

ARCHAEOLOGY
OF THE UPPER SYRIAN EUPHRATES
THE TISHRIN DAM AREA

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GOODS DISTRIBUTION IN THE UPPER EUPHRATES
FROM THE PERSPECTIVE OF THE TELL QARA QUZAQ EXCAVATIONS

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Recent excavations of the *Instituto Interuniversitario del Próximo Oriente Antiguo* in Tell Qara Quzaq, located on the left bank of the Euphrates and 25 km south of Jerāblus-Karkemiš —rather close then to Tell Ahmar—, have unearthed an archaeological Middle Bronze level of peculiar features. Almost the whole surface of this level was indeed covered with round silos which had been built with stones and deeply excavated; a large building and some small rooms located in the periphery of the tell were the only different structures¹.

The archaeological date of this level corresponds to the MBII, on the basis of its pottery that parallels the MBIIb level of Tell Hadīdī. This was identified by Dornemann² as contemporary with the royal palace of Zimrī-Līm from Mari³.

The number of the silos discovered so far amounts to 45, and there is no doubt that there were still some more, now lost due to the erosion of the tell. Moreover, in a trench opened at the foot of the tell another silo of large dimensions was excavated; this allows us to suppose that some other similar silos could be found in this area. For these reasons, and also because some of the silos which have been found are not well preserved, it is very difficult to estimate with accuracy the whole capacity of this sort of granary-city. A rough calculation, based just on the excavated silos, and on average sizes of 2.5-3 m high and 2-3 m of diameter, shows an average of 15 m³ of capacity per silo, which means a total of about 675 m³ for all the 45 silos of the tell.

The silos probably stored barley (*hordeum distichon*), and this is what flotations have shown to some extent: following these analysis, roughly the 50 % of the seeds recovered corresponded to barley, though we must consider that flotations were made with samples taken from the filling of the silos, not from the phase in which they were in use⁴.

Supposing, then, that the silos of Qara Quzaq were intended for the storing of barley, and assuming a capacity of about 675 m³, the whole quantity of grain they could store was at least of 475 tons⁵.

Why were these silos in this place and what for are the questions to which we will try to answer now.

Assuming the date provided by the archaeologists, we should firstly turn our attention to two large groups of texts: the Cappadocian tablets and those found in the royal palace of Mari. The Cappadocian texts do not supply however relevant information about the area where Tell Qara Quzaq is located. One should note that they do not even mention the close and important city of Karkemiš⁶.

1. Olávarri 1995:7.

2. Dornemann 1984:65.

3. Olávarri 1993:19-21.

4. Matilla-Rivera 1993:151-181.

5. We consider 1 m³ = 700 kg (cf. footnote *infra*).

6. Hawkins 1976-1980:426; Kupper 1992:18.

By contrast, the Mari texts contain several references to Karkemiš, the context of which, as we will see later, is extremely interesting. The information provided by these tablets about the surrounding lands of Tell Qara Quzaq is nevertheless scanty. As shown by the texts themselves, this is probably due to the fact that the envoys of Zimri-Lim used the other bank of the river for their journeys to Aleppo and Karkemiš⁷.

The consequences of this relative lack of data have been various, for example the impossibility for establishing a reliable identification of the name of Tell Ahmar in this period. We do know, at least, that this was a zone of border and conflict between three kingdoms: Yamhad, Karkemiš and the so-called kingdom of High Mesopotamia.

Much more difficult is trying to describe with accuracy the political history of this area and place Qara Quzaq under the control of one of these kingdoms. It would be necessary that the study of the historical topography of the region would have such a solid basis so as to allow the identification of some important places mentioned in the texts. Two of these places, insistently under dispute between Samsi-Addu and the kingdom of Yamhad, were Dūr Sūmū-Epuh and Dūr Addu. The hypotheses of the editors of the documents mentioning these cities⁸ locate Dūr Addu on the left bank of the Euphrates, proposing a possible identification with Tell Ahmar. Dūr Sūmū-Epuh, also called Dūr Samsi-Addu, could be placed on the right bank of the Euphrates, in front of Dūr Addu.

Apart from the precise identification of both cities, it seems to be clear that, during the period of expansion of Samsi-Addu's kingdom, the region where Tell Ahmar and Tell Qara Quzaq were located was alternately under his control or Sūmū-Epuh's, the king of Yamhad. By this time, Karkemiš would be restricted to a very small territory, probably unable to rule over this area of the Euphrates. To this period could correspond the II-2 archaeological level of Tell Qara Quzaq, equivalent to the MBIIA⁹.

A new situation at Tell Qara Quzaq is opened with the destruction of the former settlement and the resulting building of the silos complex previously described. We have seen that this archaeological level could be dated to the period of Zimri-Lim, when the political situation in High Mesopotamia had completely changed coinciding with the disintegration of Samsi-Addu's kingdom. This new balance of power allowed the strengthening of the kingdom of Karkemiš, now free from Samsi-Addu's pressure: indeed, texts show us how merchants and officials of Karkemiš freely travelled along the Euphrates, undertaking political and trade relations with the kingdom of Mari.

We assume, then, that during the use of the silos Tell Qara Quzaq was under the control of the kingdom of Karkemiš and its king Aplahanda. This would be shown by the strong presence of Karkemiš as a commercial agent in the Mari texts. On the other hand, the only power that could dispute Karkemiš the control over this important fluvial harbour was the neighbouring kingdom of Yamhad; by this time, the relationship between both kingdoms was nevertheless excellent¹⁰, and it would be difficult to explain the usefulness for Yamhad of such an upriver key-site. Indeed, the main fluvial harbour for Yamhad which controlled the trade along the Euphrates was Imār.

Now let us attempt to answer our first question: why should these silos have been built in Tell Qara Quzaq, 25 km down-river from Karkemiš? Three are in my opinion the reasons which could explain such an enterprise:

1) The existence of the silos in Tell Qara Quzaq implies the storing and transport of huge quantities of grain on ships which required a minimum of safe navigation. Such conditions can not be found in the area around Karkemiš, where small pebbly islands formed by deposits of the river render

7. Durand 1990b:272.

8. Durand 1990b:272-274.

9. Olávarri 1993:17-18.

10. Cf. for example the text edited by Lafont 1988:525-526 no. 532.

navigation most difficult. Sometimes it was even impossible, as it once happened in Jerāblus in July 1922 to general Billotte, when a policy of commercial stability along the Euphrates was being favoured by the French Haut Commissariat¹¹. As a result, Tell Qara Quzaq appears to be the first place down the river free from these difficulties.

2) It is obviously necessary to place the silos as close to the river as possible, but in an area where the changes suffered by the bed of the Euphrates due to floods are not so important. Between Jerāblus and Tell Qara Quzaq, the soil crossed by the river consists of soft marly rocks. Therefore the changes caused by floods on the bed of the river can reach much further than 2 km width¹². Down Tell Qara Quzaq the valley of the river abruptly narrows, entering a gorge of 12 km long composed of harder rocks and not exceeding one km width till Qal'at Najm¹³. Here again Tell Qara Quzaq appears to be the first place, after Karkemiš, where a more or less safety harbour to initiate fluvial trade of cereals down the Euphrates could be established.

3) One should also note that Tell Qara Quzaq is not far from a natural corridor connecting the Euphrates with Menbij and Halab towards the West, and with Al-Hasseke towards the East. I do not believe, however, that terrestrial communications were an essential reason for the location of Tell Qara Quzaq. As a matter of fact, the route linking Menbij with Tell Ahmar towards Arslān-Taš and Urfa was no doubt much more important¹⁴.

To sum up, focused on the fluvial trade and dependent on the kingdom of Karkemiš, Tell Qara Quzaq has to be studied in a context of circulation of goods from Karkemiš to Mari, particularly intense and diverse in the period of Zimri-Lim.

The commercial and political relationships between Karkemiš and Mari were soon known as early as the first volumes of the ARM series were published. The letters of Aplahanda¹⁵, the letters of Numušda-Nahrārī¹⁶ and those of Asqudum¹⁷ are of special importance. Between 1988 and 1997 Lafont has also edited 26 letters sent by a man called Šidqum-Lanasi which are of outstanding significance for the subject we are dealing with¹⁸.

Šidqum-Lanasi was a high official of the court of Karkemiš, a *sukkal*, the vizier of Aplahanda, in office at least between ZL4 and ZL12. This man had in charge the organization and supervision of the exports to Mari of all kind of goods, especially grain, wine and timber. The specific data supplied by the texts of Šidqum-Lanasi about the transport of barley are extremely interesting:

1) The different amounts of barley¹⁹, delivered under the responsibility of Šidqum-Lanasi, range approximately between 200 and 750 tons, though half of the deliveries range between 300 and 400 tons of barley²⁰. With regard to these amounts, it is interesting to note that the average capacity of the silos

11. Velud 1995:64-65.

12. Sanlaville 1985:10-11.

13. Sanlaville 1985:10-11; Serrat-Bergadà 1993:211-212.

14. Durand 1990b:88; Joannès 1996:348-349.

15. Dossin 1952:no. 5 to 13; cf. Dossin 1938:115-121.

16. Burke 1964a:no. 58 to 101; cf. Burke 1964b:67-103, Durand 1983:151-163.

17. Durand 1988:71-228.

18. Lafont 1988, 1991, 1997.

19. We consider 1 *parisum* = 50 *qa* (Durand 1989:11); cf. also Lafont 1991:279 n. 23, where the possibility that such an equivalence (recorded in ARM 24 4 and discussed by Durand) was exceptional is stated, so also in Mari, as in Ebla, Alalah and Bogazköy, 1 *parisum* = 60 *qa*. On the other hand, we calculate the amount of tons on the basis of the equivalence 1 l (of barley) = 0.7 kg (Halstead 1990:187, with bibliography); we maintain the equation 1 *qa* = 1 l, even if at Mari 1 *qa* could be less than 1 l (Powell 1987-1990:499).

20. Lafont 1988:no. 543 [A.1987]: three deliveries of 12000 *parisum* (= ca. 420 tons), 11000 *p.* (= ca. 385 tons) and 21639 *p.* (= ca. 750 tons); *ibid.*:no. 544 [A.2685]: two deliveries amounting to 21000 *p.* (= ca. 735 tons); *ibid.*:no. 545 [A.2663]: three deliveries of 12000 *p.* (= ca. 420 tons), 5000 *p.* (= ca. 175 tons) and 6000(?) *p.* (= ca. 210 tons); Lafont 1991:no. 3 [A.2133]:

of Tell Qara Quzaq (about 475 tons) was not so far from the shipments of barley that arrived to Mari from Karkemiš.

2) The texts from the dossier of Šidqum-Lanasi, together with some other documents, give us an idea about the capacity of the ships used for the transport. Thus, a letter also coming from Mari²¹ mentions a shipment of grain which had to depart from Imār. The shipment was composed of 10 ships, each loaded with 30 *ugāru* of grain (ca. 25 tons) and 6 crewmen²². Even if this was a shipment coming from Imār, the data contained in the letters of Šidqum-Lanasi allow us, as Lafont has shown, its extrapolation to these texts. The documents of Šidqum-Lanasi also provide us with some other data about matters related to the circulation of this kind of cargos: for example, about the difficulties of the crewmen when navigating with ships loaded with grain, or about problems with the measurement of grain due to the different standards used in Karkemiš and Mari.

The texts of this dossier also inform us about the different prices of the ships, ten times more expensive in Mari than in Karkemiš²³. Thus, while in Mari the hiring of ships was, when necessary, usually preferred, in Karkemiš Šidqum-Lanasi had at his disposal his own and permanent fleet, with an unspecified number of ships²⁴.

In short, though it is not obviously necessary to conclude that the silos of Tell Qara Quzaq were the ones used by the vizier of Aplahanda for his trading operations, we may suppose at least that Tell Qara Quzaq was a storing complex used with that same purpose and whose main features could be obtained through these textual data: Tell Qara Quzaq probably had a harbour, or some kind of moorings, where ships large enough to load cargos of about 25 tons could moor; the number of ships used for the transportation of grain should range between 10 and 20, and the workers employed for navigation approximately between 50 and 100; moreover, before loading the grain on the ships, the recording of the amounts delivered had to be done, and specialized officials should have weighed it.

It should also be necessary to know why this trade with Mari was carried out. Margueron has shown that the location of Mari was specially linked to fluvial communication, and that agricultural yields from its surroundings were not so important a matter²⁵. As a result, periods of scarcity of grain were recurrent and cereals had to be obtained from more or less distant areas: sometimes within the limits of the kingdom (for example, Mišlān)²⁶, and some other times from remote places. One of the regions with which Mari had historically a strong commercial relationship was the basin of the Habūr²⁷, as shown by some silos dated to the Archaic Dynasties²⁸. Nevertheless, the insistence of Zimri-Lim for controlling the basin of the Habūr during his reign, and the absence of silos in this region dated to the amorite period, induced Margueron to suppose that regular commercial exchanges with this region did not exist anymore at this time²⁹. In fact, as is shown by the texts and through the results of the excavations in Tell Qara Quzaq, it seems that long-distance trade for the provision of grain was in Zimri-Lim's times diverted towards the axis of the Euphrates, seeking commercial contacts with Imār and Karkemiš.

one delivery of 400 *ugāru* (= ca. 335 tons).

21. Burke 1964a:no. 35; cf. Durand 1983:160-163.

22. Lafont 1991:278. For the kind of ships used for transportation along the Euphrates, cf. also Finet 1969; De Graeve 1981; Margueron 1989:122-123; Durand 1990a:68 n. 158. Ships of this size, with a similar crew, are found, as Margueron has shown, in glyptic (Amiet 1980:pl 13E, apud Margueron 1989:123 n. 26).

23. Lafont 1988:no. 538.

24. Lafont 1988:no. 537, 539. Cf. Durand 1990a:70; Michel 1996:401.

25. Margueron 1989 and 1991.

26. See Michel 1996:392-393.

27. Margueron 1991:99-100.

28. Del Olmo 1993:217-232.

29. Margueron 1991:99-100.

Contacts between Karkemiš and Mari were therefore frequent and extremely important for both kingdoms. To this effect, for example, there seems to be enough evidence for a travel to Karkemiš that Zimri-Lim carried out with commercial purposes; Aplahanda, in turn, pointed out in several occasions to the king of Mari how important the continuity of such contacts was for his kingdom³⁰.

Now then, even if these contacts were frequent, it does not seem to be probable that supplies of grain to Mari depended exclusively on the exchanges with Karkemiš. And I do not think even probable that the existence of Tell Qara Quzaq, or of similar complexes, would just had been focused on the possible needs for grain of Mari.

Firstly, we must remember that navigation through the Euphrates, though intense, was by no means easy all along the river³¹. But, above all, a strong presence of Karkemiš in Imār is well attested in the documents of Mari (and not only from letters). No doubt this proves the commercial interests with which Mari was not necessarily concerned and whose *raison d'être* was the role played by Imār in the Euphratic trade.

We know, for example, that Šidqum-Lanasi owned stores of grain in Imār³², and that he also received there, at least once, a shipment with a very large amount of cereals³³. On the other hand, even depending almost exclusively on the textual evidence from Mari, Imār appears to be more and more clearly a commercial key-place on the Euphrates acting as intermediary in the distribution of goods coming from different places, Karkemiš among them³⁴.

Even if it is not easy to state the precise political status of Imār, it seems certain that it was Yamhad who held a major control over this strategic place. But there are also allusions in the tablets of Mari, like for example the payment of taxes by Imār to three kings (probably those of Halab, Mari and Karkemiš), or the aforementioned presence of Karkemiš at Imār, which allow us to suppose that Karkemiš also used Imār as a place of transit when trading with its own merchandises³⁵.

This is the reason why I consider that the grain stored in Tell Qara Quzaq could have been of course intended for supplying Mari, but also for exchange with other places. In this case, Imār should have played the role of a transit centre from where shipments of barley could depart to their new destination down the river or by land³⁶.

We do not know which was the final cause for the abandonment of the silos complex of Tell Qara Quzaq. However, given its clear commercial orientation, it is quite possible that it would have been linked to the deep political changes occurred in the Middle and Lower Euphrates after the irruption of Hammurapi of Babylon and the downfall of Zimri-Lim.

Finally, I would like to briefly comment the possibility of identification of Tell Qara Quzaq. At present, the archives of this period from Halab, Imār or Karkemiš are not available; and no tablet has been found in Tell Qara Quzaq. As we have seen, however, this part of the Euphrates was frequently reached by political and commercial interests of Mari, and texts consistently illustrate it. The edition and interpretation of these tablets are still in progress and it is too early for the definition of an accurate historical topography of this area. The wealth of the toponymy in these texts is nevertheless enormous and it is possible in some cases to identify a site with its ancient name. A good candidate for Tell Qara Quzaq could be Yabūhum, a settlement located on the left bank of the Euphrates, close to Tell Ahmar, through

30. Lafont 1988:521, 1991:278.

See Sanmartín 1993:238-240; Joannès 1996:333-336; Michel 1996:398-399.

32. Durand 1990a:74-75 and n. 196 (A.2407).

33. Talon 1985:no. 4 (cf. Durand 1989:11).

34. Durand 1990a:74-75.

35. Durand 1990a:60-61, 74-75.

36. About trading by land from Imār, see Durand 1990a:66; Michel 1996:404.

which Zimri-Lim crossed the river on his way to Halab³⁷. The edition of unpublished texts where this city is said to be mentioned could confirm, or also disprove, this hypothesis. The identification of this peculiar site should be, in any case, an important step for the knowledge of the Ancient History of the Euphrates.

Bibliography

- Amiet P.
1980 *La glyptique mésopotamienne archaïque*, Paris.
- Burke M.L.
1964a *Lettres de Numušda-nahrâri et de trois autres correspondants à Idiniatum* (ARM 13), Paris.
- Burke M.L.
1964b "Lettres de Numušda-nahrâri et de trois autres correspondants à Idiniatum", *Syria* 41, 1964, 67-103.
- De Graeve M.-C.
1981 *The Ships of the Ancient Near East* (OLA 7), Leuven.
- Del Olmo Lete G.
1993 "Silos de almacenamiento de grano en el Levante Antiguo", in G. del Olmo Lete, ed., *Qara Quzaq I. Campañas I-III (1989-1991)* (AuOr Suppl. 4), Sabadell (Barcelona), pp. 217-232.
- Dornemann R.H.
1984 "The Syrian Euphrates as a Bronze Age Cultural Unit seen from the Point of View of Mari and Tell Hadidi", *AAAS* 34:63-88.
- Dossin G.
1938 "Aplahanda, roi de Carkémish", *RA* 35:115-121 (= *Recueil Georges Dossin. Mélanges d'Assyriologie (1934-1959)* [Akkadica Suppl. 1], Leuven 1983, pp. 293-299).
- Dossin G.
1952 *Correspondence de Iasmah-Addu* (ARM 5), Paris.
- Durand J.-M.
1983 "Relectures d'ARMT XIII, II: la correspondance de Numušda-Nahrârî", *MARI* 2, 1983, 151-163.
- Durand J.-M.
1988 *Archives Épistolaires de Mari III* (ARM 26), Paris.
- Durand J.-M.
1989 "paršum", *NABU* 1989:11.
- Durand J.-M.
1990a "La cité-Etat d'Imâr à l'époque des rois de Mari", *MARI* 6:39-92.
- Durand J.-M.
1990b "Documents pour l'Histoire du Royaume de Haute-Mésopotamie II", *MARI* 6:271-301.

37. Villard 1986; cf. Durand 1990b:272-274.

- Finet A.
1969 "L'Euphrate: route commerciale de la Mésopotamie", *AAAS* 19:37-48.
- Halstead P.
1990 "Quantifying Sumerian Agriculture. Some Seeds of Doubt and Hope", *BSA* 5:187-195.
- Hawkins J.D.
(1976-1980) "Karkamiš", *RIA* 5:426-446.
- Joannès F.
1996 "Routes et voies de communication dans les archives de Mari", in J.-M. Durand, ed., *Mari, Ébla et les Hourrites, dix ans de travaux: première partie. Actes du colloque international (Paris, mai 1993)* (Amurru 1), Paris, pp. 323-361.
- Kupper J.-R.
1992 "Karkémish aux IIIème et IIème Millénaires avant notre ère", *Akkadica* 79-80:16-23.
- Lafont B.
1988 "La correspondance de Šidqum-Lanasi", *Archives Épistolaires de Mari II/2* (ARM 26), Paris, pp. 509-537.
- Lafont B.
1991 "Un homme d'affaires à Karkemiš", in D. Charpin, F. Joannès, eds., *Marchands, Diplomates et Empereurs. Études sur la Civilisation Mésopotamienne offertes à Paul Garelli*, Paris, pp. 275-286.
- Lafont B.
1997 "Nouvelles lettres de Šidqum-Lanasi, vizir du royaume de Karkémish", *MARI* 8:781-784.
- Margueron J.-Cl.
1989 "Problèmes de transports au début de l'âge du bronze", in M. Lebau, P. Talon, eds., *Reflets des deux fleuves. Volume de Mélanges offerts à André Finet* (Akkadica Suppl. 6), Leuven, pp. 119-126.
- Margueron J.-Cl.
1991 "Mari, l'Euphrate, et le Khabur au milieu du IIIe millénaire", *BCSMS* 21:79-100.
- Matilla G., Rivera, D.
1993 "Estudio paleoetnobotánico de Tell Qara Quzaq-I", in G. del Olmo Lete, ed., *Qara Quzaq-I. Campañas I-III (1989-1991)* (AuOr Suppl. 4), Sabadell (Barcelona), pp. 151-181.
- Michel C.
1996 "Le commerce dans les textes de Mari", in J.-M. Durand, ed., *Mari, Ébla et les Hourrites, dix ans de travaux: première partie. Actes du colloque international (Paris, mai 1993)* (Amurru 1), Paris, pp. 385-426.
- Olávarri E.
1993 "Las tres primeras campañas de excavación", in G. del Olmo Lete, ed., *Qara Quzaq-I. Campañas I-III (1989-1991)* (AuOr Suppl. 4), Sabadell (Barcelona), pp. 15-29.
- Olávarri E.
1995 "Excavaciones en Tell Qara Quzaq. Informe provisional: campañas tercera y cuarta (1991-92). Misión arqueológica de la Universidad de Barcelona en Siria", *AuOr* 13:5-14.
- Powell M.
(1987-1990) "Masse und Gewichte", *RIA* 7:457-517.
- Sanlaville P., ed.
1985 *Holocene Settlement in North Syria. Résultats de deux prospections archéologiques effectuées dans la région du nahr Sajour et sur le haut Euphrate syrien* (BAR Inter. Series 238), Oxford.

- Sanmartín J.
1993 "TQQ: problemas de contextualización", in G. del Olmo Lete, ed., *Qara Quzaq I. Campañas I-III (1989-1991)* (AuOr Suppl. 4), Sabadell (Barcelona), pp. 233-249.
- Serrat D., Bergadà, M.
1993 "Aportaciones geoarqueológicas a la paleoecología de Tell Qara Quzaq (valle del río Éufrates, Siria)", in G. del Olmo Lete, ed., *Qara Quzaq-I. Campañas I-III (1989-1991)* (AuOr Suppl. 4), Sabadell (Barcelona), pp. 211-216.
- Talon P.
1985 *Textes Administratifs des Salles Y et Z du Palais de Mari. Textes* (ARM 24/1), Paris.
- Velud C.
1995 "De l'Euphrate au Tigre. Le mandat français en Mésopotamie", *Une Mission de Reconnaissance de l'Euphrate en 1922. Deuxième Partie*, Damas, pp. 57-73.
- Villard P.
1986 "Un roi de Mari à Ugarit", *UF* 18:387-412.