



The Metal Trade of Ugarit and the Problem of Transportation of Commercial Goods

Author(s): M. Heltzer

Source: *Iraq*, Vol. 39, No. 2 (Autumn, 1977), pp. 203-211

Published by: [British Institute for the Study of Iraq](#)

Stable URL: <http://www.jstor.org/stable/4200067>

Accessed: 13/06/2011 09:52

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=bisi>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



British Institute for the Study of Iraq is collaborating with JSTOR to digitize, preserve and extend access to *Iraq*.

<http://www.jstor.org>

THE METAL TRADE OF UGARIT AND THE PROBLEM OF TRANSPORTATION OF COMMERCIAL GOODS

By M. HELTZER

Archaeological evidence from Ugarit shows that a lot of goods were imported to this kingdom from Asia Minor, Mesopotamia, Cyprus, the Aegean, the Syrian coast and inland, Egypt and other countries, but only the written sources can give us a clear picture of the amounts of goods, the trade-routes, methods of transportation, the structure of prices etc.

We shall not enter here into a discussion concerning all the goods and their prices known to us from the alphabetic-Ugaritic and Akkadian texts from Ugarit¹; we shall deal here with only one of the principal goods, the metals, and study the question of transportation of commercial goods in this kingdom in the XIV–XIII centuries B.C. Unfortunately we do not yet know the prices of grain in Ugarit, and therefore this basic product is not included in the study of prices.

Concerning metals we have to begin with tin(*annaku*—AN.NA², Ugar. *brr*³). This metal is mentioned in at least six texts no less than twelve times,⁴ but only twice do the texts note the quantity and the price at the same time. According to *PRU* V 101, 4–5:

tt mat. brr. b. ṯmnym ksp ṯlṯt kbd

“680 (shekels) tin—3 (shekels) silver in all (totally)”⁵

Abbreviations

Cross—D. Cross, *Movable Property in the Nuzi Documents* (New Haven, 1937); CTA—A. Herdner, *Corpus des tablettes en cunéiformes alphabétiques découvertes à Ras-Shamra—Ugarit de 1929 à 1939*, I et II (Paris, 1963); DA—*Dialoghi di Archeologia*; Forbes, IX—Forbes, *Studies in Ancient Technology* IX, (1964); Garelli—Garelli P., *Les Assyriens en Cappadoce* (Paris, 1963); ILR—Israel Law Review; IM—Istanbul *Mitteilungen*; IOS—Israel Oriental Series; JM—*Journal of Metals*; Klengel, GS—H. Klengel, *Geschichte Syriens im 2. Jahrtausend v.u.Z.*, I–III (Berlin, 1965–70); Liverani, SU—M. Liverani, *Storia di Ugarit nell'età degli archivi politici* (Roma, 1962); Meissner—B. Meissner, *Warenpreise in Babylonien* (Berlin, 1936); OA—*Oriens Antiquus*; PS—*Palestinikij Sbornik* (Russian); PZ—*Prähistorische Zeitschrift*; Steele—F. R. Steele, *Nuzi Real Estate Transactions* (Philadelphia, 1943); U V—*Ugaritica*, V, Paris, (1968); U VI—*Ugaritica*, VI, Paris, (1969); Veenhof—K. R. Veenhof, *Aspects of Old Assyrian Trade and its Terminology* (Leiden, 1972); VDI—*Vestnik Drevney Istori*—Moscow.

¹ We know more than a hundred of commercial goods in Ugarit, and this question is discussed in a

monograph, which has to be published elsewhere; Cf. also M. Heltzer, “The Goods and Prices in Ugaritic Trade,” *PS* 19 (1969), 7–31. (Russian, partly out of date).

² B. Landsberger, “Tin and Lead; The Adventures of Two Vocables,” *JNES* 24 (1965), 295–296; complementary evidence to B. Landsberger’s argumentation: *annaku pešū* (white), known formerly only from late Assyrian literary texts which showed that it is tin, appears now in the Akkadian tablet *PRU* VI, 155, 6 (RS.19.07) from Ugarit, thus attesting *annaku pešū*^{me} in the XIV–XIII century B.C.

³ C. Zaccagnini, “Note sulla terminologia metallurgica di Ugarit,” *OA* 9 (1970), 317 ff.—where the author proves definitively that the term *brr* has always the meaning “tin” in Ugaritic.

⁴ CTA, 141, 11; *PRU* II, 130 (UT.1130), 2, 15; *PRU* V, 101 (UT.2101), 4–5; *PRU* VI, 155 (RS.19.07); U V, 12 (RS.17.150), 6, 18, 30, 32, 45, 47–48; 38 (RS.20.16), 24.

⁵ *kbd*—“totally” “in all”; cf. M. Liverani, “*kbd* nei testi amministrativi ugaritici,” *UF* 2 (1970), 89–108 (esp. p. 107), *kbd* “consistenza (numerica) complessiva”.

So the ratio of silver/tin is 1:227. The text *U V*. 38 (RS.20.16) gives the tin as a component of goods, for which fifteen donkeys were allocated.

Copper (*erû*) or bronze (*siparru*) (Ugar. *ilt*—both “bronze” and “copper”)⁶ appears at least in nine texts.⁷ But only from a few of these can we receive data about the real price of copper (bronze):

1) in *PRU V*, 101, 6–8 we have “5000 (shekels) of copper” for 25 shekels of silver (total) = 200 shekels of copper for one shekel silver = 1:200.⁸

2) *PRU VI*, 155 (RS.90.07) 34 talents of copper had the price and the worth of 533 + x shekels of silver⁹ and the ratio is 1:235 or a little less, if we accept that there were one or two shekels more than 533.

So the price of copper in Ugarit was 200–235 shekels of copper (bronze) for one shekel of silver. Naturally it is more difficult to make exact conclusions about prices in places where we have a combined sale of goods such as donkeys, copper and tin together.

It must be also noted, that the texts deal here with large quantities of tin and copper. So the *U V*. 38 mentions 8 talents (less 700 shekels) of tin—i.e. 23,300 shekels.¹⁰ We know also of 5, 8 and 20 talents.¹¹ Copper or bronze is mentioned in quantities up to 100, 2,500, 500 shekels¹² and 5 talents 1,000 shekels,¹³ 8 talents,¹⁴ 20 talents (less 1 talent and 1,000 shekels)¹⁵ and 34 talents (cf. above).

A comparison of the price of gold with the price of silver in Ugarit shows us that the ratio was between 1:3–1:4.¹⁶ We know also that differences in the ratio between gold and silver appear in different passages in the same text (*PRU V*, 100). The reason could be the varying quality of the gold.¹⁷

⁶ *erû* (URUDU) generally “copper” in the II millennium B.C., and *siparru* (ZABAR) generally “bronze”; C. Zaccagnini, “La Terminologia accadica del rame e del bronzo nel I millennio,” *OA* 8–10 (1971), 123–144, esp. p. 143.

⁷ *PRU II*, 130, 1 (UT.1130); III, 16, 110, 7; 15, 108; *PRU V*, 101, 1–2, 4–5; VI, 155 (RS.19.07) 1, 6; 162 (RS.19.36), 1; 163 (RS.19.64), R. 3–4; *UV*., 38 (RS.20.16) 33; 53(20.15).

⁸ *hmšt. alp. ilt b. 'šrm. hmšt. kbd. ksp.*

⁹ J. Nougayrol, *PRU VI*, 118–36(?) *bilat erûmeš*; but the autograph shows 34 *bilat erûmeš* 5 [*me*(?) 63 + x] *šiqil kaspi-meš* (reconstruction according to *PRU VI*); the figure 63 + x comes from the total of the tablet, (9) 1 *lim* 63 [+ x] *k[aspu](?)meš[?]*. So the missing figure had to be no larger than 6; so the number 63 in the total is acceptable for working purposes; the total sum of the other goods gives a worth of 530 shekels of silver; so we can accept only 533 as a maximum in line one. All other texts give only the price or quantity, or one of the elements had to be in the broken part of the tablet.

¹⁰ On the Ugaritic weights and measures cf. N. F. Parise, “Per uno studio del sistema ponderale ugaritico,” *DA* 1 (1970–71), 3–36; we agree with Parise that the Ugaritic talent had 3,000 shekels, but

contrary to his view that the Ugaritic mina consisted of 50 shekels and talent of 60 minas, we should consider the mina to consist of 60 shekels, and the talent of 50 minas; this can be proved by the fine for killing a foreign *tamkâru* in Ugarit—according to *PRU IV*, 17.146, 26 and 43, 3 minas had to be paid for one person as compensation, and according to *PRU IV*, 17.158, after a legal case about killing a foreign *tamkâru* 3 minas of silver were paid; the Ugaritic shekel weighed 9–9.4 gr. (Parise, pp. 22–23).

¹¹ *PRU II*, 130, 2; *CTA*, 141, 11.

¹² *PRU III*, 16, 110, 7; *PRU VI*, 162, 1; *PRU V*, 101, 6–7.

¹³ *PRU V*, 101, 1–2.

¹⁴ *PRU II*, 130, 1.

¹⁵ *U V*, 38.

¹⁶ *PRU V*, 101, 20.2 shekels of gold for 8 shekels of silver = 1:4; *PRU V*, 100, (UT.2100), (1–2) 12 shekels of gold for 40 silver = 1:3. 5; (5–6) 5 shekels of gold for 15 shekels of silver = 1:3; (16–17) 14 shekels of gold for 42 shekels of silver = 1:3; (18) 10 shekels of gold for 40 shekels of silver = 1:4; cf. *PRU VI*, 6 (RS.17.144), where gold is mentioned as an exchange medium: cf. also W. F. Leemans, *Gold* (*RIA*, III, 522).

¹⁷ Leemans, *Gold* (*RIA*, III, 506).

Although the main medium of exchange in Ugarit was silver, sometimes even the prices of land sale or fees are shown in gold.¹⁸ The text *PRU* VI, 6 (RS.17.144) written in Asia Minor¹⁹ notes also a strong desire to receive gold from Ugarit, so we know that gold was also sent from Ugarit abroad.

Summing up the prices of metals in Ugarit, we see that the ratio of silver to gold was 3-4:1, to tin—c. 1:227,²⁰ and to copper (bronze)—1:200-235.²¹ We find also in Ugarit a well-developed metal industry and trade. Metal artifacts including some of iron, appear as objects of trade and also tribute, paid to the Hittite King.²² We know also that there were many copper and bronze smiths in Ugarit.²³

It is almost certain, that the metal itself was not found locally in Ugarit. Copper had to come from nearby Cyprus or Asia Minor.²⁴ It is possible that the favourable geographic position of Ugarit gave this country the opportunity to develop a metal trade. Therefore we have to observe the prices of metals in the neighbouring countries: in Syria, Kassite Babylonia, Nuzi (Arrapha, XV century B.C.) the Hittite Empire and even Egypt at the same time. For comparison we shall give also the metal prices from the preceding period from Mari (XVIII century B.C.) and Old Assyrian trade quarters in Asia Minor, in the XIX-XVIII century B.C.

The following table shows us the relative silver prices of metals in these countries.

	Ugarit	Kassite Babylonia	Nuzi	Hittite Empire	Egypt	Mari	Old Assyria
GOLD	3-4:1	9:1 ²⁵	9:1 ²⁶	16-48:1 ²⁷	5:3 ²⁸ 2:1 ²⁹	4-4.4:1 ³⁰	9:1 ³¹
TIN	1:227	—	1:220-520 ³²	—	—	1:10-14 ³³	1:6-15 ³⁴
COPPER	1:200-235	—	1:340-480 ³⁵	1:160 ³⁶	1:96-104 ³⁷	1:120-150 ³⁸	1:80-240 ³⁹

¹⁸ Cf. *PRU* III, 16. 189; 16. 205; 16. 250 etc.

¹⁹ M. Heltzer, "On the Akkadian Term *rešu* in Ugarit," *IOS* 4 (1974), 4-11.

²⁰ C. Zaccagnini, *OA* (1970), 322; 1:200.

²¹ According to Zaccagnini, p. 322, the ratio of tin:copper was 8:9; cf. J. Nougayrol, *U* V, p. 120-7:9.

²² Ch. Fensham, "Iron in the Ugaritic Texts," *OA* 8 (1969), 209-213; M. Dietrich, O. Loretz, "Der Vertrag zwischen Šuppiluliuma und Niqmaddu," *WO* 3 (1966), 227-231. M. Heltzer, "The Organization of Craftsmanship in Ugarit," *PS* 13 (1965), 49-60 (Russian); cf. also *PRU* II, 103; *U* V, 38 (RS.20.11); *PRU* VI, 7 B (RS.17.148); 6 (RS.17.144) etc.

²³ C. Zaccagnini, *OA* 9 (1970), 315-317; Heltzer, *The Organization* . . .

²⁴ R. Maddin and J. D. Muhly, "Some Notes on the Copper Trade in the Ancient Near East," *JM* 26/5 (1974), 24-30; T. S. Wheeler, R. Maddin, J. D. Muhly, "Ingots and the Bronze Age Copper Trade in the Mediterranean. A program report," *Expedition* 17/4 (1975), 31-39; H. E. Bucholz, "Keftiubarren und Erzhandel in Zweiten vor-

christlichen Jahrtausend," *PZ* 37 (1955), 21-25; *Forbes*, IX, 1969, 71-75.

²⁵ D. O. Edzard, "Die Beziehungen Babyloniens und Ägyptens in der Mittelbabylonischen Zeit und das Gold," *JESHO* 3 (1960), 38-55. The conclusions of Edzard have their confirmation in later publications—W. F. Leemans, "Un Texte de l'époque Cassite," *RA* 60 (1966), 75-76.

²⁶ *Cross*, p. 34; *Steele*, p. 34; D. O. Edzard, *JESHO* 3 (1960), 41-42; W. F. Leemans, *Gold* (*RIA* III, 512-513).

²⁷ The Hittite mina consisted of 40 shekels; and its shekel had to be nearly 1.5 shekels of Ugarit; cf. N. F. Parise, *DA* 1 (1970-71), 22 ff.; H. Otten, "Zum hethitischen Gewichtssystem," *AJO* 17 (1954/57) 128-131; there is no direct mention of the price of gold in the Hittite sources, but R. Werner, *Hethitische Gerichtsprotokolle* (Wiesbaden, 1967), 73, Fr. 2270/c, lines 2-5, relates that 8 cows (or oxen) were bought for two shekels of gold (= 4 cows (oxen)—1 shekel of gold); according to the Hittite Laws (A. Goetze, *Kleinasiens* (München, 1957), 121) various kinds of cows and oxen had the price of 4-12 shekels of silver; so if we take the minimal price, we

Despite the fact that our information is sometimes incomplete we can derive from this table some important conclusions. Concerning gold we must acknowledge that by contrast with Ugarit, in Egypt, the price was relatively low, and in Babylonia, Nuzi and especially the Hittite Empire gold was at least 2.5 times more expensive than in Ugarit (in the Hittite empire even possibly more than 10 times). This allows us to understand the flourishing economy of Ugarit, where the traders and merchants (*tamkārū*) and the royal authorities were the actual middlemen in the gold trade, importing cheap gold from Egypt and selling this gold in the eastern countries, importing at the same time silver of which the ratio to gold was much higher, or other products.

In the light of these facts we may understand the letter of Zullana from Asia Minor in which he asks the vizier (*sākinu*) of Ugarit: "As for me, my request is for a lot of gold!"⁴⁰ When we compare the prices of gold with Mari and Old Assyrian periods we find that except from Asia Minor there were no drastic changes in the prices. The price of tin which was also not of local origin in Ugarit, can be compared with the price in Nuzi and the prices in Mari and the Old Assyrian period, and relatively, it was very cheap. Possibly new tin mines were discovered, or the technology of its production or smelting improved fundamentally.

Copper was mostly cheap in Ugarit and Nuzi. This may have been caused by large-scale importing as the metal was not produced locally; in Ugarit especially copper was in great demand for tools and other copper (bronze) artifacts. In Asia Minor, on the other hand, despite the fact that this metal was mined locally the price compared to silver was slightly higher, and in Egypt, which possessed rich natural deposits of copper, this metal was relatively expensive. At the same time there were no drastic changes in the prices of copper compared with the first half of the II millennium B.C.⁴¹

Regarding international trade of metals and other goods there had to be a more or less organized system of transportation. In Ugarit it was either (a) overland transportation or (b) maritime transportation. For the overland transportation as in the previous periods⁴² we have to deal with caravans of donkeys. The sources reveal

receive 16 shekels of silver for one shekel of gold, if the maximum 48:1, and if the average 32 shekels of silver for one shekel of gold.

³⁸ XV century B.C.

³⁹ XII century B.C., according to J. Černý, "Prices and Wages in Egypt in the Ramesside Period," *CHM* 1 (1953), 905-906.

⁴⁰ J. Bottéro, *ARMT* VII, 298; *ARMT* VI, 98, 1-11; Leemans, *Gold* (*RIA* III, 512).

⁴¹ Depending on the quality of both gold and silver; Garelli, p. 269; Leemans, *Gold* (*RIA* III, 512).

⁴² Cross, pp. 21, 46-47; Steele, pp. 34-35; the cheaper price was more frequent.

⁴³ J. Bottéro, *ARMT* VII, 294; *ARMT* VII, 88, 12-10.2 shekels of tin for 1 shekel of silver; 233, 15-18-14 tin for 1 silver.

³⁴ Garelli, pp. 220-281, Veenhof, pp. 79 and 350.

³⁵ Cross, pp. 44-46; Steele, pp. 34-35.

³⁶ Goetze, *Kleinasiens*, 122 (according to the Hittite laws) 1/4 shekel of silver for 1 mina of copper; ratio 1:160, taking into account that the Hittite mina consisted of 40 shekels.

³⁷ Černý, p. 905.

³⁸ J. Bottéro, *ARMT* VII, 295.

³⁹ Garelli, pp. 296-97—variations depending on quality.

⁴⁰ *PRU* VI, 6 (36) *a-na ja-a-ši hurāšu* (GUŠKIN) (37) *dan-niṣ ṣi-bu-[ti]-ia*; cf. M. Heltzer, *IOS* (1974), 5-6.

⁴¹ Unfortunately we have absolutely no data about the prices of metals and no other prices from Cyprus and the Aegean.

⁴² M. T. Larsen, *Old Assyrian Caravan Procedures* (Istanbul, 1967).

We see that the price of load-carrying donkeys in Ugarit was between 10 and 25

⁵⁸ *PRU* VI, 6 (RS.17.144), 11; 14 (RS.19.50).

shekels of silver. The comparison with some contemporary countries, Mari (XVIII century) and Old-Assyrian trade colonies in Cappadocia, gives the following picture :

	<i>Kassite</i>				
<i>Ugarit</i>	<i>Babylonia</i>	<i>Hittite Empire</i>	<i>Nuzi</i>	<i>Mari</i>	<i>Old Assyrian</i>
10-25 shekels	15-30 ⁵⁹ shekels	4-8 shekels = (6-12) shekels ⁶⁰	62/3 ⁶¹ shekels	— ⁶²	12-37 ⁶³ shekels

From this comparison we can draw important conclusions. The absolute price was more or less the same in Ugarit, Kassite Babylonia as well as in Old Assyrian times. This fact may indicate that the demand for donkeys was higher in the societies where trade was more developed, compared with a purely agricultural society like Nuzi (Arrapha) or Hittite Asia Minor, where trade was less developed and where there existed wide pasture lands and cattle-breeding. The fact that in the Hittite Laws the price of donkeys is reported as being equal to the prices of cows and oxen, leads us to compare the relative prices of cows, oxen and donkeys in Ugarit, Kassite Babylonia, Nuzi and Old Assyrian Cappadocia. The results are the following :

	<i>Ugarit</i>	<i>Kassite Babylonia</i>	<i>Nuzi</i>	<i>Old Assyrian</i>
Donkey	10-25 sh.	15-30 sh.	6½ sh.	12-37 sh.
Cow/ox	10-17 sh. ⁶⁴	2-30 sh. ⁶⁵	10 sh. ⁶⁶	10-23 sh. ⁶⁷

We see from this table that in Nuzi the price of an ox was much higher than that of a donkey, which means that the latter played a lesser role in the economy of the country. In Kassite Babylonia there was no great difference between the prices of donkeys and oxen. On the other hand in Ugarit and Old Assyrian Cappadocia the price of donkeys was considerably higher than that of oxen. The great demand for donkeys in Ugarit and in Cappadocia in Old Assyrian times shows us the importance of these flourishing societies in trading with the neighbouring countries.

Contrary to the Old Assyrian trade colonies which were engaged only in overland trade, Ugarit was also an important sea-port and had important maritime connections with some of the Mediterranean countries and ports. It is a well-known fact that maritime transportation is much cheaper than overland transportation and that even small ships can carry loads many times larger than donkey caravans. Grain, therefore, of which the tonnage is larger, was carried by ship while metals were transported mostly overland, but also sometimes by ship. ⁶⁸ Ugarit texts mention the

⁵⁹ Meissner, p. 18.

⁶⁰ Cf. note 27 above that the Hittite mina consisted of 40 shekels; Hittite Laws, § 178; the price of donkeys is equal according to this paragraph to the prices of cows and oxen; Goetze, *Kleinasien*, 121.

⁶¹ Cross, p. 21; Steele, p. 34.

⁶² Despite a lot of mentions of donkeys, price never given or preserved.

⁶³ Average—20 shekels (Garelli, pp. 299-300).

⁶⁴ PRU V, 101, 21; 1 ox—10 shekels of silver; PRU VI, 38 (RS.17.356), 6; 1 ox—17 shekels of silver.

⁶⁵ Meissner, 16; H. P. Petschow, *Mittelbaby-*

lonische Rechts- und Wirtschaftsurkunden der Hilprecht-Sammlung, Jena (Berlin, 1974), No. 3; 3 year-old ox—7 shekels, No. 6; 2 year-old ox—2 shekels.

⁶⁶ Cross, p. 19; Steele, p. 34.

⁶⁷ Garelli, p. 312.

⁶⁸ On seafaring activities in Ugarit, cf. J. Sasson, "Canaanite Maritime Involvement in the Second Millennium B.C.," *JAOS* 86 (1966), 126-138; M. C. Astour, "Ma'hadu, the Harbour of Ugarit," *JESHO* 13 (1970), 113-170; C. H. Fensham, "Shipwreck in Ugarit and Ancient Near Eastern Law Codes," *OA* 6 (1967), 221-224 etc.

following seaports as commercial partners of Ugarit : Byblos,⁶⁹ Tyre, Akko and Egypt.⁷⁰ Naturally the only connection with Cyprus (Alašiya—*Altý*) was a maritime one.⁷¹ The same can be said about Crete (Akk. *Kapturi*, Ug. *Kptr*) with which Ugarit had commercial relations.⁷² Our most precise information at the moment concerns maritime relations between Ugarit and Asia Minor. From a series of texts in Akkadian we know that the main trade-relations of Ugarit with Asia Minor took place with the *tamkārū* of the city Ura, which was one of the Hittite dependencies.⁷³ But only the text *UV*, 33 (RS.20213), first published in 1968 made clear the maritime position of this city. The text relates also :

(17) *e-nim-ma āl U-ra-a-a a-k[a-an-na . . .]*⁷⁴ (18) *a-na* ¹¹*šamšū*⁸⁴ *ku-ru-um-ma-ta* (19) *e-te₄-er-šu* ¹¹*šamšū*⁸⁴ 2 *lim* ŠE. BAR (20) *ul-tu* ^{ma}*Mu-kiš-hi uk-tal-lim-šu-nuti* (21) *ù at-ta* ¹¹*elippa rabā ištēn*^{en} (22) *ù šabē*^{mes} *ma-la-he-e* (23) *in-na-šu-nu-[t]* *i* ŠE. BAR *an-na-a* (24) *a-na māti-šu-nu* [*l*]*i-iz-bi-la* (25) *lu-ú ma-la lu-ú 2-šú i-na-šu-ú* (26) *ù at-ta* ¹¹*elippa la-a ta-kál-la-šu-nu-ti* (27) *i-na a-ma-ti an-ni-ti* ¹*A-li-zi-[ti]* *rēš-šarri* (28) *ù* ¹*Ku-un-ni* ¹¹*šamšū*⁸⁴ *il-ta-pár-šu-nu-ti*.

“And so (the city) Ura in su[ch way acted(?)]⁷⁵ . . . (18) and for the Sun⁷⁶ the food (19) they have saved.”⁷⁷ The Sun⁷⁶ 2000 (*kùr*) of grain (20) from Mukiš he has shown them. (21) As for you,⁷⁸ one big ship (22) and the crew of sailors (23) give them, and this grain (24) let it transport to their country.⁷⁹ (25) Maybe once, maybe twice they shall carry it. (26) And do you not detain their ship for them ! (27) In these affairs⁸⁰ Aliziti the eunuch⁸¹ (28) and Kunni—the Sun⁷⁶ will send them.”

So this text shows us that the Hittite king at the end of the Hittite Empire purchased in Mukiš-Alalah 2000 *kùr* of grain (about 500 metric tons), and sent even two officials to oversee the whole transaction. The king of Ugarit had to organize the transportation of the grain. It seems also that the harbour of destination was Ura, for the city and its people are mentioned in the text. This can be confirmed also from the fragmentary tablet *UV* 175 (RS.26.158), where “grain” and “Ura” are mentioned. The more or less legible passages relate, “(13) This grain [. . .] (14) to Ura [. . .].”⁸²

The question is whether the vessels could take on one or two shiploads *c.* 500

⁶⁹ *PRU* VI, 126, (RS.19.28). According to this text various garments were given “to Abihili (destined) for Byblos,” (9) *qāt* ¹*A-bi-hi-li* (10) *a[na]* ¹¹*Gu-ub-li*; cf. also *PRU* V, 106, where the king of Byblos is mentioned in connection with maritime trade.

⁷⁰ *PRU* V, 59, (UT.2059); E. Lipiński, “L’amarage de Tyr,” (*Syria* 44 (1967), 282 ff.); cf. also *PRU* V, 63, (UT.2063).

⁷¹ *PRU* V, 95 (UT.2095); *UV*, 21 (RS.20.168) etc.

⁷² *PRU* III, 16, 238, 10–15.

⁷³ *Liverani*, *SU*, 81–82; M. Heltzer, “Tamkār et son rôle dans l’Asie Occidentale du XIV–XII siècles”, *VDI* (1964) N22, 3–16 (Russian); R. Yaron,

“Foreign Merchants at Ugarit,” *ILR* 4 (1969), 70–79.

⁷⁴ The reading according to Berger, *UF* 2 (1970), 287.

⁷⁵ Our translation.

⁷⁶ Hittite king.

⁷⁷ On the possibility of reading *e-te₄-er-šu*, and especially *te₄*, see W. von Soden, W. Röllig, *Das Akkadische Syllabar* (Roma, 1967), 41, No. 218. The verb is *ešēru* II “to save”, *AHW*, 264.

⁷⁸ I.e. the king of Ugarit.

⁷⁹ The Hittite Empire.

⁸⁰ Lit. “words”.

⁸¹ M. Heltzer, *IOS* 4 (1974), 4–11.

⁸² (13) ŠE.BAR.MEŠ *an-nu-ti* [. . .] (14) *a-na āl Ú-r[a . . .]*

metric tons.⁸³ We know now, however, that in Ugarit there were ship-anchors which weighed about half a ton. According to H. Frost, "a half-ton anchor presupposes a wooden ship of at least 200 tons and a length of 20 m",⁸⁴ So the transportation of 500 tons in two freights did not create special difficulties.

A Hittite epic text⁸⁵ speaking about the *tamkārū* of Ura and Zallara⁸⁶ explains that they had among their other commercial goods barley (grain)⁸⁷, silver, gold,⁸⁸ copper (bronze), and tin.⁸⁹ So we find in the hands of the *tamkārū* of Ura grain and metals, i.e. those goods which were imported to Asia Minor (grain, gold?) and exported from there to Ugarit (silver, copper and tin(?)). We know also that in Ura there were other Syrian products,⁹⁰ which possibly came from, or through, Ugarit. The definitive answer comes from the Hittite fragment Bo 2810 only recently fully edited,⁹¹ although known formerly.⁹² The Hittite king writes there to "his son," who could be an official or vassal ruler :

(7) *hal-ki-ia-za-wa* 1 ME *GIŠ*MA *šu-wa-an-za ú-it*

"One hundred vessels, loaded with grain, arrived".

And the king orders further : (13') *ki-nu-un-ma-an-kán* DUMU-IA *pa-ra-a na-a-i* (14') *na-an I-NA URU U-ra na-aš-ma URU La-aš-ti-x* [. . .] (15') *kat-ta iš-[hu-u-wa-a-an-du]* (16') *ku-e-da-ni URU-ri A-NA DUMU-IA ZAG-uš* (17') [*na-a*] *n a-pi-ia kat-ta iš-[hu-u-wa-a-an-du]*. (13') And now, my son, send it (14') and in Ura and Lašti [. . .] (15') [they must] unlo[ad] it. (16') Whichever town is right for my son, (17') there [they must] unlo[ad] it."

We can understand from these texts concerning Ura, that this maritime city was the real port of entry to the Hittite Empire, providing Asia Minor with the necessary goods and exporting other goods which were needed abroad. The fact, that in the last text 100 vessels are mentioned does not contradict the similar date from Ugarit, where various texts mention between 30 and 150 vessels.⁹³ It may well be that the cheap freight rates and the relatively safe sea routes, after the peace treaty between Ramses II and Hattusilis III, contributed considerably to the Ugaritic trade and were one of the sources of wealth for Ugarit. This wealth gained by Ugarit from sea trade encourages us to examine more closely the Ugaritic commercial fleet. We arrive at the following conclusions :

(1) Maritime transport, connecting Ugarit with the Hittite Asia Minor helped considerably the economic development of Ugarit, providing the city with metal

⁸³ Klengel, *GS* II, 395.

⁸⁴ H. Frost, "The Stone-Anchors of Ugarit", *U VI*, Paris, (1969), 235.

⁸⁵ *KBo* XII, 42 rev., col III (= *ABOT* 49); H. A. Hoffner, "A Hittite Text in Epic Style about Merchants," *JCS* 22 (1968/9), 34-45.

⁸⁶ (3) *LÚ.MEŠ.DAM.GAR.HI.A URU Ú-[ra-a ur]u* *ža-al-l[a-ra]*.

⁸⁷ *Halki*—line 9, commentary p. 40.

⁸⁸ (10) *KÙ.BABBAR GUŠKI[N]*.

⁸⁹ (11) . . . *UR[UDU ZABAR]* (12) [*A*] *N.NA.HI.A*.—the restoration according to the usual mention of metals in the texts, Hoffner, p. 36, note 15.

⁹⁰ Syrian wool and among it blue-purple wool. Cf. H. Otten, "Ein Hethitischer Vertrag aus dem 15/14 Jahrhundert v.Chr. (*KBo* XVI, 47)," *IM* 17 (1967), 53-62, esp. 59.

⁹¹ H. Klengel, "Hungersjahre in Hatti," *AOF* 1 (1974), 171-174.

⁹² Otten, *Ein hethitischer Vertrag* . . .

⁹³ *UV*, 34 (*RS.20.141B*)—30 ships; *PRU* V, 62, 4-5 (*UT.2062*) etc. Cf. also J. Sasson, "Canaanite Maritime Involvement . . .", *JAOS* 86 (1966), 126-138.

(bronze, copper, tin (?), silver). This encouraged also a large export trade between Ugarit and Asia Minor.

(2) The geographical position of Ugarit, between Egypt, Asia Minor and Mesopotamia, created a certain amount of speculation on the prices of gold and silver and perhaps other products.

(3) Overland transportation consisted of caravans of donkeys. The price of donkeys was linked to the economic development of the country.

(4) Despite the fact that Ugarit did not possess metal deposits, this city was, for a time, the centre of metal trading for the whole area.