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**MAKRİŞ AND AŞİŞ, COMPONENT-PARTS
OF WAGONS AND PLOUGHS RESPECTIVELY,
IN A CAPPADOCIAN TABLET FROM KÜLTEPE**

During the Old Assyrian Trading Colony Period in Anatolia, wagons were used to carry loads by the Assyrian merchants and by the local people. The name occurs in the form *eriqqum*, always phonetically written in Kültepe tablets.¹ A number of different kinds of commercial load (*awilum*)² especially copper obtained from Anatolia were loaded by the Assyrian colonists—with an explanation in the texts—into wagons (*ina eriqqim liddi'ūnim*, see Appendix (f) below) and transported on wagons (“by wagon”) (*ina eriqqim ublūšum*, see Appendix (f)) among the neighbouring cities of this country. Grain, leather and wool were “drawn” (*išdudūnim*)³ by wagon from one place to another; in addition to these commodities, wagons were also used to carry straw, furniture, stone and caravan trappings⁴.

*Narkablum*⁵ and *hulukannum*⁶ both of which occur only once on Kültepe tablets, are two other unknown kinds of wagon.

Assyrian merchants used to buy⁷ a wagon for their trading or perhaps used to

(1) *Eriqqum*, “Lastkarre”, J. Lewy, EL I p. 116; “Lastwagen”, A. Salonen, Die Landfahrzeuge des alten Mesopotamien, 1961, S. 23, 28ff.; “wagon, cart, cartload”, CAD E 296-297; “Lastwagen”, von Soden, AHW 238.

(2) Cf. BIN VI 258: 15f. [1 e]-ri-qum qā-dum [a-w]i-ti-ša, “[one] wagon with its [lo]ad”; for *awilum* see AHW 91; CAD A II 523f.; K. R. Veenhof, Aspects of Old Assyrian trade and its terminology, Index p. 459.

(3) For *šadādum*, see Balkan, Anatolian Studies presented to H. G. Güterbock..., 1974, p. 38f.; AHW 1121b.

(4) For the kinds of loads which were carried by *eriqqum* in Kültepe tablets, see the Appendix.

(5) CCT III 20: 19 a-na na-ar-kā-ab-tim.

(6) *Hulukannum* (*hulukannum*), a type of wagon, CAD H 232b; AHW 354b; cf. W. Nagel, Der mesopotamische Streitwagen, 1966, p. 12. Ankara 14: 7 (unpubl., translit. only) *ama hu-lu-kā-ni-kā ina puzzurim ušēbilakkum*, “I sent you your *hulukannum*-wagons secretly?”; *ibid.* 30 *šim hi-lu-kā-ni-im*, “the price of a *hulukannum*-wagon”, Bilgiç, Appellativa, p. 49f.; Landsberger, ArOr XVIII 1-2, p. 342, note 67 sub No. 5.

(7) kt e/k 46: 17 1/2 MA.NA AN.NA *šit-im e-ri-qī-im*, “1/2 mina of tin as the price of the wagon”; IAV 32: 3f. [x] GÍN KŪ.BABBAR (4) [*šit-im*] *e-ri-qī*, “[x] shekels of silver as [the price] of the wagons”; cf. CCT I 15a: 10f. 4 1/2 GÍN KŪ.BABBAR *a-na e-ri-qā-tim aš-qūl*,

rent⁸ a wagon from the local people or from their Assyrian colleagues in Anatolia. It is also known from a letter found in Kültepe, that they sometimes asked the local Kings for a wagon⁹. The expenses of the drivers were born¹⁰ by the merchants. There was no doubt that the expenses of fodder for the carriage animals were also paid by the merchants.

Cattle must have been yoked to the *eriqqum* wagon¹¹. No definite record has been found to show that donkeys were hitched to a carriage¹². Although four horses harnessed together can be seen on a few seal impressions on the tablet envelopes, and two hitched animals—possibly horses¹³—on one of the examples, these are pictured more usually on mythological representations.

The horse was not everly common during the Old Assyrian Trading Colony Period in Anatolia¹⁴. It was rare except in the palaces of local Kings. Cattle are hitched to models of four wheeled votive wagons found in illegal excavations which were perhaps carried out on the South-eastern parts of Anatolia. These models have now been acquired by some museums and collectors¹⁵. The wagons we generally described as having four wheels and, as we have just mentioned, horses

"I paid 4 1/2 shekels of silver for wagons"; CCT V 32b: 1ff. 1 1/2 GÍN KÛ.BABBAR *a-na* (2) *e-ri-qá-im* *ša* (1) (3) *ká-šá-ri-im* (4) *áš-qúl*, "I paid 1 1/2 shekels of silver for the wagon of the dispatcher"; BIN IV 130: 2 3 GÍN KÛ.BABBAR *a-na e-ri-qá-tim* {*a-dí*} *áš-qúl*, "I paid 3 shekels of silver for the wagons"; see also Appendix (a, b) and 8 below.

(8) kt c/k 154: 11f. 38 MA.NA URUDU (12) *ig-ri e-ri-qá-tim*, "38 minas of copper as the (transportation) fee of the wagons"; kt c/k 535: 24f. 21 (!) (Text: 20) MA.NA URUDU *ig-[ri] e-ri-qá-im áš-qúl*, "I paid 21 minas of copper as the (transportation) [fee] of the wagon"; kt c/k 263: 24 21 MA.NA *ig-ri e-ri-qá-tim*, "21 minas (of copper) as the (transportation) fee of the wagons"; *passim*; cf. Appendix (a, b) and n. 7; TC II 18: 7ff. *ki-ma URUDU-i-ú* (8) *i-na Pu-ru-uš-ša-tim* (9) *ma-aš-šú-ni i-ri-qá-am* (10) *la ni-gur-ma*, "since (the price of) copper (8) in Purušattum (9) is low, we have not hired a wagon...".

(9) TCL XXI 3: 10ff. *um-ma a-na-ku-ma* (11) *e-ri-qá-tim iš-tí* (12) É.GAL-*lim e-ri-iš-ma* (13) *a-dí šú-ša-ru i-ma-qú-ti-ni-ni* (14) *lu er-sú-wa* (15) *a-ma(!) ma-lá i-da-nam* (16) *ù a-na É.GAL-lim a-dí-i* (17) *e-ri-qá-tim la i-qá-bi-ma* (18) *e-ri-qá-tim la nu-šé-ša-ar*, "(10) I spoke as follows: (11-14) request wagons from the palace, so that they shall be ready when the servants arrive. (15) Please, however, many (wagons the palace) will give me, (16) concerning (these) (17) wagons it should not be said (as follows) (16) to the palace: (18) 'we cannot direct the wagons in the right way'".

(10) kt c/k 154: 15f. 1 MA.NA URUDU *a-na ki-ri-im* (16) *a-na ša e-ri-qá-tim*, "1 mina of copper for the *kirrum* ('feast') (was given) to the drivers of the carts".

(11) VAT 13532: 8f. *ša GUD.ĪI.A* (9) *ša-da-dim* (10) *li-iš-du-du-nim*, "that which is to be hauled with oxen let them haul (that) over here"; kt f/k 62: 8ff. ŠE-*am a-na* (9) *ha-ar-pi i-du-nu* (10) *ù al-pu-šu-nu* (11) *i-ša-du-du-nim*, "They will give back the wheat at harvest time, (10-11) and their oxen will haul (the wheat) over here".

(12) Cf. A. Salonen, *Die Landfahrzeuge*, p. 31; BIN VI 94: 7ff. *um-ma a-na-[ku]-ma* (8) ANŠE.ĪI.A (9) *i-lá-tim* (10) *ú-nu-sú-nu* *ù* (11) *e-ri-qá-tim* (12) *ur-da-am*, "(7) I spoke as follows: (12) 'send me (8) the donkeys for the caravan, (10) their equipment, and (11) the carts'. We think that this translation in CAD E 296a is preferable to the translation of the same passage in CAD I/J 104a and in Veenhof, *Aspects...*, p. 40 ("send me donkeys, bags (*ilātim*)...".

(13) Nimet Özgüç, *The Anatolian group of cylinder seal impressions from Kültepe*, TTKY V No. 22, 1965, p. 76 "a god in two wheeled wagon drawn by two boars..."; W. Nagel, *loc. cit.*, p. 12 "Der Fahrer lenkt die zwei unbestimmten Equiden...".

(14) Cf. A. Salonen, *Hippologica Accadica*, 1955, p. 13, 22; *idem*, *Die Landfahrzeuge*, p. 45; A. Kammenhuber, *Hippologica Hethitica*, 1961, p. 13.

(15) J. Danmanville, *RA* 62, 1968, p. 59-61; W. Nagel, *loc. cit.*, fig. 77.

were hitched to them on the seal impressions of Kültepe tablet envelopes.¹⁶ It is known that the "two-wheeled wagon" (a sort of ox-cart, Turkish *kağni*, with two solid wooden wheels—as suggested by Professor Nimet Özgüç), was also used during the Old Assyrian Trading Colony Period in Anatolia.¹⁷ The wheels of this wagon were different from the present day solid-wheeled examples in that they have four spokes.¹⁸ During the systematic excavations which have been carried out by Professor Nimet Özgüç at Acemhöyük in South-east of Central Anatolia, a bronze model of a votive cart has been discovered from the contemporary levels of Kārum Kaniš lb.¹⁹ This recent discovery has confirmed Nagel's opinion²⁰ on the four spokes—inadvertently called fellow (Turkish *ispil*) by Nimet Özgüç—of the four wheels of a carriage which is shown on one of the seal impressions of Kültepe tablet envelopes. In other words it is certainly clear that cart-wheels with spokes were used during the early second millenium B.C. in Anatolia. The number of the wheels of an *eriqqum* wagon was not mentioned in Kültepe tablets.

The wheels must have been tightly fixed to the axle and both wheel and axle should have turned together when the cart moved.

We learn the name of one of the component parts of the wagon²¹, called *eriqqum*, from the Kültepe tablet which is published below (kt d/k 28a, b). This tablet is a loan contract. It records that the debtors undertake to give to their creditor many pieces of one certain part of a cart when they repay their debt.

The loan contract was found in the archive of the building which was called the house of Peruwa in Kültepe-Kārum level 2. It was made clear in the tablet that six Anatolians and the city of Talwaḫšušara (see below) incurred a debt of silver, wheat and barley to the native banker Per(u)wa and at the end of the credit time (which would be the end of the harvest) they would undertake also to give 20 *makriš* (one of the pieces of the cart *eriqqum*) and 20 *ašiš* (or *aššiš*) (one of the pieces of the plough *epinnum*), perhaps as interest on their debt. The words *makriš* and *ašiš*, are not seen on any other Kültepe tablets and are terms from a local language spoken during the early second millenium B.C. in Anatolia.

It is clear that the *makriš* was quite an important component of a cart. Presumably it was the axle or spoke (see below remarks on lines A: 9-10, B: 10). Modern villagers who, not long ago, were using ox-carts, have told us that the most important parts of a cart are the wheels and the axle. They also said that it was possible to use the solid wheels for 10 or 15 years, merely changing the worn parts of the wheel (which are tightly fixed together) but that it was not possible to use the axle (which rotates with the wheels) more than 1 or 1 1/2 years. The axle becomes,

(16) A. Salonen, *Die Landfahrzeuge*, pl. VII 3; W. Nagel, *loc. cit.*, fig. 15; A. Götze, *Kleinasien*, 1957, pl. 7, 13. Two new impressions of the same type of seal: Nimet Özgüç, *loc. cit.*, pl. III 9, see p. 76, III 9; ICK I pl. LXXI 46A.

(17) Nimet Özgüç, *loc. cit.*, pl. VIII 24a, 24b, see p. 78, VIII 24a; the same wagon, W. Nagel, *loc. cit.*, p. 102.

(18) W. Nagel, *loc. cit.*, p. 12.

(19) Nimet Özgüç, *Bulleten XLI*, No. 162, 1977, p. 358.

(20) W. Nagel, *loc. cit.*, p. 13.

(21) For component parts of wagons in Babylonia see CAD E 297a; A. Salonen, *Landfahrzeuge*, p. 81ff.

with friction worn and useless. It should therefore be frequently changed and made from a hard wood such as oak and ash²².

It is mentioned that the *ašiš* was part of a plough called *epinnum*²³ in our text (B: 10-12). Here, *epinnum* should have been a "subsoil plough" (Turkish *Karasaban*)²⁴ which was used not long ago in Anatolia and is still used in undulating parts of the country, more than a "seeder-plough"²⁵.

Although, the seeder-plough has been used until recent times in East and South-east Anatolia, it was not known in Central Anatolia. In this area the subsoil plough was very common both for breaking the ground and for sowing the seeds.

Villagers who have used subsoil ploughs told us that the most important part of this sort of plough is the "plough-heel"²⁶ which actually does the work of ploughing and although made from a hard wood (generally oak), it becomes worn very quickly. The metal part called "ploughshare" is attached to the tip of the plough-heel. It can be submitted that *ašiš* in our text, (1) which was asked in some quantity (20 pieces) probably as interest, (2) which was a part of a plough (*epinnum*), (3) which was a word in an Old Anatolian language and, finally, (4) which was a necessary piece of equipment for Anatolian farmers during the Old Assyrian Trading Colony Period, was perhaps the "plough-heel". It was, at this early date, not impossible that a bronze point was attached to the tip of the plough as in Babylonia²⁷.

In our text and in another text which has been known for some time *epinnum* is written phonetically²⁸.

Transliteration and translation of texts:

A (kt d/k 28b; tablet):

(Obv. 1) 1/2 MA.NA KÙ.BABBAR 7 *na-ru-uq*

(2) ŠE-um ù 3 *na-ru-uq*

(3) GIG *i-še-er Tár-ḫu-a-lá*

(4) *Ku-ul-zi-a-ar Ga-lu-lu*

(5) *Ḫu-ši-ú-ma-an Lu-úḫ-ra-aḫ-šu*

(6) ù *Ga-lá-a a-lúm^{K1} Tal-wa-aḫ-šu-ša-ra Pi-ir-wa i-šu*

(7) KÙ.BABBAR ù *ú-lá-lám i-na*

(22) For the component parts of an ox-cart with two solid wheeled wooden carts (Turkish *kağni*) from Central Anatolia, see Hamit Zübeyr Koşay, *Das Dorf Alaca-Höyük, Materialien zur Ethnographie und Volkskunde von Anatolien*, TTKY VII No. 21, 1951, p. 101, No. 117, 118, p. 102 No. 120, pl. XV 117-118, pl. XVI 120, 122, 124.

(23) CAD E 235; AHw 229; A. Salonen, *Agricultura Mesopotamica*, 1969, p. 37ff., 52ff.; for the component parts of a plough, see Salonen, *loc. cit.*, p. 71ff.; CAD E 237.

(24) For the subsoil plough (Turkish *Karasaban*) used at Alacahüyük and its vicinity, see H. Z. Koşay, *loc. cit.*, p. 101, pl. XIII, fig. 98. See also F. Christiansen-Weniger, "Saatmethoden im Zweistromland und Anatolien", *Orient* (Ed. German Near and Middle East Association. German Orient Institute), Juli 1970, p. 96f., Abb. 4.

(25) F. Christiansen-Weniger, *loc. cit.*, p. 95ff.

(26) H. Z. Koşay, *loc. cit.*, pl. XIII, fig. 100.

(27) Cf. *emü* "Pflugshare" AHw 556b; "plowshare" CAD E 156b; Salonen, *Agricultura Mesopotamica*, p. 39, 77, 85.

(28) BIN IV 258: 8f. [x] *e-ri-qá-tum* (9) [...] 4 *e-pi-nu* 2 *ḫi-ša-nu*, "(8) [x] wagons, (9) [...] 4 ploughs, 2 *ḫišānum*".

(8) *ḫa-ar-pi-im i-du-nu*

(9) ù 20 *ma-ak-ri-e-iš*

(10) ù 20 *a-ši-iš*

(Low. edge 11) *i-du-nu KÙ.BABBAR i-na*

(12) *qá-qá-ad šal-mi-šu-nu*

(Rev. 13) ù *ki-ni-šu-nu ra-ki-is*

(14) *ú-lá-lám a-na Kà-ni-iš^{K1}*

(15) *šu-nu-ma i-ša-du-du-nim*

(16) *ú-lá-lám i-na DUG-lim*

(17) *ša Pi-ir-wa-ma i-ma-du-du*

(18) IGI *Ḫa-za-mi-il₅ DUMU Ḫa-ma-ar*

(19) IGI *Pi-ir-wa DUMU A-zu*

(20) IGI *A-šur-i-di DUMU Dan-A-šur*

"(6) Pirwa has (1) 1/2 mina of silver, 7 sacks (2) of barley and 3 sacks (3) of wheat upon Tarḫuala, (4) Kulziar, Galulu, (5) Ḫuṣiuman, Luḫrahšu (6) and Galā, (and) the Talwaḫšuṣara-town. (8) They will give (back) (7) the silver and the grain at (8) harvest time; (11) they will give (9) also 20 *makriš* (10) and 20 *ašiš*. (11-13) The silver is put under their joint guarantee. (15) They, themselves, will haul (14) the grain to Kaniš. (17) They will measure out (16) the grain (17) also (16) with the measuring vessel (17) of Pirwa. (18) Before: Ḫazamil, son of Ḫamar; (19) before: Pirwa, son of Azu; (20) before: Aššur-idi, son of Dan-Aššur."

B (kt d/k 28a; envelope):

(Obv. 1) KIŠIB *Ḫa-za-mi-il₅ DUMU Ḫa-ma-ar*

(2) KIŠIB *A-šur-i-di DUMU Dan-A-šur*

(Seal impression a)

(3) KIŠIB *Pi-ir-wa DUMU A-zu KIŠIB Tár-ḫu-a-lá*

(4) DUMU *Ti-wa-ti-a KIŠIB Ḫu-ši-ú-ma-an DUMU Ḫa-ar-ša-a*

(5) KIŠIB *Lu-úḫ-ra-aḫ-šu DUMU Ša-wa-na*

(6) KIŠIB *Ga-lu-lu DUMU Ša-am-na-aḫ-šu*

(7) KIŠIB *Ga-lá-a DUMU A-ta-aḫ-šu*

(8) 1/2 MA.NA KÙ.BABBAR 7 *na-ru-uq*

(9) ŠE-um 3 *na-ru-uq GIG*

(Seal impression a)

(10) 20 *ma-ak-r[i-e-i]š* 20¹ *a-ši-iš*

(11) *ša e-ri-[q]i-[i]m* "ù"

(Low. edge 12) *ša e-pi-nim [i-š]é¹er¹*

(Seal impression b)

(13) *Tár-ḫu-a-lá Ḫu-ši-ú-ma-an*

(14) *Lu-úḫ-ra-aḫ-šu Ga-lu-lu*

(15) *Ga-lá-a ù a-lúm^{K1}*

(Rev. 16) *Tal-wa-aḫ-šu-ša-r[a P]i-ir-wa*

(Seal impression b)

(17) *ša Lu-ḫi-tim i-šu KÙ.BABBAR*

(18) ù *ú-lá-lám i-na ḫa-ar-pi-im*

(19) *i-du-nu ú-lá-lám a-na Kà-ni-iš^{K1}*

- (20) *šu-nu-ma i-ša-du-du-nim*
 (21) *ù-lá-lám i-na DUG-tim*
 (22) *ša Pi-ir-wa-ma i-ma-du-du*
 (23) KÜ.BABBAR *i-na qá-qá-ad šál-mi-šu-nu*
 (24) *ù ki-ni-šu-nu ra-ki-is*
 (Seal impression c)

(Low. edge. Seal impression a)
 (Left edge. Seal impression b)
 (Right edge. Seal impression d)

“(1) Seal of Hazamil, son of Hamar. (2) Seal of Aššur-idi, son of Dan-Aššur. (3) Seal of Pirwa, son of Azu. Seal of Tarhuala, (4) son of Tiwatia. Seal of Hušiuman, son of Haršā. (5) Seal of Luḫraḫšu, son of Šawana. (6) Seal of Galulu, son of Šamnaḫšu. (7) Seal of Galā, son of Ataḫšu. (16) Pirwa, (17) the man of (E)Luḫat has (8) 1/2 mina of silver, 7 sacks (9) of barley, 3 sacks of wheat, (10) 20 *mākri*[i]š, 20 *ašiš* (11) of a cart and (12) of a plough upon (13) Tarhuala, Hušiuman, (14) Luḫraḫšu, Galulu, (15-16) Galā and the Talwaḫšušara-town. (19) They will give (back) (17) the silver (18) and the grain at harvest time. (20) They, themselves will haul (19) the grain (20) here (19) to Kaniš. (22) They will measure out (21) the grain (22) also (21) with the vessel (22) of Pirwa. (23-24) The silver is put under their joint guarantee.”

Commentary:

A: 18, B: 1. *Ha-za-mi-il*₅ (son of Hamar) = *Hazam-il* “man of (the town or country of)” *Hazam*; also in JCS 14, p. 17, Text 12: 2; kt d/k 26a: 1, b: 15; kt e/k 159: 22 (see Anatolian Studies presented to H. G. Güterbock... p. 41); kt i/k 132: 5-6; *passim*. In Hittite Texts: ^m*Ha-ša-mi-li*, ^m*Ha-aš-mi-li*, Laroche, NH No. 319.

Ha-ma-ar (father of Hazamil); also in kt d/k 26a: 1; kt i/k 132: 6; *passim*. *Ha-mar* kt d/k 40a: 1; *Ha-ma-ra-a*, EL 107b: 4; ICK I 35b: 11; ^r*Ha*-*ma-ar-a*, ICK I 35a: 2.

A: 6, 19; B: 3, 16, 22. *Pi-ir-wa*; a variant of personal name *Per(u)wa*, Laroche, NH No. 1017. *Pi-ir-wa*, son of Azu, A: 19, B: 3 (witness); [*P*]*i-ir-wa ša Lu-ḫi-tim*; “[*P*]irwa, the (E)Luḫatian”, B: 16-17; the same *Pi-ir-wa*, A: 17, B: 22.

B: 17. *Lu-ḫi-lim*, perhaps *nisbe* in place of (E)*Luḫili'im* (Gen.); cf. K. R. Veenhof, Aspects, p. 242 and note 375. *Nisbe* on the place names ending in consonants: *Hu-du-ru-ti-im*, *Kà-ni-ši-um/im*, *Kà-sù-ri-im* (Bilgiç, AfO 15, p. 32 f.).

A-zu, A: 19, B: 3. Also in Conteneau, Trente tabl. Capp. 13: 8; TCL IV 181: 18; IAV 30a: 8, 17; KTHahn 36: 14; *passim*.

By attaching different endings to *Azu-* the following Anatolian personal names are obtained: *-a*: *A-zu-a*, ICK I S. 10; *-wa*: *A-zu-wa*, kt g/k 6a: 3, b: 18; *-e*: ^(d)*A-zu-e*, Laroche, No. 219; *-(w)elka*: ^(d)*A-zu-(w)e-el-kà*, Laroche, NH No. 221; *-kani(n)*: ^(d)*A-zu-kà-ni*, KTHahn 13: 3, 8; kt m/k 147 Rev. 3; *A-zu-kà-ni-in*, kt m/k 147 Rev. 10; *-ma*: *A-zu-ma*, CCT V 9b: 29; 36a: 37; *-mana*: *A-zu-ma-na*, IAV 57: 35; *A-zu-ma-nim*, CCT III 35b: 2; *-mei*: *A-zu-me-i*, kt g/k 1a: 6 (for *-mei* in personal names from Kültepe, see Balkan, Eine Schenkungsurkunde aus Inandık, p. 54); *-la*: *A-zu-la*, TCL XIX 91: 22; *A-zu-la-a*, EL 108: 19; 109: 20; CCT I 32a: 2; CCT V 23a: 1; MNK 635 Rev.

x+23 (for the text see L. Matouš, Journal of Juristic Papyrology XI-XII, 1957-58, p. 113ff).

A: 3; B: 13. *Tār-ḫu-a-lá* (son of *Tiwalia*, B: 4) = *Tarḫu-ala*. *Tarḫu* “Wettergott” in “*aḫšu-Sprache*”, Landsberger, JCS 8, p. 126; “*dieu de l'orage hitt. et louv.*”, Laroche, NH p. 289. For the suffix *-ala*, see Bilgiç, AfO 15, 3 f. Other occurrences of *Tarḫuala* in personal names in Kültepe tablets, Laroche, NH No. 1255; *passim*.

Ti-wa-li-a (father of *Tarḫuala*, B: 4) = *Tiwal-ia*. *Tiwa(t)* “Sonnengott” in “*aḫšu-Sprache*”, Landsberger, JCS 8, p. 126 and note 304; cf. Laroche, NH p. 290. *Ti-wa-li-a* also in kt a/k 97: 4.

A: 4. *Ku-ul-zi-a-ar* (one of the debtors not mentioned in B) = *Kulzi-ar* (Bilgiç, AfO 15, 6). *Ku-ul-zi-a-ar*, EL 161: 3, 5; TCL XIX 19: 4.

Ga-lu-lu (A: 4, B: 6 son of *Šamnaḫšu*, 14). For the structure of the name see Bilgiç, AfO 15, 6. *Ga-lu-lu*, also in kt f/k 72 tablet: 4, envelope 10; 81: 5; 83: 6; *passim*. *Ga-lu-lu-uš*, TCL IV 87: 17 (not “*fils du Dudupiala*” (Laroche, NH No. 492) but *ù Dudupiala*).

A: 5, B: 4, 13. *Hu-ši-ù-ma-an* (son of *Haršā*, B: 4) = *Huši-uman*; cf. *Ha-ši-ù-ma-an*, KTHahn p. 51; *Hu(!)-ši-li-ù-ma-an* (= *Huši-li-uman*), kt f/k 181: 20 (son of ^d*UTU-ba-ni*), *Hu-ši-li-(ù)-ma-an*, IAV 19a: 21, b: 21.

Lu-ḫi-ra-aḫ-šu (A: 5; son of *Šawana* B: 5) = *Luḫra-aḫšu*. Also in Laroche, NH No. 702; kt a/k 805a: 2, b: 16; *Lá-aḫ-ra-aḫ-šu*, TCL IV 87: 15; kt a/k 808a: 6, 8, b: 2.

B: 5. *Ša-wa-na* (father of *Luḫraḫšu*) = *Šawa-na*. For the ending *-na*, see Bilgiç, AfO 15, 5; additional examples, Balkan, Letter, p. 18; cf. Landsberger, ArOr/XVIII 1-2, p. 339, note 57; Laroche, NH p. 330. *Ša-wa-na* also in kt d/k 22a: 8, b: 3.

B: 6. *Ša-am-na-aḫ-šu* (father of *Galulu*) = *Šamna-aḫšu*; cf. Landsberger, JCS 8, 120f, 124; Laroche, NH p. 299, 302. *Ša-am-na-aḫ-šu*, kt b/k 81: 3; cf. *Ša-am-na-aḫ-šu-šar*, kt k/k 42: 14.

A: 6, B: 7, 15. *Ga-lá-a* (son of *Alaḫšu*) = *Gala-a*. *Ga-lá-a*, kt i/k 41b: 2, 4, 10, a: 3 (*Ga-lu-a*), 9, 11, 14; kt c/k 1645: 4.

A: 6, B: 15-16. *A-lúm^{KI} Tal-wa-aḫ-šu-ša-ra* = *alum^{KI} Talwa-aḫšu-šara*, “^(d)Talwaḫšu-šara-town”. For *talwa-* in personal names cf. *Tal-wa-na*, TCL XXI 252: 2 (father of *Tarḫuala*); kt f/k 69 tablet: 12, envelope: 1; kt f/k 72 tablet: 15; *Ta-lu-w[a-na?]*, ICK II 12: 11.

-aḫšu-šara, also in *Na-aḫ-šu-ša-ra*, TCL I 240: 1 (cf. *Ni-wa-aḫ-šu-šar*, *ibid.* 21); cf. Goetze, Language 30, 1954, p. 354, note 31.

As is well known, city names were written without determinatives in Kültepe tablets. *Kārum* or *wabartum* in a certain city in Anatolia is determined by putting one these words before the name of the city in question, as apposition; see the list of place names in Bilgiç, AfO 15, p. 32-57.

A few of the big cities were determined by using the apposition *alum^{KI}* before the names of the towns: *a-na a-lim^{KI} A-šur*, “to the city of Aššur”, CCT 37a (= EL 230): 22; *i-na a-lim^{KI} A-šur*, “in the city of Aššur”, TCL IV 5: 10-11; *i-na a-lim^{KI} A-ku-wa*, “in the city of Akkuwa (Ankuwa)”, IAV 49b: 11; *i-na a-lim^{KI} Wa-ar-ša-ma-ma*, “in the city of Waršamama”, kt g/k 36: 13; *a-lam Ha-ar-sá-am-na*, “the city of Harsamna” (acc.), kt g/k 35: 30 (Balkan, Letter, p. 7); *ša a-lim Ha-aš-ši*, kt k/k 4: 16.

Many city names determined by the apposition *alum*^{K1} both in our text (*alum*^{K1} *Talwaḥšušara* A: 6, B: 15-16) and in texts below, are not seen in any other Kültepe tablets. It should be considered that many of these cities were called by personal names, such as: ⁽¹⁾*Talwaḥšušara*, ⁽²⁾*Ḥazušara*, *Kuluna*, *Per[wa ...]*, *Šamna*, etc. These cities should have been founded by or named after a certain person. These places were perhaps insignificant, small, village settlements: *i-na a-lim*^{K1} *Ḥa-zu-ša-ra*, "in the town of Ḥazušara", kt g/k 36: 23-24; *i-na a-lim*^{K1} *Kà-sà-na*, kt g/k 36: 22; *i-na a-lim*^{K1} *Ki-pi-la*, kt g/k 42: 23; *i-na a-lim*^{K1} *Ku-lu-na*, kt g/k 36: 15; *i-na a-lim*^{K1} *Pi-ru-[wa-x-x]*, kt g/k 42: 31-32; *i-na a-lim*^{K1} *Ša-am-na*, kt g/k 78: 7-8; *i-na a-lim*^{K1} *Za-ba-la*, kt g/k 36: 11; etc.

A: 9-10, B: 10. The words *ma-ak-ri-e-iš* (= *makri-š*) and *a-ši-iš* (= *aš(š)i-š*) are the first examples of the appellatives, in one of the Anatolian languages, to show a trace of inflection (-š). Both words are used as accusative in the text but their grammatical forms should have been probably nominative. The Old Anatolian language which was the source of these two words, is unknown. We should consider that the ending -š was sometimes dropped at the end of some native personal names (Bilgiç, AfO 15, 6)²⁹ but always used at the end of the Old Anatolian place names such as *Hallu-š*, *Hakp/mi-š*, *Kani-š*.³⁰

According to the text of the envelope, *makriš* was a part of a wagon (*eriqqum*), *ašiš* was a part of a plough (*epinnum*). The possible meaning of these words was suggested above.

The relation between these two words and the words *eriqqum* and *epinnum* respectively is not mentioned in the text of our tablet (A: 9-10).

A: 15, B: 20. *Šu-nu-ma i-ša-du-du-nim*, "They, themselves, will haul the grain"; *šadādum*, "to haul", see footnote 3 and Appendix (c, d).

A: 16-17, B: 21-22. *Uḫalam ina karpalim ša PN madādum*, "to measure out the grain with the measuring vessel of PN", see Balkan, Anatolian Studies presented to H. G. Güterbock..., 1974, p. 39; CAD K 219 b; AHw 449-50.

APPENDIX

The various kinds of loads which were carried by *eriqqum* in Kültepe tablets are catalogued here.

(a) Grain cereals (*uḫutum*)

kt b/k 665: 8ff. 10 GIN KÜ.BABBAR *a-na* (9) *e-ri-qá-tim* (10) *ša ú-té-tim* (11) *áš-qúl*, "I paid 10 shekels of silver for (transportation fee of) cartloads² of grain".

(b) Straw (*tibnum*)

BIN IV 169: 12f. 2 GIN *a* (!) *e-ri-qé-en* (13) *ša tt-ib-nim*, "(I paid) 2 shekels (of silver) for (transportation fee of) 2 cartloads of straw"; kt f/k 120: 1ff. 1/3 MA.NA 5 GÍN (2)

(29) Cf. H. Hecker, GKT § 60 d "In einzelnen Namen auf -š ...könnte eine heth.-luv. Nom.-...Endung vermutet werden...".

(30) Götze, Kleinasien², p. 46.

KÜ.BABBAR *i-šé-er* (3) *Tù-ḫi-um-na-an* (4) *ù Ḥa-šu-i* (5) *a-ḫa-ma tt-ib-nam* (6) *e-ri-qá-am* (7) *ù a-ba-na-am* (8) *e-ri-qá-am* (9) *Pi-ru-a i-šu* (10) IGI *A-la-la* (11) IGI *A-ra-ra* (12) IGI *Ta-li-a* (end of the text), "(9) Perua has (2) upon (3) Tuḫiumnan (4) and Ḥašui (1) 1/3 mina 5 shekels (2) of silver; (5) in addition, (6) one cartload² (5) of straw (7) and (8) one cartload (7) of stone. (10) Before: Atata; (11) before: Arara; (12) before: Talia".

(c) Leather (*maškim*)

Cf. CCT II 29: 24ff. "(30) we have given (24) 20 minas of copper to (25) Šū-Ištar, your caravan driver, (26) 21 minas of copper to (27) Ḥimâ and to your servant" (28) *i-nu-mi maš-ki ù ša-nam iš-du-du-nim*, "when they hauled here (with ox-cart) the hides and one cauldron".

(d) Furniture (*unūlum*; etc.)

kt b/k 665: 11f. 6 1/2 GÍN KÜ.BABBAR (12) *a-na e-ri-qí-im* [š]a *ú-nu-ul-kà* (14) [na-áš]-*ú áš-qúl*, "(14) I paid (11) 6 1/2 shekels of silver (12) for (transportation fee of) the cart (13) [whi]ch [carri]ed your furnitures"; CCT II 29: 28f. ... *ù* (29) *ša-nam iš-du-du-nim*, see (c) above.

(e) Wood or timber (*išum*)

kt d/k 16b: 1ff. "(4-5) A and B (6) owe (1) 4 1/2 shekels of silver" (2) 3 *e-ri-qá-tim* (3) *ša e-ši*, "3 cartloads of wood (6) to Peruwa"; (7) *e-ri-qá-tim* (8) *ša e-ši-e* (9) *a-nima i-ša-du-du-nim*, (9) "they will haul (7) the cartloads (8) of wood (9) over here", (12ff.) KÜ.BABBAR (13) *ù e-ri-qá-tim* (14) *ša e-ši i-qá-qá-ad* (15) *šál-mi-šu-nu ù ki-ni-šu-nu* (16) *ra-ki-is*, "(12) the silver (13) and the cartloads (14) of wood (15-16) are bound to their joint guarantee"; Conteneau, Trente tabl. Capp. 13: 1ff. 1/3 MA.NA 1 GÍN KÜ.BABBAR (2) 1 UDU *ú e-ši* (3) *e-ri-qá-um* (4) *i-šé-er nu-a-im*, "the *nu'ā'um* (a native Anatolian) owes (1) 1/3 mina 1 shekel of silver, (2) one sheep and (3) a cartload (2) of wood"; TCL XXI 197: 17ff. 1 GÍN KÜ.BABBAR *e-ši* (18) *e-ri-qá-am* (19) *a-na a-ši-ti-šu al-qé* "(17) for 1 shekel of silver (19) I bought (18) a cartload (17) of wood (19) for his wife"; kt f/k 186: 1ff. *a-na A-mur-Ištar qí-bi-ma* (2) *um-ma I-dí-a-bu-um-ma* (3) 9 GÍN KÜ.BABBAR (4) *e-zi-ba-kum um-ma a-na-ku-ma* (5) 4 *e-ri-qá-tim* (6) [š]a *e-ši ša-aḫ-lù-tim* (7) [š]a *a-ma li-ib-ši* (8) [ki]-*ma lup-pi-e* (9) [t]a *áš-me-ú e-ši* (10) [ša]-*a-ma li-ib-ši*, "(1) To Āmur-Ištar say, (2) Idi-abum speaks as follows: (4) 'I have left with you (sg.) (3) 9 shekels of silver, (4) saying: (7) [b]uy (pl.) (5) 4 cartloads (6) [o]f stripped⁶ wood (i.e. lumber) (7) (and) let them stay (there)'. (8) [As s]oon as (9) [y]ou hear (9) my letter (10) [b]uy (9) the (4 cartloads of stripped) wood (10) (and) let them stay (there)".

(f) Copper (*erūm*)

KTS 3b: 15ff. ... *a-šu-mi URUDU* (16) *šu-pu-ur-ma i-na* (17) *e-ri-qí-im li-di-ú-nim*, "send instructions regarding the copper, so that they may put it in a wagon"; kt c/k 735: 18ff. ... *ur-kà-nūm* (19) 6 GÚ *ma-si-am ù* (20) 14 GÚ *ši-kam* ... (22) *i-na e-ri-qí-im a-Pu-ru-uš-ḫa-tim* (23) *A-lá-ḫu-um ù Wa-li-a* (24) *ub-lu-šum*, "(18) ... Later, (23) Al(i)-aḫum and Walia (24) transported to him (19) 6 talents of 'washed' (i.e. good quality) copper and (20) 14 talents of low quality copper ... (22) on a wagon to Puruḫattum"; kt c/k 263: 18ff. *ur-kà-nūm* 6 GÚ *ma-si-am* (19) *ù* 14 GÚ *ši-kam* ... (20) ... (21) *i-na e-ri-qí-im a-na* (22) *Pu-ru-uš-ḫa-tim A-la-ḫu-um* (23) *ù Wa-li-a ub-lu-šum*; cf. kt c/k 671: 23ff. 6 GÚ URUDU *ma-si-am* ... (24-25) ... (26) *a-ḫa-ma* 14 GÚ URUDU *ši-kam* ... (27) ... *A-la-ḫu-um* (28) *ù Wa-li-a a-na Pu-ru-uš-ḫa-tim* (29) *a-šé-ri-šu ub-lam* (mistake for *ublūnim*), "(23) 6 talents of 'washed' copper ... (24-25) ...; (26) in addition,

14 talents of low quality copper ... (27) Al(i)-aḥum (28-29) and Walia have transported to him to Purušhattum"; kt c/k 254: 3ff. 6 GŪ URUDU SIG₅ ... (4-6) a-ḥa-ma (7) 14 GŪ URUDU šī-kam ... (8) A-la-ḥu-um (9) ú Wa-li-a a-na (19) Pu-ru-uš-ḥa-lim a-šé-ri-kà ub-lu-nim.

(g) Stone (*abanum*; mistake for *abnum*, sg.? Or pl.?)

kt f/k 120: 7f. ú a-ba-na-am (8) e-ri-qá-am, "one cartload of stone" (for the whole text see (b) above^Y).

α) In Kültepe tablets the following phrases were used for the term of "x cartloads of wood/grain/straw/stone":

1. 3 *eriqqālim ša ešši*, "3 cartloads (acc. pl.) of wood (gen. pl.)", see (e) above;
eriqqātum ša ešši, "cartloads (nom. pl.) of wood (gen. pl.)", see (e) above;
ana eriqqālim ša uṭtelim, "cartloads (gen. pl.) of grain (gen. pl.)", see (a) above;
a (!) eriqqēn ša tibnim, "two cartloads (gen. dual) of strow (gen. sg.)", see (b) above;
2. *ešši eriqqum*, "one cartload (nom. (!) sg.) of wood (acc. pl.)", see (e) above;
ešši eriqqam, "one cartload (acc. sg.) of wood (acc. pl.)", see (e) above;
3. *libnam eriqqam*, "one cartload (acc. sg.) of straw (acc. sg.)", see (b) above;
abanam eriqqam, "one cartload (acc. sg.) of stone (acc. sg.? Or pl.)", see (b) above.

β) *Šaḥḫūtum*, pl. of *šaḥḫum* II (<*šahāḫum* II, "weg-, ab-, herumreissen", AHW 1131 a), "abgerissen" (AHW 1132 b); *iššū šaḥḫūtum* should have been used with the meaning of "trees stripped of bark".

γ) The remaining texts mentioning wagon in Kültepe tablets are: TCL XIX 19: 22f. 3 *e-ri-qá-lim ú ma-ar-zi-ši-na*; *ibid.* 15: 5ff. *e-ri-qá-lim* (6) *a-na Pu-ru-uš-ḥa-lim a-bu-uk*, "I took away the wagons to Purušhattum"; *ibid.* (9) *e-ri-qá-lim ú-lá a-bu-uk*; *ibid.* (12) ... *e-ri-qá-lim a-ba-ak*; BIN VI 258: 12 ... 2 *e-ri-qá-an*.