAN), ishizziya- 'be lordly, dominate'. Etymology uncertain; suggested cognates have included Lat. $erus < *esH_1o-$ (from F. Ribezzo, Rivista Indo-grecoitalica 4 [1920]: 128), Arm. išxan 'ruler, prince' (P. Jensen, ZA 36 [1925]: 82), and Hitt. ishiya- 'bind' (E. Forrer, ZDMG 76 [1922]: 217), although cogent objections can be raised to all these. The most satisfactory solution is a source in Hattic shap/w-, shap/w- 'god', collective washap/w-, linking further Luw. washai-, washa(n)t-, Hier.

washa- 'master' and possibly Pal. pashullasas, washullatiyas (Laroche, RA 41 [1947]: 77-78; T 372-77; P 385-90).

19.42-19.43 — SLAVE; SERVANT — The Hitt. reading of ÌR (Akk. ardu) 'servant, slave, subject' is unknown; likewise LÚAMA.(A.)TU 'house slave', GEMÉ(-assara-) 'female slave, maidservant', SAG.GEME.ÌR^{MEŠ} 'servants' (*HWb*. 265, 273, 278, 290).

19.45 — COMMAND, ORDER — *hatrai-* 'decree', 18.51. *tapariya-* 'rule, be in power', 19.31.

sesha- 'arrange, assign, order' is a reduplicated *se-sE₂-eA₂(-y)-, corresponding to pf. *sE₂óye- in ishai- 'bind' (9.16); cf. Sturtevant, Comp. $Gr.^1$ 247.

watarnahh- 'commission, charge' or the like, possibly from IE *(A_2)wed- 'speak' (Skt. vádati, Gk. αὐδή 'voice', etc.; IEW 76), via a *(A_2)wod-r-no- A_1 - (Sturtevant, Comp. Gr.² 61; Oettinger, Stammb. 458).

19.46 — OBEY — *istamas*- and Luw. *tummantai*- 'obey' < 'hear, listen'; cf. 15.41-15.42, 4.22.

19.47 — LET, PERMIT — tarna-, 12.18.

- 19.48 COMPEL GEŠPU-ahh-, with GEŠPU 'strength, power;' restraint', lit. 'fist'; *HWb*. 273.
 - 19.51 FRIEND LÚ/SAL ara, see 16.73.

sakkant- 'acquaintance', part. (variant of normal sekkant-) of sakk- 'know, recognize', 17.17.

Cf. also *genzu-* 'love, friendship', 16.27, 4.447. Lútaksulas 'ally', fr. taksul 'agreement', 12.92.

19.52 — ENEMY — (LÚ)kurur, originally abstract 'animosity, hostility' (kururiya- 'be hostile to, fight with', kururiyahh- 'treat as an enemy'), may reflect *ghwr-wr 'crookedness, trick' < IE *ghwer-'be crooked, bent' as in Skt. hvárate 'be crooked, go astray, awry', Av. Zurah- 'injustice, evil' (Eichner, MSS 31 [1973]: 75), or perhaps better *kwr-wr 'division' : H. kuer- 'cut' (9.22); cf. harpu- 'hostile' < harp- 'separate' (12.23) (Sturtevant, Comp. Gr.¹ 119, 148; Laroche, BSL 58 [1963]: 69). See also E. Neu, Athenaeum 47 (1979): 407-27; T 665-67.

harpanalli- (cf. harpu- 'hostile' and Luw. harpana- 'revolt') is from harp- 'separate (from)' (12.23); see Gusmani, Lessico 93; DLL 42; T 182.

 $^{\text{L\'U}}\text{K\'UR}$ is usually read *kurur*, though this is rejected by Neu (loc. cit.).

- $19.53 \text{COMPANION} \frac{\text{LÚ/SAL}}{\text{ara-}}, 16.73.$
- 19.55 STRANGER Lúarahzena-, arahzenas UKÙ-as 'foreigner' fr. arahza-, arahzena- 'alien, foreign', lit. 'bordering'; cf. arha-, irha-'border, boundary', 19.17 (P 133-34).
- 19.58 Help, AID (anda) warrai- (also waressa-), denom. from a warra-, a dat.-loc. or early form of warri- 'aid, (military)

support' (*Stammb.* 504). The basic sense is 'mutual aid under treaty', and matches that of the cognate Hom. ἤρα, as shown by Gusmani (*SMEA* 6 [1968]: 17-22), comparing especially ἐρί-ηρες ἑταῖροι (: Myc. name *E-ri-we-ro*) and securing an important Greek-Anatolian isogloss.

Other expressions are appa(n) es- 'be behind, back up' (cf. Fr. assister < Lat. adsistere), appan tiya- 'get behind' (10.45), appan huwai- 'run behind' (10.46; cf. for meaning Gk. $\epsilon \pi i \kappa o \nu o \epsilon \omega$ and Lat. succurrere like subvenīre.

harp-, harpiya- 'join up with', 12.23.

- 19.61 Custom *saklai-* 'custom, law, rite' is an abstract deriv. in $-l\bar{a}$ or -li-, generally assumed to be related to Lat. *sacer* 'sacred', *sanciō* 'ordain', ON *sátt*, *sætt*, OE *seht* 'treaty' (Sturtevant, *Comp. Gr.*¹ 87, *EHS* 206). Alternatively, the root could be Hitt. *sak* 'know', thus *saklai-* '(traditional) knowledge, what is known or usual'; cf. NIr. *nós* 'custom' < OIr. *gnás* (W. [g]naws) 'nature, disposition', W. *gnawd* 'customary' : OIr. *gnáth* 'usual, known', Lat. *nōtus*, Gk. γνωτός, etc. 'known'.
- 19.62 STRIFE, QUARREL halluwai-, with denom. halluwai-'fight, brawl, quarrel' and vbl. noun halluwātar, probably from the same ${}^*A_{v_2}l$ -n- $(e)A_{v_1}$ as hallanniya- 'lay waste, ravage' : Gk. ὄλλῦμι (see 11.27). Thus P s.v., doubting the earlier comparison with Gk. ἀλύω 'be distraught, be beside oneself' (Benveniste, Athenaeum N.S. 47 [1969]: 30-31) on semantic grounds and assigning ἀλύω to Hitt. alwanzatar, etc. 'witchcraft' (22.42; P 43-47). Cf. also Puhvel, Bi. Or. 36 (1979): 57.

sulli- 'fight' with *sullatar* fr. the corresponding (denom.?) verb *sulla-*, invites a reconstruction from **sul(H)-*, but further root-relation is obscure (*EHS* 505, Oettinger, *Stammb*. 291-93). Schindler's identification of *sulla-* with *hulla-* 'strike' (*Die Sprache* 15

[1969]: 160), presumably via *s*-mobile, is unlikely; the initial **sh*-would yield **ish*- (*Stammb*. 293, n. 70).

sarupa-, etym. unknown (EHS 184).

Words for 'strike' can have 'fight, come to blows' as a secondary meaning; thus *kuen-*, *hulla-*, *walh-* (9.21). Cf. also *argatiya-*, 16.43.

19.63 — PLOT, CONSPIRACY — *kup-* 'to plan, plot', Luw. *kupiya-*, *kukupalatar* 'conspiracy'; see 16.68.

tastasiya- 'whisper; plot' may be onomatopoeic, with reduplicated **tas-* (Van Brock, *RHA* 22 [1964]: 158, n. 1).

Also note appali dai- 'set a trap' (16.68) and HUL-lu takkes- 'weave evil' (6.33).

19.65 — MEET — anda wemiya-, with wemiya- 'find' (11.32), lit. 'find in', like Bret. en em gavout, refl. of kavout 'find'.

hazziya- 'strike, hit (upon)' (9.21), cf. NHG treffen.

- 19.71 PROFESSIONS, OCCUPATIONS Terms for those involved in a large number of occupations are known, practically all in sumerographic form; cf. *EHGl.* 62-64.
- 19.72 PROSTITUTE SALKAR.KID (Akk. *harimtu*) 'prostitute', SAL.SUHUR.LAL 'temple prostitute, hierodule'.

WARFARE

- 20.11 Fight The verbs for 'fight' are essentially those for 'strike', thus esp. *hulla-, (hul)hulliya-,* also *walh-; kuen-; zahh-, zahhiya-* (Lyc. $z\chi\chi\tilde{a}na$ 'to conquer'); *lahiyai-;* 9.21. Cf. also *argatiya-* 'come to violence', 16.43, *kururiya-,* denom. from *kurur-* 'enemy' (19.52), and *halluwai-* 'brawl, quarrel' (19.62).
- 20.12 Battle Deverbative hullanzatar, hullanza(i)-, hulhuli-from hulla-'strike down', zahhai- fr. zahh- (9.21).
- 20.13 War Besides the words for 'battle' (20.12), there is Hitt. *lahha-* 'war, military campaign; journey', usually in dat.-loc. *lahhi, lahha* and comparable with Hom. δαϊ 'in battle' (with areal d- $^{\prime}l$ variation). Further related forms are Lyc. B *laka-*, H. *lahhiyala-* 'soldier; traveller'; cf. Hes. $\lambda\alpha i\lambda\alpha \varsigma$ · ὁ τύραννος ὑπὸ Λυδῶν (Gusmani, *SMEA* 6 [1968]: 14-28).
 - 20.132 ENEMY See 19.52.
- 20.14 PEACE taksul, lit. 'agreement' < takk(e)s- 'agree, come to terms' (6.33), with taksulai-, taksul iya-, taksul da- 'make peace, conclude a treaty'.
- 20.15 ARMY *tuzzi(ya)-, tuzziyant-* (KARAŠ 'army', ERÍN.MEŠ 'troops') is from IE **tewti-*, cognate with WIE **teutā* 'the

people' as in Goth. *þiuda* (OE *þēod*, ON *þióð*, OHG *diutisc*, NHG *deutsch*), OIr. *túath* (W. *tud* 'country'), Osc. *touto*, Umbr. acc. *totam*; Latv. *tàuta*, OLith. *tautà* (Sturtevant, *Comp. Gr*. 155; *IEW* 1080).

Possibly also cognate is Luw. *kuwatna-* 'army (camp)', if from *twat-na- (vs. Hitt. tut-i-) via "Lycianism" tw- > kw- (Laroche, BSL 62 [1967]: 50). Neumann (KZ 90 [1977]: 142-43, seconded T 620) prefers a hypostatic obl. form of a *kuwatar and comparison with OHG houwan, OE hēawan, ON hoggva 'hew', Lith. káuju 'strike', Lat. cūdō 'strike' (IE *kāu-, *kéAw-, IEW 535).

A reading *kula*- (posited by Bossert, *Die Sprache* 4 [1958]: 115-26) is refuted at length in T 620-21.

20.17 — SOLDIER — kussan(iy)atalla- (LÚKAŠKAL-la-) is from kussaniya- 'hire' < kussan- 'wages, pay' (11.78), thus 'hireling, mercenary' (T 670-71); cf. Skt. vasnika- 'id.' from vasnám 'wages; price'; similarly Lat. soldārius and Romance derivs., from solidus 'gold coin'.

lahhiyala- 'soldier; traveller' fr. *lahhiya- 'go to war; travel', 20.13.

- 20.18 GENERAL EN KARAŠ, EN ERÍN.MEŠ, perhaps GAL.GEŠTIN (an official, lit. 'wine-chief').
- 20.21 Weapons, ARMS GIŠTUKUL.HI.A 'weapons, implements, tools'.
- 20.22 CLUB Hitt. and Luw. *hattalla-*, fr. *hattai-* 'chop, strike', 9.22. For 'axe' see 9.25.
- 20.24 Bow GIŠBAN. Words for 'bowstring' are *ishunau*-, primarily 'sinew' (4.31) and istagga(i)-, comparable with OE stagga(i)-, comparable with OE stagga(i)-, since stagga(i)-, comparable with OE stagga(i)-, since stagga(i)-, comparable with OE stagga(i)-, since stagga(i)-, since

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- ON stag 'cable, hawser' (Neumann, KZ 77 [1961]: 79; Gusmani, Lessico 69; P 451).
- 20.25 ARROW The terms are *suhmili* and *nata-/i* (GI, ^{GI}KAK.Ú.TAG.GA), both etymologically obscure.
- 20.26 SPEAR Two types are referred to in the texts, designated *mari* and *turi* (probably = GIŠŠUKUR); cf. *CHD* 3.183-84. Neither has been explicated.
- 20.27 SWORD The reading *malatti-*, hesitantly recorded in e.g. *HWb*. 133, *EHGl*. 96, *HDW* 49, is very doubtful: cf. *CHD* 3.128.
- 20.33 HELMET gurpis(s)u-, gursip(p)u-, fr. Akk. qurpisu, a type of head- and neck-protector for men or horses; T 653-54.
- 20.34 SHIELD Luw. *palahsa* may belong with Skt. *phálakam* 'shield, board, plank', ON *fjǫl* 'board, plank', IE * $p(h)el-(H_1-)$; Bomhard, *RHA* 31 (1973): 111.
- 20.35 FORTRESS halzi- (HALZI), Akk. halṣu-. Perhaps also related are Gk. Ἄλτις, the name of the temple precinct in Olympia, and ἄλσος (< *ἄλτιος) 'glade, grove' (T 141, refs.; Petersen, Lg. 10 [1934]: 314).
- sahessar (BÀD-essar) is a verbal noun fr. the same sah- 'clog, plug, stuff up' (IE *dhyó E_2 -) seen in sehur, Luw. dūr 'crap, urine', Lat. faeces, etc. (4.65), thus 'shut area; stronghold', and produces denom. sahesnai-, sahesn(a)eski- 'fortify, make into a stronghold' (AI 301).

Several possibilities exist for *gurta-* 'citadel'. Though labeled semantically wanting in T 659, Sturtevant's early derivation from *kuer-*, *kur-* 'cut (off)' (*Comp. Gr.*¹ 119, 157) remains conceivable.

Most plausible seems to be a comparison with numerous Aegean and Asian place-names; e.g. Cretan and Arcadian Γόρτυν, Γόρτυς (cf. Myc. dat.-loc. ko-tu-we, gen. ko-tu-wo), Thess. Γυρτών, Phrygian Γόρδιον, Γορδιεῖον (cf. P. Kretschmer, Glotta 31 [1951]: 11, n. 1), though further connection with Skt. grhá-, Goth. gards 'house', Lith. gar̃das 'fold, pen', OCS gradǔ 'city', or Lat. hortus, Gk. χόρτος 'feeding-place' (beginning with Benveniste, BSL 33 [1932]: 139, further refs. T 659) is less likely. The Mitannian place-name Gurta also points in the direction of Skt. kuṭa- 'fortress' (T 661).

- 20.36 TOWER *auri-, awari-* is a 'watch-tower', with nounforming suffix *-ri-* (cf. *edri-* 'food', *es[sa]ri-* 'shape; fleece') on *au(s)-* 'see, watch' (15.51), with derivs. *auriyala-, auriyatalla-* 'watchman, guard' (P 232-34).
- 20.41 VICTORY Probably *tarahhuwar*, vbl. noun from *tarh*'overcome, conquer, be mighty' (4.81).

Lyc. $z\chi\chi\tilde{a}na$ 'to conquer', $z\chi\chi\tilde{a}te$ 'they conquered' is cognate with H. zahhiya- 'fight' (9.21; Puhvel, *Evidence* 84 = AI 130); cf. also *hulla*-, *hulliya*- 'fight, strike down' (9.21) and (-za) tarh- 'conquer, overcome' (4.81).

- 20.42 DEFEAT (sb.) arpa-, see 16.19.
- 20.45 RETREAT The verb is appa ep(p)- 'pull back', 11.14 (P 273).
- 20.46 SURRENDER *hink* 'turn over, give up; sacrifice'; seemingly the verb underlying *henkan* 'death, disease, plague' < IE * E_2 e $n\hat{k}$ (see 4.75), although a relationship to *hink* 'bow, show reverence' (* A_1 enk-; 9.14) is also conceivable. T 246-50.

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- 20.47 CAPTIVE, PRISONER appant- (ŠU.DIB), part. of ep(p-), ap(p)- 'seize', 11.14.
- *arnuwala-* (NAM.RA) 'displaced person, deportee', fr. *arnu-* 'move, remove, transport, bring', etc., caus. to *ar-* 'move, stir'; see 10.61.

The etymology of Lúhippara- 'prisoner' (as a social class) is disputed; cf. T 251-52; Van Windekens, *BHD* ... *Kerns* 337-38.

- 20.48 BOOTY, SPOILS $s\bar{a}ru$ (denom. saruwai- 'plunder') was connected by Gusmani (Lessico~100) with sarra- 'divide, break off', etc. (12.232).
- 20.49 Ambush Possibly *senahha-, sinahha-,* of unknown origin (*EHS* 166; *Alimenta* 125).

LAW

21.11 - LAW (GENERAL = LAT. $I\overline{U}S$) — The sense is included in the verbal noun *hannessar* fr. *hanna*-'judge, decide', 21.16.

'Right, justice' are *handatar*, vbl. noun fr. *handai-*, and *āra-*; 16.73.

 $21.12 - \text{LAW (SPECIAL} = \text{LAT. } L\bar{\text{E}}X) - ishiul$, lit. 'bond', fr. ishai-, ishiya- 'bind' (9.16), thus 'treaty, obligation' (P 400-1). saklai- 'custom, law, rite', 19.61.

- 21.13 LAWSUIT hannessar, 21.16.
- 21.15 COURT *hurki-* 'court of law, legal machinery' is an extension of the primary meaning 'wheel' (10.76), reflected in the legal phrase *hurkin halenzi*, lit. 'they start the wheel turning' = 'they begin legal proceedings', also *ANA* GIŠ/DDUBBIN *lamniyat* 'summoned to the *hurki-*' (Puhvel, *AI* 217-19; *Bi. Or.* 37 [1980]: 204, comparing the Roman *Rota*).

tuliya- 'Ratsversammlung, Gerichtssetzung', obscure (*HWb.* 228, *EHS* 170).

21.16-21.162 — JUDGE; DECIDE — The verb hanna-, iter. hanniski-, hassiki- (cf. Lyc. qan-; qas-), may be connected with Gk. ὄνομαι 'blame, find fault with', as in redupl. Hitt. hanhaniya-'blame' (16.78); Van Brock, RHA 22 [1964]: 139-41), $IE *A_w_1(\acute{e})n$ -o-.

Comparison with Gk. ἀναίνομαι 'spurn, reject' (Čop, KZ 85 [1971]: 26-30) should be rejected in view of Puhvel's equation of the Gk. form with H. *enant-* 'tamed', IE *ain- 'be agreeable' (P 271), while analysis as a caus. to hai- 'believe' (EHS 562) is morphologically questionable and semantically facile. Cf. also Hier. haniyata 'bad, evil', via 'condemned'? (T 146-48, refs.).

The verbal noun *hannessar*, with obl. *hannesna(nt)*- and further abstracted *hannesnatar*, covers such notions as 'law; court case, lawsuit; decision, verdict', etc., through its basic sense 'judgment' (EHS 289, 295; Laroche, BSL 57 [1962]: 38-39). Sum. DI, DI.KUD, DI-essar, Akk. *dīnu*.

- 21.17 JUDGEMENT hannesnant-, hannessar, etc., 21.16.
- 21.18 JUDGE The arbiter of justice seems generally to have been the king.
- 21.21 PLAINTIFF hannitalw(na)- 'legal opponent', probably formed with multiple suffixes on an agent-noun *hannitalla- fr. hanna- 'judge'; EHS 182, 193; T 148.

hantitiyatalla- is likewise an agent-noun, from the verbal cpd. *hantitiya*- 'inform, accuse', 21.31.

The Akk. legal term *BEL AWATI* 'lord of the case' yields the Hitt. loan translation *uddanas isha-* (*EHGl.* 69); similarly *hannesnas ishas* 'lord of the judgment' = *BEL DINI*.

21.23 — WITNESS — *kutruwa(n)*- (Akk. *ŠIBU*, *ŠEBU*), with derivs. *kutruwai*- 'bear witness', *kutruwah(h)*- 'summon as a witness', vbl. noun *kutruwatar* 'witnessing'. An ingenious early etymology (by C. H. Carruthers, *Lg.* 9 [1933]: 151-52) derived the term (as *kutru*-) from IE **k*^w*tr-u*- 'fourth (party to a dispute)', comparing Lat. *testis* < **tris-tis*, but was quickly superseded by a

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more cogent connection with Lith. *gudrùs* 'wise, clever', *gùsti* 'practice, become used to', with the sense of the thematized Hitt. *kutruwa(n)*- thus 'expert witness' as in Goth *weitwops*, etc. (*DSS* 1436; cf. Pedersen, *AO* 5 [1933]: 177-79; Puhvel, *Gedenkschrift Kronasser* 182 and P s.v.).

21.24 — SWEAR — link- (caus. linganu-) 'swear', also 'swear falsely, commit perjury', may be related to Lat. ligāre 'bind', NE leech (line), as IE *leyg-, *li-n-g-, with the sense of legal obligation in Lith. laigõnas 'wife's brother' (like Gk. $\pi \epsilon \nu \theta \epsilon \varphi \delta \zeta$ 'father-in-law' < *bhendh-), Hes. λοιγωντίαν · φρατφίαν, as well as Lat. obligāre (IEW 668; Pedersen, Lg. 9 [1933]: 10).

lingain iya- 'make (administer or take?) an oath', linkiya kattan dai- 'place (words, etc.) under oath', with lingai- 'oath'.

huek-/huk- (iter. huk[k]iski-) is traditionally glossed 'swear' and compared with IE *wekw- 'speak, declare' (Sturtevant, Lg. 6 [1930]: 226) or better Gk. αὐχέω 'brag, boast' < IE *A₁w(e)gh- (IEW 348; Knobloch, Kratylos 4 [1959]: 35; M. Peters apud Oettinger, Stammb. 103, n. 34a); cf. T 255-57. These etymologies are not inconsistent with the more precise definition 'conjure, utter incantations'. A comparison with Skt. uśij-, title of a priest, appeared in T. Burrow, W. B. Henning Memorial Volume 37, while J. Holt (Festschrift J. Friedrich 216-19) tried to connect Goth. weihan 'consecrate', Lat. victima, intimating an ultimate identity with the root of H. huek-'slaughter' (4.76); the difficulties of this approach were anticipated already by Puhvel, LIEV 24-25.

21.31 — ACCUSE — *hantitiya-* 'inform on, bring to justice' (cf. *hantitiyatalla-* 'informer, plaintiff') is literally 'step forward' or 'confront' (*tiya-* + *hanti*), i.e. with evidence or charges; an interpretation as dat.-loc. 'step before the face (of the judge [or the

accused?])' < hant- 'forehead; (face)' (EHS 161, T 157) seems unnecessary.

(appa) isiya(hh)- 'disclose, expose, inform on, denounce', ishiyahhiskattalla- 'denouncer, informer', with isiyahh- (22.47; P 409-13).

21.32-21.33 — Condemn; Convict — hanna-, 21.16.

21.34 — ACQUIT — *parkunu*- 'acquit, absolve', lit. 'make clean', fr. *parkui*- 'clean' (15.87).

huldalai- 'spare', 11.25; haratar lā- 'forgive', 16.69.

duddunu- 'pardon, show mercy towards', from duddu- 'mercy' or 'be merciful' (via denom. *dudduwai- according to Stammb. 167, n. 79); cf. also duddumar 'mercy, grace' (Goetze, ANET 400; EHS 305, 456); source?

21.36 — INNOCENT — *parkui-*, lit. 'clean', 15.87.

Luw. *niwalli-, niwalla-,* etym. ? (Friedrich, *Staatsverträge* 1: 176; ZA N.F. 5 [1930]: 50; HWb. 152).

21.37-21.38 — PENALTY, PUNISHMENT; FINE — *zankilatar*, vbl. noun from *zankilai*-, unconvincingly compared with Lat. *sanciō* 'consecrate, confirm' (Umbr. divine epithet *Sansi*) in *Stammb*. 152, n. 40.

dammesha- 'damage, act of violence; punishment', denom. dammeshai-, formed from damas-, tames- 'press, oppress', 9.342 (EHS 166).

sarnikzel- 'compensation', with noun-forming -el- on sarnikzi, sarnink- 'atone for, make good', 11.23 (EHS 325).

Lyc. *qanuweti* and *qastti* 'punish' belong with H. *hannai*- and *hasskizzi* 'judge', 21.16 (Pedersen, *Lykisch und Hethitisch* [Copenhagen, 1945], p. 26-28, 46; Puhvel, *Evidence* 84 = *AI* 130).

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- 21.39 PRISON, JAIL É $K\overline{l}LI$, $B\overline{l}T$ SIBITTI, É EN.NU.UN? (read *lustani* by Laroche, see 7.22); HWb. 270; EHGl. 71.
- 21.41 CRIME hurkel is best connected with OE wyrgan, OHG wurgen 'strangle', ON virgill, OE wurgil 'rope', Lith. veržiù 'constrict', IE *H₁wer-gh-. The meaning is 'hanging matter, capital crime, abomination', with LÚ.MEŠ hurkilas 'criminals, demons' analogous to OE wearg, OHG warg 'robber, criminal', ON vargr 'wolf; outlaw (who could be killed with impunity)'. Cf. Petersen, JAOS 59 (1939): 179; AI 216-19; Bomhard, RHA 31 (1973): 111.

wastai- 'sin', 16.75; haratar 'guilt, offense', 16.167.

21.42 — MURDER — kunatar and kuennuwar, verbal nouns 'killing' from kuen- 'kill' (4.76), hence parallel to Gk. ϕ óvo ς and Avest. jənərā- (DSS 1454-56, T 604-6).

ishanas uttar 'a matter of blood, case of murder', cf. eshar iya-'commit murder', lit. 'make (shed) blood', like Akk. dāmi epēšu (Kronasser, Festschrift J. Friedrich 275-76, 286; EHS 125; P 305-8).

- 21.43 ADULTERY Possibly *pupuwalatar*, fr. $^{\text{L\'u}}$ *pupu-* 'lover, paramour', compared as a "Lallwort" with Akk. *bubu* 'beloved' in *HWb*. 173.
- 21.44 RAPE wen- was compared with Skt. vánati 'wish, love, desire', Lat. venus 'love', etc. (IE *wen- 'desire, strive for', IEW 1146) by Petersen, AO 9 [1937]: 213.
- 21.45 THEFT *dayawar*, taya(z)ili-, tayazzilatar, verbal nouns from $t\bar{a}ya$ 'steal', 11.56.

21.47 — PERJURY — *lingai*- 'oath' can also connote 'false oath, perjury'; likewise *link*- 'swear (falsely)' (21.24, 21.25; *CHD* 3.63, 69). Luw. *lawarr*- 'despoil, strip', also 'transgress an oath' (9.26, *CHD* 3.49).

RELIGION AND SUPERSTITION

22.12 — GOD — To the lexical descendants of IE *dyew-, *deiw-o- Hittite adds siu- (DINGIR), with variants siun(i)-, siwann(i)-, siwant- and adj. siunalli- (= Lyd. †iuvali- [Gusmani, Lyd. Wb. 93]). Cf. also Luw. Tiyaz 'sun, sun-god' = H. siwat(t)- 'day' (14.41). HWb. 194-95.

A separate stem, of obscure origin, is seen in Luw. massani-, massana-, Lyc. mahãna-, Hier. GOD-ni/na- (cf. Laroche, Fouilles de Xanthos 6 [1979]: 107-8).

On the many individual Hittite gods and the general aspect of Hittite religion see e.g. Gurney, *The Hittites* 132-69.

- 22.13 TEMPLE No compelling Indo-European etymology has been recorded for neut. Ékarimmi-, comm. Ékarimma- (É DINGIR[-LIM]). Suggestions include OCS chramǔ 'house', Skt. harmyá- 'palace, mansion' < IE *gṛm-, *ghorm- (Machek, Die Sprache 4 [1958]: 74) and Lat. caerimonia 'holiness; reverence; sacred ceremony' (Juret, Vocabulaire 8); also Arm. xoran 'altar, tabernacle' (Jahukyan, Hayerenə 157); see T 507-8. Agent-noun Lúkarimnala-'temple servant'.
- 22.14 ALTAR *istanana* (ZAG.GAR.RA) is probably from IE *stā- 'stand', with nasal stem as in OCS *stanǫ*, Arm. *stanam*, Lat. -stināre, etc. 'place, stand, (af)fix' (*IEW* 1008) and -no-suffix, cf. Skt.

sthánam, Av. stāna-, Lith. stónas, OCS stanŭ 'stand(ing place)'; P 461-63.

Lat. āra- matches H. hassa- 'hearth', 7.31.

22.15 — SACRIFICE, OFFERING — *ispanduzzi-* 'libation (vessel)', from *sippand-*, *ispand-* 'pour, libate', 9.35.

maltessar 'recitation, vow, votive offering', vbl. noun fr. *mald*-'recite; vow' (22.17; *CHD* 3.132-35, 136-37).

22.16 - WORSHIP - hink- 'sacrifice', primarily 'hand over, surrender', see 20.46 and 4.75.

sippand-, ispand- 'pour a libation', 9.35.

22.17 — PRAY — $m\bar{u}g\bar{a}i$ - matches Gk. $\mu\dot{v}\zeta\omega$ 'murmur', Lat. $m\bar{u}gi\bar{o}$ 'bellow, roar, rumble, groan' (Benveniste, *BSL* 33 [1932]: 140); IE *m(e)wg- or * $m\bar{u}g$ -, perhaps ultimately of imitative origin.

mald-, malda- 'recite', also 'vow, promise' (CHD 3.132-35), compared with Lith. meldžiù, melsti, OCS molsti 'beg', molitva 'prayer', etc. (cf. DSS 1471) since Benveniste (BSL 33 [1932]: 133-35; cf. Laroche, Prière hittite 8-13), may be the source of Arm. malthem 'wish, pray' (Schultheiss, KZ 77 [1961]: 225).

22.18 — Priest — The generic term for the many types of priest is $^{\text{L\'o}}$ sankunni(yant)- ($^{\text{L\'o}}$ SANGA), from Akk. \check{s} ang \bar{u} .

Lyc. kumaza, 22.19.

22.19 — HOLY, SACRED — Hittite words corresponding most closely to the modern sense of 'sacred' or 'holy' are mainly those for 'clean, pure', in ritual context; thus *suppi-, parkui-,* 15.87.

From Lycian come the terms kumaza 'ἰερεύς', kumezi- 'θύειν', kumaha- 'κατιερώθη', kumehi- 'ἱερεῖον', and kumeziye 'βωμός', corresponding to Luw. kummai- 'sacred, pure' (cf. Laroche,

Académie des Inscriptions & Belles-Lettres, Comptes rendues des séances 1974: 723; Fouilles de Xanthos 6 [1979]: 98, 108-10). Etymology ?

OCS *svetŭ*, Lith. *šveñtas*, Avest. *spənta-* are cognate with Hitt. *kunna-* 'right, correct', etc., 12.41.

- 22.24 Curse hurt-, huwart- 'to curse' (part. 'accursed', nominal hurta-, hurtai- 'a curse') is analogous to OPruss. wert- 'swear', Lat. verbum, Goth. waurd, NE word, from the IE root * H_1 wer- 'speak (solemnly), declare', etc. (IEW 1162-63), seen also in Hitt. weriya- 'call, summon' (18.41); cf. T 308-12. The preservation of the initial laryngeal in hurt- vs. its loss in weriya- is not easily explained, but may be comparable with pe-hute 'take away' vs. u-wate 'bring' (10.62).
- 22.31 HEAVEN nepis(ant)- 'sky, heavens' (AN, Akk. šamū), 1.51 (cf. Gusmani, *Studi ... V. Pisani* 504-5 and n. 12).
- 22.32 Hell The polar opposite of *nepis* was characterized as *dankui tekan* 'the dark earth', the abode of men (cf. Hoffner, *JNES* 27 [1968]: 65, n. 33-34).
- 22.35 DEMON (EVIL SPIRIT) *kallar uttar*, literally 'nefarious being', cf. *kallar* 'monstrous' (16.72) and *uttar* 'thing' (9.90), shares an ancient nuance of the supernatural or maleficent in IE **wekt(i)*-, as shown by the cognate ON *véttr* '(supernatural) being', OE, OHG *wiht* (esp. OHG *lêda wihti*, NHG *bösewicht* 'villain'), a connotation which survives even into the Lesbian $\Gamma \dot{\epsilon} \lambda \lambda \omega$, an 'evil spirit' (*AI* 221-22).

tarpi- (Akk. *šēdu*), a usually malevolent spirit often invoked together with the mostly benign *annari-* (22.46), is of unknown origin, but traced as a loanword into Hebrew *terāphîm* by Hoffner, *JNES* 27 (1968): 61-68.

- 22.37 IDOL Images, models, and statues of divinities were ubiquitous in cult usage, and were commonly denoted by DINGIR-LIM-tar (= siyuniyatar 'godhead, deity', abstract noun from siu[ni]- 'god' [22.12]; cf. NHG götze). Cf. also esri- (ALAM) and sena-, 9.83.
- 22.42 MAGIC, WITCHCRAFT, SORCERY alwanzatar (UH₄-tar), alwanzessar, alwanzahha- 'sorcery, witchcraft', alwanzena-, alwanzannas LÚ-as 'sorcerer', alwanzahh- 'bewitch', all from a stem alwanza-. Connection with Gk. $\grave{\alpha}\lambda\acute{\nu}\omega$ 'be beside oneself' (E. Polomé, La Nouvelle Clio 6 [1954]: 45-55, adducing also Latv. aluôt 'be distraught' and Runic alu, a magical term) is supported with reservations in P 43-46, suggesting a base-meaning 'possessed'; cf. also Puhvel, JAOS 97 (1977): 599.

uddaniya- and utnalliya-, uddanalliya- 'work magic', denominative from the oblique stem uddan-, utn- (and suffixed utnalla-) of uttar 'thing; matter; word, speech' (9.90); Oettinger, Stammb. 353).

- 22.43 WITCH, SORCERESS *alwanzenas* SAL 'woman of witchcraft'. A frequently encountered but not clearly understood magical practitioner is the ^{SAL}ŠU.GI, lit. 'old woman'.
- 22.45 GHOST, SPECTER, PHANTOM The 'spirit' or 'ghost' of a dead person is *akkant* (GIDIM), part. of *ak(k)* 'die; be killed', 4.75.
- 22.46 GUARDIAN SPIRIT Something analogous to Lat. *genius* 'generative force' or the like may be present in H. *annari*-(Akk. *lamassu*-), the personification of 'strength, vigor' with southern cultural influence indicated in the Luwian form *annari*-

vs. Hitt. *innara- (4.81), seen in Hattic D Inara- = D LAMA 'protectorgod'; see P 62-63 and refs.

22.47 - OMEN - sagai (IZKIM) fr. sak(k)- 'know', 17.17; cf. Ital. *presagio*, etc. (DSS 1504).

A verb *isiya-* 'appear, be revealed' is indicated by *isiyatar* 'sign, revelation' and fact. *isiyahh-* 'disclose, expose, reveal, announce; inform on'. The etymon may be IE **edh-yo-* (cf. Skt. δha , Av. $\delta \delta a$ 'spoke', OPers. $\delta azda$ 'announcement', possibly also Gk. $\delta \sigma \sigma a$ 'voice' < * $\delta azda$ 'announcement', with cognates in Gk. $\delta azda$ 'he said', Lat. $\delta azda$ 'affirm', $\delta azda$ 'portent', $\delta azda$ (Locūtius); cf. P 409-13.

An occasional alternate reading of IZKIM is H. *ilessar*, *ilissar*, *ilassar*, *elassar* 'sign', of unknown origin (P 357-58, T 355).

ariyasessar 'oracle', perhaps ariya- + asessar 'place, site', arises from ariya-, arai- 'consult an oracle' (generally accomplished by the observation of omina; cf. Gurney, *The Hittites* 156-60), probably related to Lat. $\bar{o}r\bar{o}$ ($<\bar{o}r\bar{a}y\bar{o}$) 'address the gods', $\bar{o}r\bar{a}culum$; cf. P 136-38 and refs.

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soft 15.75	spring (sb., of water)	subject 19.38
soil (sb.) 1.212	1.37	suck 5.16
soldier 20.17		suffer (16.31)

suffering 16.31	territory 19.14	toe 4.38
sugar 5.85	testicle 4.49	toil (sb.) 9.12; (vb.)
summer 14.76	theft 21.45	9.13
summit (12.33)	thick (in density)	tomorrow 14.48
summon (18.41)	12.64	tongue 4.26
sun 1.52	thief 11.57	tool 9.422
surety 11.67	thin (in dimension)	tooth 4.27
surrender (vb.) 20.46	12.65	top 12.33
swear (take oath)	thin (in density)	touch (vb.) 15.71
21.24	12.66	towel 6.82
sweat (sb.) 4.55	thing 9.90	tower 20.36
sweep 9.37	think ¹ (= reflect)	town 19.15
sweet 15.35	17.13	trade (vb.) 11.83
swift 14.21	think ² (= be of the	tree 1.42; 8.60
swine 3.31	opinion) 17.15	tribe 19.23
sword 20.27	third (ordinal) 13.42	try (= attempt,
	thirst (sb.) 5.15	endeavor) 9.99
table 7.44	thread 6.38	turn 10.12
tablet (for writing)	three 13.41	turn round 10.13
18.55	three times 13.44	
tail 4.18	thresh 8.34	ugly (in appearance)
tailor 6.13	threshing-floor 8.35	16.82
take 11.13	throat 4.29	understand 17.16
take hold of 11.14	throne 7.43	unite 12.22
talk (vb.) 18.21	throw 10.25	urine, urinate 4.65
taste 15.31	thunder 1.56	
tax (sb.) 11.69	tie (vb.) (9.16)	valley 1.24
teach 17.25	till (vb.) (8.15)	value (11.87)
tear (sb.) 16.38	time 14.11	vegetables 5.65
tear (vb.) 9.28	tin 9.69	veil 6.59
temple 22.13	tired 4.91	vessel (10.81)
	tired 1.71	v ebber (10.01)
tent 7.14	today 14.47	victory 20.41

village 19.16	weep 16.37	witch 22.43
vine 8.67	well (sb.) 1.37	witchcraft 22.42
vinegar 5.83	well (adj.) 4.83	witness (sb.) 21.23
	west 12.46	wolf 3.71
wages 11.78	wet 15.83	woman 2.22
wagon 10.75	wether 3.27	womb 4.47
wait 12.16	wheat 8.43	wood 1.43
wake 4.63	wheel 10.76	woods 1.41
walk (vb.) 10.45	white 15.64	wool 6.22
wall 7.26	whole 13.13	word 18.26
want (vb., wish)	wide 12.61	work (sb.) 9.12; (vb.)
(16.61)	widow 2.76	9.13
war 20.13	wife 2.32	world 1.1
warm 15.85	will (vb.) 16.61	worm 3.84
wash 9.36	win (= be victorious)	worship (vb.) 22.16
watch (vb.) (11.24;	(20.41)	wrap 10.14
15.52)	wind (sb.) 1.72	write 18.51
water 1.31	wind (vb.) 10.14	wrong 16.74
wave (sb., on water)	window 7.25	
1.35	wine 5.92	yard 7.15
way (road) 10.71	wing 4.392	year 14.73
weak 4.82	winter 14.74	yellow 15.69
wealth 11.42	wisdom (17.21)	yesterday 14.49
weapons 20.21	wise 17.21	yoke 10.78
weave 6.33	wish (vb.) 16.61	young 14.14