

OFFPRINT

ESSAYS ON ANATOLIAN STUDIES
IN THE SECOND MILLENNIUM B.C.

Edited by

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OTTO HARRASSOWITZ · WIESBADEN

ANNELIES KAMMENHUBER

ON HITTITES, MITANNI-HURRIANS, INDO-ARYANS AND HORSE TABLETS IN THE IInd MILLENNIUM B.C.

(1) Through the kindness of HIH Prince Mikasa, I am invited to give You a conference on a particularly interesting subject: the Hittite Horse Tablets. But at first I have to confess that these texts are boring to read and could hardly be considered stylistic masterpieces. Despite these drawbacks, the contents of these tablets are worthy to note because they are the oldest instructions of this kind in the world. These instructions cover the training of horses on light, two-wheeled chariots. Usually such experiences are handed down by word of mouth, and treated as a professional secret, but in this case, they were written down in Hittite between 1350 and 1200 B.C. The use of the Hittite language in the oldest of the three instructions (and a preserved part of a training report) is accidental. The oldest instruction by Kikkuli of Mitanni was apparently intended to inform Hittite nobility circles surrounding the Hittite king, Mursili II. These people seem to have been interested in the experiences gained by Indo-Iranian or Indo-Aryan and Hurrian horse trainers.

(2) Before the real rather complicated topic of this lecture can be dealt with, "Training Instructions for Horses on Light, Two-Wheeled Chariots" (in §§ 8–11), some terms must be clarified and some explanations offered. Both the long title of this lecture and the introductory remarks will have made this necessity apparent.

Unfortunately, it is not possible for me to respond to your invitation to Japan with a representation in your language. So I must try to show how honored I feel by using other means to ease understanding. A student of mine, Daisuke Yoshida, was so kind to translate in Japanese this lecture and also the brief résumé that has been handed out to you.

Four explanatory tables have been included with the handout. The published version will also contain a bibliography. Those titles not listed in the bibliography can easily be found in the books and articles listed.

With these means, it should be possible to restrict the clarifications here to those that are absolutely essential, and only that which has been established beyond a doubt or which seems the only possible explanation will be presented. This is not the place to cover hypotheses that are swamping Hittite research in Europe and in the United States.

(3) In 1887, Amarna, the city of the Pharaoh Amenophis IV, who called himself Achnaton, was rediscovered and excavated. With this began everything in connection with the Horse Tablets. Amarna lay 300 km up the Nile from present-day Cairo, and the excavation of the site led to the discovery of two languages which had, up to then, been unknown. The first was Hittite, an Indo-European language, and the second one was (Mitanni-)Hurrian. Hurrian is neither an Indo-European nor a Semitic language, and is related only to the Urartian. Urartian was written in inscriptions from the 9th to the beginning 7th century B.C. in Urartu, in the region from the Van Lake in East Turkey, Northwest Iran, and up to the other side of the Russian border. In addition, letters from Amarna brought to light the first personal names that could be connected with Indo-Iranian (= Aryan), which was yet another Indo-European language group.

The beginnings made in 1887 in Amarna were carried further from 1905/1906 to 1912, for it was then that the former capital of the Hittite kingdom, Hatti, was rediscovered. This capital city, Hattusa, lay in and near by the Turkish village Boğazköy (now Boğazkale), and is about 150 km directly northeast from Ankara. Hugo Winckler and Makridi Bey found there about 10000 clay tablets, including the Horse Tablets of Kikkuli of Mitanni. There were found also other Hurrian (religious) texts and a treaty between the Hittite kingdom Hatti and Mitanni. At the end of this treaty the gods were called upon as witnesses, and the gods listed included not only Hittite and Hurrian gods, but some Indo-Iranian gods as well.

The two more recent "Horse Tablets" and the "Training Report" were not discovered until the excavations had been begun again from 1931 to 1939. Kurt Bittel headed this project in Boğazköy.

(4) All of those rediscovered languages could be read immediately, but two of them could not be understood. They were written in Cuneiform Writing on clay tablets. Cuneiform had been invented by the Sumerians and then spread by the (Semitic) Akkadians, the Babylonians and Assyrians, to the whole of The Middle East (as seen when looking from Japan, equating the "Near East" in the sight of Europe and the United States).

Cuneiform was written with wedge-shaped signs and sign combinations. Because it was written on clay tablets and stone, it had developed this way from the original stylised pictographic writing. It contained Sumerian word signs, which were used also as determinatives for "god", "wood", "house" (and others) in front of the names of gods, objects of wood, and houses and rooms respectively. The rest were syllabic signs and signs for the vowels A, E, I, and U. All the Sumerian word signs, called "Sumerograms" (and in the Hittite type of cuneiform also yet "Akkadograms"), could be immediately understood by every scribe from Elam in Iran to Hatti in Central Anatolia and unto Egypt, in a

manner comparable to the understanding of Chinese characters here in East Asia.

(5–7). A few further clarifications concerning the mentioned languages:

(5) Who were the Hittites? (With table 1 and 2.) Who were these people, whose cuneiform tablets had been found in Amarna in Egypt in two letters, and in Boğazköy in Turkey in a lot of texts (20000–30000) of many different kinds?

The Hittites were found near Kayseri in Central Anatolia in about 1800 B.C. (excavation level Kaniš-Kültepe Ib, Hittite name Nesa). From 1650 or 1590 to 1200 B.C. they had a kingdom. In the time of the New Hittite Dynasty, the 2nd dynasty, from about 1450 to 1200 B.C., it became an empire, on a par with Babylon, Assyria, Egypt in the 14th and 13th centuries B.C. This is established, among other reasons, by the use of “my brother” as form of address in letters between the rulers of these kingdoms.

Until the destruction of their kingdom Hatti shortly after 1200 B.C., the Hittites called themselves “Sons and daughters of Hatti” or “men of Hatti”. Their language was referred to once as *nešumnili*, once as *nešili*, and once as *našili* = “Nesian”, named after the earliest or one of the earliest places of settlement, Kaniš-Neša. Our name “Hittite” is based on the Bible. In the Old Testament, after about 900 B.C. (beginning with King, Salomon), the Luwian (= Luwite) and (Semitic) Aramaic speaking population of the so-called Late Hittite City States in North Syria (until Damascus) are referred to about 30 times as “Hittites”. The most recent and valid depiction of the Hittites in the Old Testament People Lists was written by a younger Japanese colleague and friend of mine, Tomoo Ishida.

The Hittite language is the oldest Indo-European (or Indogermanic) language of which we have written texts. Together with five other languages, it constitutes the Hittito-Luwian (= Hittite-Luwite in Table 1), a closely related language group, comparable with, for example, the Indo-Iranian Group, the Greek Dialects, or the Germanic Languages. Included in the Hittito-Luwian Group are Palaite (= Palaite) with texts after about 1650/1590 B.C., and Cuneiform Luwian with texts from the 14th and 13th century B.C. The Hieroglyphic Luwian from the Late Hittite City States that were just mentioned also belongs to the group. It was written in a new pictographic script that the Hittites had invented in the 15th century B.C. for seals and inscriptions on stone documents.

After 1200 B.C. until about 700 B.C. that script remained in use in North Syria. Other Hittito-Luwian languages were the Lycian, another Luwian language, and Lydian, both from about the middle of the 1st millennium B.C., and both written in Greek alphabetic scripts.

Since the Hittito-Luwians spoke an Indo-European language, they must have

emigrated from elsewhere into Anatolia. The migration took place before 1800 B.C., and in all probability the Hittito-Luwians arrived from the East over the Caucasus to Anatolia.

The speakers of Hittito-Luwian must have started from that area to which linguistic evidence in the reconstructed Proto-Indo-European points. German *Ur-Indogermanisch* = Proto-Indo-European and *Urheimat* = Original Homeland created in the last century under the influence of the German Romantik, are today impossible as terms.

Proto-Indo-European can mean today only that one transitory phase of language, of which parts can be reconstructed by the individual Indo-European languages. Proto-Indo-European means only that last phase of linguistic unity before the first groups emigrated who were later found elsewhere as speakers of Hittite, Luwian and so on.

Based on the evidence of the individual Indo-European languages, the reconstructed Proto-Indo-European points to an area in the West. The speakers of Proto-Indo-European had a culture based on agriculture, in the Late Neolithic Period. When all of the linguistic results are compared with the real world (for example the knowledge of the copperbeech tree), it must be presumed that there were Proto-Indo-European settlements about 3000 B.C. from the Main River to the South and from the Elbe River to the West in today Bavaria or in the northern Balkan. This is based on the fact that the copperbeech tree was not found east of the Elbe River until a later date. The prehistoric "Bandkeramische Kultur" ("Bandkeramik") of the Danube Basin fits the linguistic evidence. Of course, today we know (or should know) that the diffusion of this Neolithic Ceramic Type was not identical to the spreading of the Indo-Europeans (more exactly: of the Indo-European languages). The Indo-Europeans reached the sea coasts of the North and Baltic Seas only centuries later than 3000 to 2500 B.C., that time, when the first groups of Indo-European speaking peoples had migrated away from the area. Those earliest emigrants were the speakers of what later became known as Hittito-Luwian, Indo-Iranian, Greek, and Armenian.

Only the speakers of Indo-Iranian called themselves *arya-* "Aryans" after 1500 B.C. in their new homelands North India and, testified from about the middle of the 1st millennium B.C., on, in Iran (and in vast regions north of it).

arya-, Middle- and Newpersian *ērān*, survives in the name *Iran*, which was revived in 1934. The genuine designation Aryan for Indo-Iranian was also adopted by Comparative Indo-European Linguists as a mainly linguistic designation. This comparative Linguistic has its origins in the German Romantik, in the first part of the 19th century C.E.

In German schools after 1945 all that topic mostly has been neglected. If ever, there was only spoken of an Indo-European Homeland in the East. Of course,

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On the other hand, scholars of Comparative Linguistic, therefrom separated
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time when they carried out their linguistical reconstructions. This is true with
many scholars making etymologies of words, before 1933 as well as after 1945.

180 Who were the Hurrians? (With table 3.) The Hurrians reached the Middle
East before the Hittites and were still there after the decline of the Hittite Empire
shortly after 1200 B.C. (Hurrian language and the related language Urartean in
the kingdom Urartu, 9th to beginning 7th century B.C., were already mentioned
p. 33.)

The oldest sources of Hurrians, personal names, names of gods, a first inscrip-
tion in Hurrian, begin in the 23th century B.C. Together with an Old Hurrian
King List, stored and delivered in a religious text, by the Hittites in the 14th–13th
century B.C. they show the early settlements of the Hurrians at the time of the
first great king of Akkad, Šarkališarri, in about 2140 (/2200). Their center lay from
Ninive on north of the Tigris (with Hurrian name Aranzah) in a region called by
the Sumerians *su-bir*, and by the Akkadians *Šubartu* (and from the 14th century
B.C. on also Assyria). In about 2140 the settlements expanded between Kerman-
šan in Iran and Urkiš = Tell ‘Amūda in the West. (Tell ‘Amūda lies between Rās-
-el-Ain and Qamišli on the Turkish-Syrian frontier, and south of Mardin.) The
“capital cities” were under Ari-šen (not Atal-šen) this Urkiš in the West and
Ninwar in the East. The Old Hurrian King List from Boğazköy (KUB XXVII 38)
has preserved this Hurrian king Ari-šen, the kings of Akkad and one king each
from Elam, Awan(-Elam), Lulufe/Lullubu and Dukriš. In about 2140 B.C.,
shortly before the Gutu Invasion, the Hurrians were a part of that Cuneiform
culture which also included the Sumerians in Southern Mesopotamia at the Gulf
of Persia, the (eastern Semitic) Akkadian Empire north of it, Elam (with Susa,
Awan) in the East and the western Semitic kingdoms Mari on the middle course
of Euphrates, and Ebla in North Syria.

Remains of Indo-Iranian (= Aryan) language are found only centuries later with
a group of Hurrians, those of Mitanni. Between 1500 or 1450 to about 1350 the
Mitanni Empire of Mitanni covered an area from east of the Tigris with Nuzi and
Kirkuk (= modern Kirkuk) up to North Syria with Halpa (= modern Aleppo)

Alalah (excavation level IV) on the Orontes River. Probably, Mitanni (or at
least its sphere of influence) did not extend beyond the Orontes. Also the eastern
parts of the Hittite kingdom Hatti belonged than to Mitanni. After the Hittite
king Suppiluliuma I destroyed Mitanni in twenty years until in about 1350 B.C.
and took their land in (modern) Turkey and North Syria for himself, there
remained little Hurrian kingdoms. These little kingdoms, the best known

Ḫanigalbat, lay in the Ḫabur-Area (East Turkey), a center where Hurrian settlements are found from the IIIrd millennium B. C. on.

The region of the Ḫabur River is also looked for the capital of Mitanni, for Waššukanni (excavation at Tell Fcherījé until now negative). Perhaps Waššukanni has been nearer to the eastern bank of the Euphrates.

The reason why the Hurrian letter of king Tušratta from Mitanni was found (along with his other letters written in Akkadian) in Amarna in Egypt is obvious:

Because there was a common sphere of interest between Mitanni and Egypt in Lebanon and North Syria, the last Artatama, Šuttarna (II), and Tušratta, 3 generations of Mitanni kings, tried an active policy of marriages with Egypt in giving daughters to the Pharaohs Thutmosis IV and Amenophis III (whose second Hurrian wife was inherited by Amenophis IV = Achnaton into his harem). By Tušratta's letters we know that the Mitannian princesses played no important role in the Pharaoh's harem. Achnaton's beautiful wife Nofretete, certainly, was no Mitannian princess. The Hurrians never have settled so far to the south that the unimportant *Ḫōrī* people of the Old Testament could have had anything to do with them. And also Egyptian *hr* does not mean the Hurrians. They also never did settle on the island Alašya (= modern Cypros).

(7) The relics of Indo-Iranian (= Aryan) language. The importance of these few relics found in 1887 in Amarna and in 1905/6 to 1912 in Boğazköy has been vastly overrated, because at that time Indo-Iranian had been considered the Oldest Indo-European language group. There should have been an Indian Empire from at least Mesopotamia into Palestine, or even in Egypt (Hykos Time). Every word or name that showed, at the beginning or at the end, some resemblances with an Old Indian word was taken as a proof. Until 1961, the existence of Hurrians was automatically equated with the existence of Aryans, at least as part of their nobility, etc., etc. The discussion in hundred of books, articles and shorter citations was not free from political accents.

The titles of the books and articles of those authors who have helped to clarify the problem show still something of that terrible discussion. The mentioned relics are called in the following passages (Indo-)Aryan as Mayrhofer does. This is only for convenience, for to discriminate the few relics from the above mentioned Indo-Iranian (= Aryan language) group. It does not implicate that the relics stem from an Indian already separated from the previous Indo-Iranian (= Aryan).

Mayrhofer had tried to put the arbitrary language comparison on a solid footing in a lot of articles. He compared really Old Indian words, mostly from Vedic and not from the younger Sanscrit. His results and a bibliography for the time from 1884, 1887 to 1965 containing more than 700 titles he published in *Die Indo-Arier im Vorderasien* (1966).

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Kammenhuber in: *Hippologia hethitica* (1961) pp. 15–21 and more explicitly in: *Die Arier im Vorderen Orient* (1968), first chapters finished in 1966. Results fully accepted by Diakonoff who puts a still more severe measure on words supposed Indo-Aryan in: *Die Arier im Vorderen Orient – Das Ende eines Mythos Zur Methodik der Erforschung von verschollenen Sprachen*, *Orientalia* 41 (1972) 91–120.

Mayrhofer answered with a new book: *Die Arier im Vorderen Orient – ein Mythos?* (1974), where he also continued his bibliography . . .

As it turned out in 1961 and 1968, there were still fewer demonstrably (Indo-)Aryan words, personal names, and god names than Mayrhofer presumed. There are no (Indo-)Aryan words preserved by the Kassites, the later kings of the Middle Babylonian Dynasty after 1500 B. C. All those relics came from the Mitanni-Hurrians. There remain only 4 god names mentioned in the treaty between the Hittite king, Suppiluliuma I, and Kurtiwaz(z)a (not Šattiwazza!) of Mitanni, son of Išratta. There are some, mostly technical terms dealing with horses, in the Horse Tablets of Kikkuli from the time of Mursili II., son of Suppiluliuma. And there are a few other words (lexems), as well as some personal names of the kings of Mitanni and of persons in Nuzi and Arraphē in the farthest east of Mitanni.

In the time these few (Indo-)Aryan relics were past on by Mitanni, they were already fossils of a dead language. The actual language contact must have taken place a certain time earlier. It must have been a contact between a Hurrian group who later founded the State Mitanni, and a group of (later) Indians on their way to their new homeland North India. There they seem to have in part destroyed, and in part assimilated the previous Indus-Culture (c. 2500–1500 B. C.).

The language fossils are too few to decide if this later Indian was still a dialect in the unseparated Indo-Iranian (= Aryan), or was already a separated Indian as Mayrhofer's term Indo-Aryan shall show. The supposed place of contact may well have been in the Area of Lake Urmia. So Diakonoff, precisising my proposal of the Area of Caucasus.

§ 3. On the Horse Tablets

§ 3.1. At least since 1961 two facts are evident: "The Training Instructions for Horses on Light, Two-Wheeled Chariots" were not written for to introduce horses in the area south of the Caucasus (where horses were not autochthonous). And they were not written for to introduce there the light chariots of war.

Previous works on that subject done by Potratz, Hančar, A. Salonen, and again by Diakonoff showed, that the light, two-wheeled chariot presupposed a technical development which had only been reached in Mesopotamia in about 2000 B. C. And horses had been used in Anatolia since the Old Assyrian Merchand

Colonies Kaniš-Kültepe (and so on in the 19th and 18th century B. C. and since the beginning of the Hittite kingdom in to the 16th century B. C.) Wild horses were already in East Anatolia about the middle of the IIIrd millennium B. C., as proved by newly excavated bones which are not yet published (Boessneck by word of mouth). The considerably discussed animals drawing the heavy four-wheeled war-chariot of the Standard of Ur (c. 2500 B. C.) also are considered today (again) as horses.

On the other hand, the already (in §5) mentioned Proto-Indo-Europeans knew both the horse and a heavy, probably four-wheeled wagon, in that Late Neolithic Time. Thus, the from there emigrated Indo-Iranians (= Aryans) or Indo-Aryans, a group of the later Indians, could not have bestowed the peoples of Mesopotamia and Anatolia with this “cultural gift”. It is rather they who burrowed the light, two-wheeled chariot of war from the higher Bronze-Time civilization of the Near East, probably in the already mentioned area of Lake Urmia. But the (Indo-)Aryan technical terms concerning training of horses to draw that light chariot that have been handed down as fossils by the Mitanni-Hurrians show that those (Indo-)Aryans seem to have been very quick to develop superior training methods that produced good results. Though, these technical terms were stored by the Mitanni-Hurrians and went together with newer Mitanni-Hurrian training experiences in the Kikkuli-Text to the Hittites after 1350 B. C., in the time of the Hittite king, Mursili II, son of Suppiluliuma I. But that was after Suppiluliuma I had destroyed the empire Mitanni with his own horses and chariots!

(9) Now some general information about the content of the Hittite “Training Instructions for Horses on Light, Two-Wheeled Chariots” and the Training Report will be given (§§9–10). After that, to close this paper, in connection with the number rounds (German “Rundenangaben”) in the Kikkuli-Text, some of the relations that have been worked out will be discussed. These include (Indo-)Aryan language fossils that have been reverently handed down by the Mitanni-Hurrians (§§7–8), later technical terms in Hurrian (§6), and the creation of new technical terms in Hittite (§5).

1. Kikkuli-Text: 4 tablets and a fragment of a further tablet. Each of the four tablets appears to have had a different Hurrian author, for each had different areas of weakness in his knowledge of Hittite. The author of Tablets III and IV had the least knowledge of Hittite. When they did not know the correct Hittite word, they just substituted the Hurrian one. This proves that, at the time these tablets were written, after 1350 B. C., Hurrian, and not Indo-Aryan, was the language of Mitanni and the remaining Hurrian rest states in the Habur area. There are 184 training days preserved in Tablets I to IV, and 5 more on the fragment. The days are numbered consecutively; at the most, 10 days are listed together.

fossils of language. They had long since been replaced by more accurate (Mitanni-)Hurrian expressions, and the authors of the Kikkuli-Text created the Hittite equivalents.

The (Indo-)Aryan words in the Kikkuli-Text are:

^{LÚ}*aššuššani* “horse trainer” (not accepted by Diakonoff); the half Hittite and half Aryan *anda wartanzi* “to turn in (tails of the horses)” Tablet IV rev. 7;

wašanna “race course” one each time on Tablet III and IV; and the round numbers *aikawartanna* “single round”, *t(e)riwartanna* (and writing variants) “triple round”, and five, seven and nine rounds.

These round numbers were only used with the fast gait *parḫ-*. Actual rounds can only be intended by the two places in the sources dealing with the race course. In the other cases, the (Indo-)Aryan rounds refer only to a particular distance that varies between 14 IKU = “field” and 20 field, that means between 1½ km (precisely 1498 m) and a bit more than 2 km (precisely 2140 m). The use of rounds begins in the IInd Tablet, because in the Ist Tablet, at the beginning of the training, the “galopp” distance did not exceed ½ round = 750 m.

The Mitanni-Hurrians did no more understand why there were (Indo-)Aryan round numbers only for odd numbers. So, they added new terms for 2, 4, 6, in Hurrian and adapted to the new situation. Therefore *šinišella auza/umewa_a* = Hittite *2-anki parḫuwar* “twofold galloping” at the first occurrence in tablet II, but later often only with the Hittite expression. But the simple Hittite wording *2 wahnuwar*, *3 wahnuwar* etc. “2 rounds, 3 rounds” is the translation of the antiquated (Indo-)Aryan *-wartanna*! On the other hand, the Hurrians have, oftener, added the “glose” *auza/umewa_a* to the (Indo-)Aryan odd round names for to make clear that the faster gait *parḫ-* is intended.

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Table 1

\$ 5

| The Hittite-Luwite | | |
|-----------------------|---|--|
| Approximate date | | Influence by other Languages in Anatolia in the 2nd Millennium |
| ca. 5000 B. C. | (Ur-)Indogermanisch Proto-Indoeuropean | |
| | | |
| ca. 2500 B. C. | Proto-Hittito-Luwian | <i>Hattian</i> (isolated language) has influence on Hittite and Palaic. Dies about 1500 B. C. |
| | | |
| | Proto-Luwian | <i>Non indo-european South-Eastern Anatolia</i> has influence on the Luwian Languages. |
| Later than 2000 B. C. | Hittite ca. 1800–1200 B. C. | |
| | Palaic (text from ca. 1650–1400) | |
| ca. 1400 B. C. | | |
| | Cuneiform Luwian (texts from ca. 1400–1200) | <i>Hurrian</i> influence from ca. 1430 B. C. on. |
| ca. 1200 B. C. | Hieroglyphic Luwian ca. 1200–8 th century in Northern Syria | |
| ca. 700 B. C. | Lydian (in Greek script) | Lycien (in Greek script) |

Table 2

§ 5

| Hittite kings | some synchronism | |
|---------------|--|---|
| About 1800: | The Hittites are in Central Anatolia | Kaneš-Neša-Kültepe Ib (near Kayseri) |
| 1650 or 1590 | <i>Old Hittite Kingdom</i> Labarna I. Ḫattušili I. Muršili I. ————— | destroys Babylon, end of the Old Babylonian Dynasty 1531 (1595) B. C. |
| | Ḫantili Zidanta (Zidanza) Ammuna Ḫuzziya Telipinu Alluwamna | |
| ca. 1450 | <i>New Hittite Kingdom</i> Tuthaliya I. Ḫattušili II. Tuthaliya II. ∞ Nikalmati Arnuwanda I. with sister Ašmunikal, wife Taduḫepa Tuthaliya III. | |
| ca. 1380–1346 | Šuppiluliuma I. ————— Arnuwanda II. Muršili II. | Amarna: Tusratta of Mitanni; Amenophis III. and Amenophis IV. from Egypt. |
| about 1300 | Muwatalli Ḫattušili III. Tuthaliya IV. sons Arnuwanda III.; Šuppiluliuma II. till 1200 B. C. | |

§ 5

Tabelle 3

§ 6: Hurrians

Expansion der Hurriter (nach der kurzen Chronologie)

Chronism

eša-Kültepe Ib (near

Babylon, end of the
Assyrian Dynasty 1531
C.Mitanni;
s III.
Sargon IV.
C.

| | Ereignisse | Hurriter |
|------|--|--|
| 2134 | Akkad-Reich | terminus ante quem |
| - | Zt. Šarkališarri | Ḫabur-Dreieck bis Westiran: Arišen v. Ur- kiš u. Nawar; akkad. Subartu. – Unbe- kannte Völker westl. von Urkiš. |
| - | Guti-Einfall, nach 2136 | Ende der althurr. Überl. in Boğ. |
| 1630 | Ur III | Hurr. PN von Urkiš bis Ostiraq, östl. des Tigris. – Westsemiten nördl. des Euphrats. |
| 1696 | Mari-Zeit | Verstreut Euphrat-Ḫabur-Gebiet bis |
| 1718 | Šamši-Adad v. Assyrien, Chagar Bazar, Kaniš Ib. | Nordostiraq. – Westsemit. Machtentfaltg. bis Kargamiš, Ḫalpa, Ugarit. |
| 1680 | Ḫammurabi v. Babylon | |
| 1648 | Samsuiluna v. Babylon | |
| - | erste Kassiten in Babylonien | |
| 1621 | Hyksos im Nil-Delta | |
| - | Alalah VII, Ḫattušili I. v. Ḫatti kämpft mit zerstört | SW.-Grenze Alalah Vorstoß bis Zentralanatol. Hurr. in Ursum. hurr. Ḫaḫḫum u. Ḫaššum. |
| - | Muršili I. v. Ḫatti zerstört Babylon | zerstört hurr. Ḫalpa-Aleppo |
| - | | Kontakte zw. Hurritergruppen und Arier- gruppen auf der Wanderung nach Indien im Kaukasus-Gebiet. |
| 1600 | | Mitanni (u. and. hurr. Staaten). Grenzen: Östl. d. Tigris: Nuzi, Arrapha; W: Ostana- tolien mit Kommagene; Orontes SW: 36. Breitengrad. |
| - | Hurr. Dynastie in Ḫatti | |
| - | Heth. Vormacht im W. Heirats- politik, hurr. PN auch südl. v. 36°. | Hurr. Reststaaten östl. des Euphrats (Ḫanigalbat) |
| - | noch überlebende "heth." Stadtstaaten bis Hamath, = <i>ḫittim</i> der Bibel. | Hurriterreste im O. Reich Urartu in Armenien. |
| - | unbekanntes Volk namens <i>Ḫōrī</i> in der Bibel | |

Tabelle 4

§§ 9–11 aus Hippologia hethitica (1961)
Die arischen "Runden"

| "Runde" | Trab (<i>penna-</i>) | Galopp (<i>parḫ-</i>) | |
|--------------------------------|---|-------------------------|------------|
| ½ Runde | | | |
| I Nr. 20, 21 | ½ Meile und 20 Feld | 7 Feld | |
| Nr. 25 | verschrieben 1 Meile u. 20 Feld | 7 bzw. 10 Feld | |
| Nr. 26 | ½ Meile und 20 Feld | 10 Feld | |
| IV Nr. 102 | ½ Meile und 20 Feld | 7 Feld | |
| 1 Runde | | | |
| II Nr. 30, 31 | ½ Meile und 20 Feld | 20 Feld | |
| III Nr. 93 | ½ Meile | 15 Feld | |
| IV Nr. 108 | ½ Meile | 15 Feld | |
| Nr. 113 | ½ Meile | 20 Feld | |
| 2 Runden | | | |
| II Nr. 35, 39 | ½ Meile und 20 Feld | 38 Feld | |
| III Nr. 79, 81 | ½ Meile und 20 Feld | 37 Feld | |
| IV Nr. 114 | ½ Meile und 20 Feld | 30 Feld | |
| Nr. 116 | ½ Meile und 20 Feld | 37 Feld | |
| 3 Runden | | | |
| II Nr. 45 | ½ Meile und 20 Feld | ½ Meile u. 7 Feld | = 57 Feld |
| Nr. 56 | ½ Meile und 20 Feld | ½ Meile | = 50 Feld |
| III Nr. 87, 89, 95 | ½ Meile und 20 Feld | ½ Meile | = 50 Feld |
| Nr. 97 | ½ Meile und 20 Feld | ½ Meile | = 50 Feld |
| IV Nr. 110 | ½ Meile | ½ Meile | = 50 Feld |
| Nr. 112 | ½ Meile | ½ Meile u. 7 Feld | = 57 Feld |
| Nr. 122 | ½ Meile und 20 Feld | ½ Meile u. 7 Feld | = 57 Feld |
| 4 Runden | | | |
| II Nr. 65 | umgedeutet: Trab von | 67 Feld (vgl. S. 293) | |
| Nr. 78 | 1 (statt ½) Meile, 20 Feld | ½ Meile u. 10 Feld | = 60 Feld |
| 5 Runden | | | |
| II Nr. 73 | ½ Meile und 20 Feld | ½ Meile u. 20 Feld | = 70 Feld |
| III Nr. 86 | ½ Meile und 20 Feld | ½ Meile u. 20 Feld | = 70 Feld |
| Nr. 94 | ½ Meile und 27 (statt 20) Feld | ½ Meile u. 27 Feld | = 77 Feld |
| IV Nr. 109 | ½ Meile und 20 Feld | (½ Meile) u. 27 Feld | = 77 Feld |
| 6 Runden | | | |
| III Nr. 80 | ½ Meile | 90 Feld | |
| [vgl. Nr. 96 | <i>uasanna</i> , wo sich | 105 Feld ergeben] | |
| 7 Runden | | | |
| III Nr. 88 | ½ Meile | 1 Meile | = 100 Feld |
| IV Nr. 101 | ½ Meile und 20 Feld | 1 Meile | = 100 Feld |
| Nr. 111 | ½ Meile | 1 Meile | = 100 Feld |
| Nr. 121 | ½ Meile und 20 Feld | 1 Meile | = 100 Feld |
| 9 Runden | | | |
| IV Nr. 103 | verkürzt: <i>n-aš nāuartaṇna ḫarkanzi</i> | | |
| Nr. 117 | dasselbe ² auf Hurrisch | | |
| [vgl. Nr. 115 <i>uasanna</i> : | | 1 Meile u. 80 Feld | = 180 Feld |

des Typus II a α, II b α

| arisch | Benennung hurrisch | hethitisch |
|------------------------------------|----------------------------------|-------------------------------------|
| — | — | — |
| — | — | — |
| — | — | — |
| — | — | — |
| <i>aikayartanna</i> | — | — |
| — | — | — |
| — | — | — |
| — | — | — |
| .. | <i>šinišella auzameya</i> | 2 -anki parḫuyar |
| — | — | 2 uḫnuḫar |
| — | — | — |
| .. | <i>auzumeya šieša</i> | — |
| — | — | — |
| <i>triḫartanna</i> | Glosse <i>auzameya</i> | Übersetzung mißglückt |
| <i>triḫartanna</i> | — | — |
| — | — | <i>uḫnuḫar</i> 3 (bzw. 3 <i>uḫ-</i> |
| <i>triḫartanna</i> | — | 3 <i>uḫnuḫar</i> [nuḫar]) |
| <i>triḫartanna</i> | — | <i>uḫnuḫar</i> 3 |
| — | — | — |
| <i>triḫartanna</i> | — | <i>uḫnuḫar</i> 3 |
| — | — | <i>uḫnuḫar</i> 4 |
| — | — | <i>uḫnuḫar</i> 4 |
| — | — | <i>uḫnuḫar</i> 5 |
| — | — | <i>uḫnuḫar</i> 5 |
| — | — | <i>uḫnuḫar</i> 5 |
| <i>panzauartanna</i> | — | <i>uḫnuḫar</i> 5 |
| — | — | <i>uḫnuḫar</i> 6 |
| — | — | — |
| <i>sattayartanna</i> | <i>šittanna</i> | 7 <i>uḫnuḫar</i> |
| <i>sattayartanna</i> | Glosse: <i>auzumeya</i> | <i>uḫnuḫar</i> 7 |
| <i>sattayartanna</i> | Glosse: <i>auzumeya</i> | <i>uḫnuḫar</i> 7 |
| <i>sattayartanna</i> | Glosse: <i>auzumeya</i> | <i>uḫnuḫar</i> 7 |
| — | (Übers.: [<i>šit'at</i>]niḫa) | — |
| “man hält sie in” Neunerrunde | — | — |
| — | <i>nišuya[š]u'niya udu[p(.)]</i> | — |
| * <i>navavartanni vasannasya</i> | — | — |
| “in Neunerrd. d. <i>uasanna</i> ”] | — | — |