WINE FROM MAMMA: *ALLUHARUM*-POTS IN 17TH-CENTURY BC TRADE NETWORKS

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New evidence allows us to demonstrate that a regional trade connected North Syria with both central Anatolia and Babylonia well into the 17th-Century BC. Archaeological evidence indicates that a specific type of vessel, the globular flask, was produced at Zincirli Höyük in the mid-17th century for the purpose of storing and transporting wine. The simultaneous appearance of these vessels as far afield as Kültepe and Sippar-Amnānum lines up with Late Old Babylonian attestations of *alluharum*-pots in 17th-c. texts from Sippar, Babylon, and Dūr-Abiešuh. These, we argue, must refer to the same vessels called *aluārum* in earlier Old Assyrian texts from Kültepe from the 19th century. Taken together, this evidence points towards the existence of a previously unsuspected trade network centered on the ancient Syrian state of Mamma that thrived in the decades between the collapse of the Old Assyrian Trade Network and the accession of Hattušili I. Through a dialogue between textual and archaeological materials, we are not only able to reveal the persistence of long-distance exchange for a century previously believed to lack it, but provide more context for the political transformations taking place at the end of the Middle Bronze Age.

Introduction: From Anatolia, 19th Century BC, to Babylonia, 17th Century BC

In a recent study, Gojko Barjamovic and Andrew Fairbairn discuss "a specific type of container called an *aluārum*" appearing in Old Assyrian texts from Kültepe dating to the early 19th century _{BC} (ca. 1895–1865 _{BC}). The *aluārum* was used for the storage and transport of fine wine (geštin *tābum*)¹ imported from the region of Mamma, located by Barjamovic near Kahramanmaraş (itself circa 70 km northwest of Gaziantep) in southeastern Turkey.² The authors go so far as to publish an image of a flask excavated at Kültepe which they believe could be an *aluārum*-vessel.³ The published flask is one of at least nine of the same type found at the site, generally in cist-graves associated with Lower Town levels Ib and Ia; it is globular in shape with a short neck and a single handle, decorated with painted red and black concentric circles.⁴ This decoration together with its fabric indicate that the vessel itself was non-local in origin. Along with others, the authors understand that the shape and decoration of the vessels point to their manufacture in North Syria and their use for the transportation of wine and other liquids.⁵

This paper presents additional information in support of this identification, based on two complementary streams of evidence, the first archaeological, the second textual. The first point is that we can more securely identify a center of production of these vessels in north Syria, specifically in the area of Zincirli, ancient Samal, in the Karasu valley, at least within the 17th century BC (i.e. contemporary with Kültepe Lower Town level Ia). The second position is that textual references to pots called ^{dug}alluharum</sup> restricted to northern Babylonia in the same time (i.e., the Late Old Babylonian period) refer to those same *aluārum*-vessels, rather than to pots

¹ In the Babylonian context, *tābum* for wine could as easily mean "fine" or "good-quality" as "sweet"; CAD translates this both ways. Here, we translate *tābum*/dùg as "good," on the thinking that another way to refer to "sweet" wine

would have been unnecessary given contemporary writings for wine sweetened with honey as geštin làl/dišpu: see e.g., Chambon 2009: nos. 44–45, 112, 114, and 174. Compare with Hittite geštin ku₇, "sweet wine" (Gorny 1996: 150), though Corti (2018: 286) argues for this as "pekmez" (our thanks to Mark Weeden for the reference).

² For additional references to wine in Old Assyrian texts with geographical information, see Barjamovic 2011: 98 and 114 (Zalpa), 132 (Tegarama), 197 and 200 (Uršum), and 210–11 (Mamma).

³ Barjamovic and Fairbairn 2018: 278 Fig. 22.

⁴ Emre 1995: 174–76, Type A1a; see also Kulakoğlu and Kangal 2010: 199, no. 74.

⁵ See Gates 1988, Emre 1995, Einwag 2007, among others.

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^{*} Most abbreviations used in this article follow *The Assyrian Dictionary of the Oriental Institute of the University of Chicago* (CAD); additional abbreviations include: ETCSL = *The Electronic Text Corpus of Sumerian Literature* (http://etcsl.orinst.ox.ac.uk); Haradum II = Joannès 2006; TLOB 1 = Richardson 2010. Abbreviations for texts published in series include CUSAS = Cornell University Studies in Assyriology and Sumerology, and MHET = Mesopotamian History and Environment, Texts. "OB" occasionally abbreviates "Old Babylonian," passim.

containing *alluharum*-dye, as has been previously understood. This coincidence is supported by the presence of similar globular flasks at Sippar and Harādum in contexts datable to that same century.

The geographic breadth of these attestations, on the one hand—as far north as central Anatolia and as far south as northern Babylonia-and the chronological restriction of the term to the 19th and 17th centuries BC, respectively-leads us to several interlocking conclusions. First, these attestations and allied evidence (see Appendix) point to trade between Babylonia and north Syria continuing down towards the end of the 17th century, despite the absence of direct textual references, perhaps reviving a Syro-Babylonian trade which is already in evidence for the 19th-century.⁶ Second, a dramatic increase in references to Mamma in Kültepe texts of the Lower Town Level Ib period (for which textual evidence is generally sparse), combined with the appearance of the painted flasks in Level Ib and their increased frequency in Level Ia, indicates that the north Syrian trade was likewise of growing importance at Kaneš at this time.⁷ We concur with previous suggestions that the product in question was almost certainly wine, for which the region was reputed already in the days of Zimri-Lim's palace at Mari, at which point (the 18th century) its large-scale trade was managed by middlemen.⁸ We can now, however, tentatively reconstruct a regional trade centered on Mamma in the 17th century BC, one in which the globular flasks, or their contents, continued to play a major role. Furthermore, the textual and archaeological appearances of these vessels point to their being unusual objects even when empty of goods. These were containers specially designed for export, which designated their contents and users as participants in a recognized system of long-distance exchange. We propose that this system flourished until the Syrian raids of Hattušili I ca. 1650 BC, when the patterns of trade and communication changed in significant ways.

In what follows, we will examine first the archaeological and then the textual evidence for *aluārum*-vessels, and then conclude with a synthetic discussion. An Appendix of allied evidence for Late Old Babylonian trade appears at the end.

North Syrian wine in the Middle Bronze Age: the archaeological evidence

Recent excavations at the site of Zincirli in the Karasu valley of southeastern Turkey have yielded multiple examples of bichrome-painted globular flasks bearing close similarity to those found at Kültepe.⁹ The vessels were discovered *in situ* within several buildings of a monumental architectural complex that was destroyed in a conflagration dated by radiocarbon to 1661–1631 cal. BC.¹⁰ The globular or 'pilgrim' flask is a well-established type with a wide distribution, both geographical and chronological: it appears from Kültepe-Kaneš in the north and Tarsus in the west to Tell ed-Der/Sippar-Amnānum in the southeast, beginning at the end of the Early Bronze Age and extending into the Late Bronze Age, at least (see Fig. 1). Unpainted flasks appear first at Kurban Höyük on the upper Euphrates in layers dating to the EB–MB transition; they are found soon afterwards up and down the Euphrates, as well as at Kültepe, in the houses of Lower Town

⁶ See Marchetti 2003; Marchesi 2013; Marchesi & Marchetti 2019.

⁷ Kārum Ib is dated 1830–1700 вс based on recent analysis by Barjamovic, Hertel and Larsen (2012, 3–40). They cite further arguments by Emre (1995) and Kulakoğlu (1999) for the duration of the subsequent Ia period into the reigns of the Late Old Babylonian kings Abi-ešuh and Ammiditana, i.e., for at least the first half of the 17th century Bc. These arguments, which rely on archaeological evidence, including that of the globular flasks, are addressed further below. On the Mamma trade, see Barjamovic 2011: 210 and n. 793: "the frequency with which Mamma appears in the Ib-texts stands out when compared to other Anatolian toponyms and may well relate to the growing political importance of Mamma in the region."

⁸ Benati 2016: 155–57.

⁹ At time of writing, seven complete flasks had been identified and restored, of which four bear painted

decoration and three are unpainted; fragments of many others were recovered but have not yet been closely studied or quantified. In addition to these, an eighth example was excavated and published by the Orient-Comité expedition to Zincirli: von Luschan and Andrae 1943: pl. 17b. In a visit to the Kültepe excavation house and the Kayseri museum in 2019, macroscopic evaluation by Zincirli ceramicist S. Soldi confirmed the very close similarity of the Kültepe vessels in both decoration and fabric to the Zincirli MBII ceramic assemblage.

¹⁰ 68.2% probability (1σ range); 1680–1619 BC, 95.4% probability (2σ range). On this context, see Herrmann and Schloen 2018; Herrmann and Schloen 2020; Morgan and Soldi forthcoming. Dates provided by Dr. Sturt Manning of Cornell University, based on preliminary modeling using a Tau_Boundary paired with a Boundary in OxCal, derived from carbonized seeds of bitter vetch and wheat excavated from sealed contexts.

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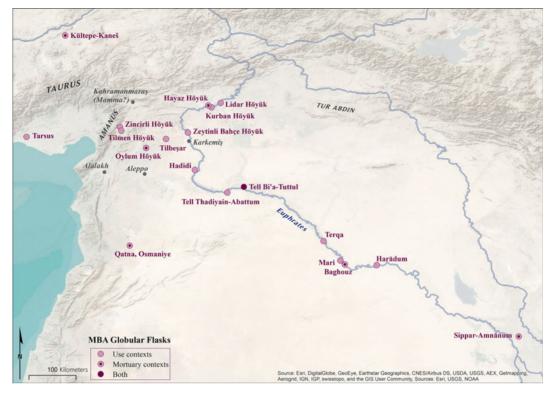


Fig. 1 Distribution Map. Attestations of globular flasks in Middle Bronze Age contexts. Credit: Lucas Stephens

Level II (i.e., contemporary with textual attestations of *aluārum*-containers).¹¹ Bichrome-painted examples like those from the Zincirli destruction level are significantly more rare, however: aside from Kültepe, where all published examples come from cist graves dated to Lower Town Level I or, where more specificity is possible, Level Ia, only one other published globular flask, from a pottery storeroom at Tarsus dated to the local LB I level (which begins ca. 1650 BC, according to excavators), bears painted decoration.¹²

The Zincirli flasks are noteworthy in several respects. First, their decoration, consisting primarily of a series of alternating red and black concentric circles on the belly, sometimes with a cross or star pattern inside the innermost circle, is identical in several cases to that of Kültepe examples (see Figs. 2 and 3; compare details at rim and in innermost circle to Emre 1995, Type A1a, cat. 7–9). Second, based on their fabric and the presence in the local assemblage of numerous other vessels decorated in the same tradition, excavators are confident that the painted flasks are a product local to Zincirli or its region in the late Middle Bronze II period (ca. 1800–1600 BC).¹³ Their appearance in

¹¹ See Einwag 2007 for a summary. For Kurban Höyük, see Algaze 1990. The flasks continue into the Late Bronze Age, appearing at Umm el-Marra (Schwartz et al. 2003: fig. 32:11), Munbaqa, and Tell Bazi, with some modifications (Einwag 2007: 205). As noted by Gates (1988), the form develops into the two-handled, lentoid 'pilgrim flasks' of the Iron Age coastal Levant; see below.

¹² Levels prior to the final MB II have not yet been excavated at Zincirli; it is possible that the tradition begins there earlier than the 17th century, but this awaits further investigation. For Tarsus, Goldman 1956: 193–94 and figs. 308, 377 (no. 1024). The decoration on the Tarsus example is slightly different than the Zincirli or Kültepe examples; it has concentric circles, but the outer pairs are filled in between them with a wavy line, and it is not clear that they are bichrome. For Kültepe, see Emre 1995, 174–76: Type A1a. Emre's Type A1b, with bichrome decoration very similar to the Zincirli examples, but which is lentoid in shape with a double handle, finds a direct parallel at Tilmen Höyük, an MB II palatial center just 9 km south of Zincirli; see Alkım 1974. Another lentoid, double-handled, bichrome-painted flask was excavated in a grave of MBA date at Oylum Höyük (possibly ancient Haššum? Ünal 2015): Çatalbaş 2008: pl. 5.

¹³ On the Zincirli MB II ceramic assemblage, see Morgan and Soldi forthcoming. As noted above (fn. 9), macroscopic evaluation of Kültepe flasks during a visit to the excavation confirmed the similarity in fabric between the Kültepe



Fig. 2 Aluārum-containers from Zincirli, ca. 1650 BC: Two examples of a globular flask, found side by side in Zincirli's destroyed Middle Bronze Age monumental complex (Room DD6, Building DD/II, Local Phase 4; C17-46.0B#6–7). Credit: Roberto Ceccacci. Courtesy of the Chicago-Tübingen Expedition to Zincirli.

Kültepe Level Ia graves is thus the result of trade, direct or indirect, between the Karasu valley and Central Anatolia at that time. Third, their specific contexts of discovery at Zincirli, where they are found alongside special-purpose items such as funnels, as well as numerous drinking-cups, generally support earlier arguments for the shape's function as a container for wine; furthermore, grape, including grape pips and skins, is present in many archaeobotanical samples from these contexts.¹⁴

The globular flask type stands out in archaeological assemblages due to its unusual method of manufacture: the round belly of the vessel was formed by attaching two separate wheel-made bowls at the rim with a band of clay, a technique most closely associated with the typically Syro-Palestinian 'pilgrim flasks' found at coastal sites of the Late Bronze and Iron Age. Along with the presence of the handle — an unusual feature for inner Syria and Mesopotamia, but standard in MBA assemblages of western Syria and the Levantine coast — this marks it as an import in Mesopotamian contexts, as well as in Anatolia. At Hadidi, for example, Franken notes that the technique was "hardly ever used;" at Terqa, Kelly-Buccellati and Shelby conclude that the type "must have had a specific function as indicated by its very different manufacturing process and by the pattern of its distribution."¹⁵ The pattern referred to is the flasks' appearance in significant concentrations at major Middle Bronze sites along the Euphrates, including Terqa and Tell Bi'a/ Tuttul, but most notably in the Zimri-Lim palace at Mari, where they occur in groups ranging from 25–30 to as many as 98 vessels, usually in storage contexts near reception suites.¹⁶ In these cases, the flasks in question are undecorated, and date primarily to the mid-18th century BC.

flasks (where it appears to be non-local) and Zincirli (where it appears to be local). ¹⁴ D. Karakaya (project archaeobotanist), personal

¹⁴ D. Karakaya (project archaeobotanist), personal communication: The Chicago-Tübingen Expedition employs a systematic sampling strategy for archaeobotanical remains. As of 2019, all samples (n=260) from Zincirli's destroyed MB II complex had undergone preliminary processing but not detailed analysis. The contexts were generally rich in

botanical remains, including concentrations of free-threshing wheat and bitter vetch, along with other crop plants, pulses, fruits, and weedy taxa. For spatial distribution, see Morgan and Soldi forthcoming.

¹⁵ Franken and van As 1994: 510; Kelly-Buccellati and Shelby 2007: 122–23.

¹⁶ Tell Bi'a/Tuttul: Einwag 2007: 202–205. They occur in all levels of Palace A (KK3–KK7), but increase

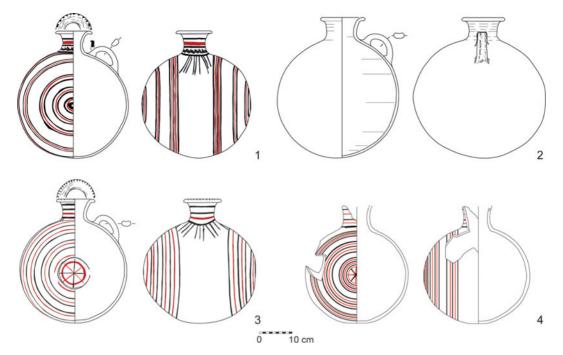


Fig. 3 *Aluārum*-containers from Zincirli, ca. 1650 BC. Multiple examples of painted and unpainted flasks found in two buildings of Zincirli's destroyed Middle Bronze Age monumental complex (Room DD2, Building DD/I, Local Phase 4; Room DD6, Building DD/II, Local Phase 4). Credit: Cem Küncü, Karen Reczuch; prepared by Sebastiano Soldi; courtesy of the Chicago-Tübingen Expedition to Zincirli.

The palatial consumption of wine is well-documented in the Mari archives, as are its sources, which include the regions of Aleppo and Karkemiš, whence its shipment down the Euphrates by boat.¹⁷ The wine-producing zone extended for some 300 km along the well-watered Taurus foothills of southeastern Anatolia and northern Syria, from the Mediterranean coast in the west as far as the Tur-Abdin in the east; evidence for wine production in this region appears as early as the mid-third millennium $BC.^{18}$ Wine remained a luxury import to Mesopotamia in the early second millennium, at which point, according to a recent study by Laneri, "wine produced in southeastern Anatolia and northern Syria was considered a precious and expensive commodity for kings and gods," though rather less desirable vintages were also produced in the Mari palace, designated *sâmum*, came from assorted vineyards in a relatively restricted (and probably slightly higher-altitude) zone, stretching from the Karasu valley in the west to Zalmaqum, just east of the Euphrates. *Sâmum* wine is documented regularly in shipments to the palace from both Karkemiš and Aleppo; Chambon places one *sâmum*-producing *terroir*, Zizkibum, specifically in the Amanus mountains.²⁰

dramatically in the final phase of use, which is dated to the last fifteen years of Shamshi-Adad, i.e., the second quarter of the 18th c. BC. (Einwag 2007: 198). Mari: Parrot 1959: 116–18; discussion in Gates 1988: 69–73. The destruction of the Mari palace is dated to 1760 BC.

¹⁷ Chambon 2009.

¹⁸ The evidence consists of seeds and pips of *Vitis vinifera* associated with plaster basins or pits: Laneri 2018: 226–27; Miller 2008.

¹⁹ Laneri 2018: 227; Michel 2009, esp. 210-13.

²⁰ Chambon 2009: 15–16. In Chambon's analysis, "*sâmum*" originally referred to a specific place, located near Harran in the Zalmaqum region, but the term came to designate a

grape varietal of high quality that was cultivated both there and elsewhere in north Syria. Mari texts describing shipments that include *sâmum* wine refer to source locations in the Karasu valley 'in northwest Yamhad' (e.g. Zizkibum; Chambon 2009: 16), in the Karkemiš region, and as far east as Zalmaqum, but not to Terqa, the Middle Euphrates, the Levantine coast, or the Tur-Abdin (where other types of wine were sourced). More recently, Chambon (2018: 246) has briefly described the cultivation area of *sâmum* as "in the surroundings of the city of Carchemish (*sic.*) or in the Zamalqum (*sic.*) region," but refers readers to his earlier (2009) discussion, acknowledging that "the cultivation area of this grapevine still needs to be precisely located."



Fig. 4 Aerial View of Zincirli Höyük, Middle Bronze Age Complex DD (Area 2). The mountains in the background are the Amanus foothills. Credit: Lucas Stephens. Courtesy of the Chicago-Tübingen Expedition to Zincirli.

Taken together, the north-Syrian affinities of the globular flask type, the vessel's distribution along the Euphrates, and the specific contexts of their discovery in the Mari palace made their identification as "wine jars from western Syro-Palestine" already probable when first proposed by Gates in 1988.²¹ The particular affordances, too, of the shape — its narrow neck, easy to stop up; its manageable, roughly standardized size, no more than 30 cm in diameter (yielding a volume of ca. 10–12 liters); its tendency to have one flatter side, the better to hang on a donkey's back — lend themselves to filling, to carrying, to pouring out, making their attributed function for wine a satisfying one, if still subject to chemical verification.²²

The presence of the flasks at Zincirli in MB II levels is therefore unsurprising. Zincirli is located south of the Taurus, in the narrow valley of the Karasu river, the ancient *Saluara*, at the foot of the Amanus mountain range (see Fig. 4). It is firmly within the wine-producing zone of north

²¹ Gates 1988: 72. Özgüç (1953: 116) independently observed that the painted decoration on the Kültepe examples suggested a North Syrian origin. Gates (1988) notes other discoveries of the flasks in funerary assemblages, e.g., at Baghouz near Mari, where they appear in place of the local beer jugs, in support of her argument for wine. The flask from Hayaz Höyük, near Kurban Höyük, was likewise found in a funerary context: see Rodenberg 1980: 19, Fig. 9. Her thesis has been subject to slight revision since then: Einwag argues, for example, that "because of the way of shipment on the Euphrates, an origin in the Karkemiš regions seems much more probable than in the Levantine coast," though he finds their function as wine jars "very probable" (2007: 204). 22 The unpainted flasks from Zincirli tend to be slightly larger than the painted ones (see Figs. 2 and 3). The painted flasks from Kültepe on display in the newly opened Kayseri museum, on the other hand, are smaller — perhaps half as big as the Zincirli examples (see Emre 1995, p. 175, cat. no. 4) — although most of those published by Emre (1995) are comparable in size to the Zincirli examples. It is worth noting that a krater-style vessel painted in the same tradition is on display alongside these flasks (see Kulakoğlu and Kangal 2010, cat. no. 83): an identically-shaped and decorated vessel was found in the Zincirli destruction level (Building DD/I, Room DD3), but the Zincirli example is likewise an order of magnitude larger than the Kültepe one. It is possible that these 'miniature' versions were manufactured specifically for long-distance transport. Syria, even that of *sâmum* wine. The site's name in the Middle Bronze Age is not known, and archaeological evidence suggests the settlement was no more than a few hectares in size in this period, making the most obvious interpretation that it was a satellite of a larger center.²³ The fertile river valleys east of the Amanus supported several contemporary palatial centers: Tilmen Hoyük, very likely ancient Zalwar, is only 9 km to the south, also in the *Saluara*/Karasu valley, itself a tributary of the Orontes;²⁴ Tell Aççana/Alalakh, seat of the powerful Bronze Age kingdom of Mukiš, vassal of Yamhad, lies 100 km to the south of Zincirli, in the Amuq plain. Zalwar was part of the kingdom of Anum-hirbi, a known contemporary of both Zimri-Lim, king of Mari, and Waršama, king of Kaneš, whose reign can thus be dated to the first half of the 18th century BC.²⁵ Anum-hirbi's dominion also extended over the region of Mamma. Barjamovic's proposed location of the latter at modern Kahramanmaraş, where the Amanus meets the Taurus, 55 km north of Zincirli, places the site within the greater Mamma region.²⁶

Archaeological evidence for MBA Mamma has thus far been scant; its identification with modern Kahramanmaras rests on the discovery of two bronze spearheads inscribed with the name of Anumhirbi in Old Assyrian dialect at the village of Hasancık(lı), 14 km northwest of the city (Donbaz 1998). Survey of the Kahramanmaras plain by Carter et al. in 1994 identified two mounds in the vicinity of Hasancık(lı) with early-second-millennium material, KM 173 and KM 174, that Carter proposes as candidates for the center of the kingdom of Mamma, along with a third, KM 178, 4 km to the south. She notes the valley's advantageous location at the intersection of routes from Syro-Mesopotamia leading north to Anatolia and west to Cilicia, as well as the presence of grapes in the surrounding hills.²⁷ The collections of the Kahramanmaraş Museum include numerous figurines found near Hasancık(lı) village and stylistically datable to the MBA (several votive pegs in bronze and as many as 50 clay bulls), lending further support to the proposed localization there of an important MBA settlement.²⁸ Textual evidence attests to the existence of an Assyrian wabartum at Mamma well into the later (kārum Ib) period of the Old Assyrian trade network. Along with Uršum (likely modern Gaziantep region, 120 km due east of Zincirli), with which it is very frequently associated in Assyrian texts, Mamma apparently represented the southern frontier of the Assyrian commercial circuit.²⁹

The region's association with locally bottled wine is steadfast.³⁰ Eight texts from Kültepe refer to shipments of wine relevant to our study.³¹ Seven of these texts use some form of the term *aluārum* to describe the containers in which the wine was shipped.³² Five of the texts specify this wine to be '(fine) sweet wine' from Mamma; a sixth mentions Mamma as the destination of a traveller.³³ Of the

²³ This preliminary interpretation is somewhat at odds with the monumentality of the architecture: Hilani I, which has recently been recognized as part of the Middle Bronze Age stratum, is larger than any of the buildings at neighboring Tilmen Höyük, for example; architectural parallels suggest it may have been a temple: see Herrmann and Schloen forthcoming. ²⁴ For this identification, see, most recently, Archi 2015,

²⁴ For this identification, see, most recently, Archi 2015, 430–42. See also discussion in Marchesi and Marchetti 2019, fn. 73.

2019, fn. 73.
²⁵ Miller 2001: 66–67; Barjamovic, Hertel, and Larsen
2012: 36.
²⁶ Barjamovic 2011: 208. Anum-hirbi additionally figures,

²⁶ Barjamovic 2011: 208. Anum-hirbi additionally figures, in certain Mari letters, as king of Haššum, possibly modern Oylum Höyük where a bichrome-painted pilgrim flask has also been found: see above, n. 12.

²⁷ Carter in prep., Chapter 6.

²⁸ Akdoğan ²⁰¹⁹. Akdogan describes a 2011 meeting wherein the Hasancıklı village muhtar identified the findspot of the bronze peg figurines as an agricultural terrace known as "Kalaycık," 1 km from the village, where he also found 'black stone cylinders,' and she observed Middle Bronze Age ceramics. She argues on this basis for the identification of Kalaycık with Mamma, though she observes that the bull figurines seem to have come from a broader area around Hasancıklı (Akdoğan 2019: 128). The peg figurines find close parallels at Middle Bronze Age Zincirli (Morgan and Soldi forthcoming: fig. 6.2) as well as at Tilmen Hoyük (Duru 2003: 68 and pl. 37/2) and at Oylum Höyük (Engin 2011).

²⁹ "... an impermeable frontier seems to have separated the Assyrian traders from all states south of Uršu" (Barjamovic 2011: 202).

³⁰ For textual attestations of the Mamma *wabartum*, see Barjamovic 2011: 209, fn. 785. ³¹ Six of these texts are unpublished, but discussed by

³¹ Six of these texts are unpublished, but discussed by Barjamovic and Fairbairn 2018: 251–52 and Table 3; these are Kt 89/k 367, 93/k 604 and 731, and 94/k 667, 676, and 731. The seventh and eighth texts are published: KTS 2, 14 and BIN 4, 219, both collated by Barjamovic; the authors thank him for sharing his transliterations.

 32 As either *aluārum* or *aluāratim* (š*a*) *karānim*. Kt 89/k 367 alone does not use the term; here the wine, though from Mamma, is in *kukkubu*-flasks.

³³ Of the Kt texts, only Kt 93/k 604 does not specify Mamma as the source of the wine; it may suggest, instead, Tegarama, but this is unclear. Neither of the published texts specifies the source of the wine, but KTS 2, 14 does identify that a person associated with the transaction had gone to Mamma. OA attestations of *aluārum*-vessels adduced by Barjamovic and Fairbairn which specified the origin of the wine those vessels held, all identified Mamma for their appellation d'origine contrôlée.³⁴ When filled with wine, these vessels were expensive: one trader "gave 1 mina of good, native copper for another *aluārum*-container of sweet wine from Mamma," a price comparable to that of a sheep;³⁵ as Barjamovic and Fairbairn conclude, "imported wine was clearly a luxury commodity."³⁶ That the flasks appear with such frequency at Zincirli is both in line with the picture of the regional economy gleaned from the texts, and suggestive of the benefits savvy local actors may have accrued during this short period.

Mamma, with its Assyrian *wabartum*, was the most — if not the only — accessible north-Syrian market, at least from the point of view of Assyrians traversing Anatolia. Wine and globular flasks alike were certainly produced in a broader area, most of which was not accessible to Assyrian merchants due to exclusionary trade agreements.³⁷ Still, the impression left by this handful of texts is that the *aluārum* was a distinctive type of vessel, to the point of retaining its local name even in foreign contexts. Much like wine, an imported commodity that had recently become indispensable to both social and ritual life at Kaneš, the *aluārum*-container itself may likewise have held a unique cachet beyond its functional value, in that it signaled its user's access to broader networks.

OB^{dug} alluharum = OA aluārum: the Babylonian connection

The word *aluārum* rings a Babylonian bell, because a small number of writings for vessels called alluharum (e.g., as dugal-lu-ha-rum) can be found in Late Old Babylonian texts. As Barjamovic and Fairbairn note, the term *aluārum* does not appear in the CAD, but the writing is unambiguous as a-lu-a-ra-tim ša karānim or similar: "aluārum-vessels (of wine)." This parallels the names for other containers for wine in Kültepe texts, including $k\bar{u}tulkukkubulkarpat kerānim.³⁸$ The understanding of these attestations in a Babylonian context has been somewhat strained, for the principal reason that *alluharum* is attested since Old Akkadian times as a "mineral dye" (per CAD A/1, 359–360). This substance — unlike vessels counted by number — was parcelled out sometimes by weight, more typically by volume, and occasionally unmeasured in recipes ("You grind [some] a.mineral...," etc.). The substance was associated in Old Akkadian, Ur III,³⁹ Old Babylonian, and Middle Babylonian writings with dyeing, tanning, and staining (esp. with *ligtum/nigtum*, another sort of dye or fixer),⁴⁰ whereas in Standard Babylonian medical and ritual texts alluharum was used primarily as *materia medicalmagica*.

But six Late Old Babylonian writings mention alluharum as discrete objects, enumerated specifically as vessels, all restricted to texts from northern Babylonia of the 17th-century BC (see Table 1).⁴¹ A brief description of these examples is in order. Example 1 is a loan of silver from Iltani, dumu.munus lugal, made for the purchase of wine in two alluharum-vessels. The purchase was to be made through a trading expedition, since the loan was to be repaid after the completion of a journey (ll. 7-8: ina erēb girri). Example 2 is a receipt text, documenting two 50-sila deliveries

³⁶ Barjamovic and Fairbairn 2018: 252–53.

³⁷ See Barjamovic 2018 on "interlocking commercial networks": Assyrian traders could procure goods in Mamma, positioned on the fringes of north Syria, from networks which they could not access directly.

⁸ One can probably add to the list of Old Assyrian examples the text Kt 97/k 108b, a list of goods which includes in 1. 14: 2 udu 2 a-lu-a-ra-tim 1 túg: Çayir 2012: 54–55 no. 32. ³⁹ See e.g. Sigrist 1981: 156f. for examples: TCL 5 17 iv and

v, AnOr 1 34, Nik 438; BIN 9 105 is less clearly dye: ú-hab ù al-la-ha-ru, "hab-plant and allaharu." Note also the word in a

practical vocabulary from Susa of the period, probably misunderstood by Scheil (1921: 63), who gave "nasse, sac"; it probably belongs with the list of clays found in the following lines 184-190 (ibid.: 64).

⁴⁰ CAD N/2 s.v. niqdu s., with further examples of alluharum measured by weight and volume. See also OB Tell Rimah nos. 128-29, with *liqtu* and other dyes (Dalley et al. 1976: 102-104); also CT 6 21a, an inventory of silver for various people and objects, including (l. 17) 21/2 gín (kù.babbar) al-lu-ha-rum, following (l. 16) igi.6.gál.la (kù.babbar) tamlīt dutu, where tamlītu is a filling or inlay for jewelry or vessels. The context of these lines seems to relate to craft use.

⁴¹ Pientka 1998: 641, 648, identifies Sippar as the provenance for examples 1 and 3; example 4 (see TLOB 1 pp. 26-27) is also Sipparean by prosopography. Example 2 is presumably from Dūr-Abiešuh. Example 6, mentioning the woman Uqnītum (see also VS 61 and 68) comes from Babylon. The provenance of example 5 cannot be identified, but it is certainly of northern Babylonian origin.

³⁴ Admittedly, this specification attaches only to three consignments, described in five documents: Kt 94/k 667 (four vessels), Kt 94/k 676 (one), and a consignment of eight vessels discussed in three texts (Kt 93/k 604, Kt 93/k 731, and Kt 94/k 731), per Barjamovic and Fairbairn 2018: 252. ³⁵ Kt 94/k 676 (l. 1–8), trans. Barjamovic 2011: 211.

Ex.	text	date	passage
1	CT 48 112: 2, 8	Ae "o"	ana šám 2 ^{! dug} al-lu-ḥa-rum ša geštin / ^{dug} al-lu-ḥa-rum ša geštin
2	CUSAS 29 204: 12	Ad 20	1 ^{dug} al-lu-a-rum ma-har PN
3	Dalley, Cat. Edinb. 15: 20	Ad 23	1 ^{dug} al-lu-(ha)-rum rīqum
4	TLOB 1 40: 7, 9, 11, 15, 17	As 4?	{#} ^{dug} al-lu-ha-rum
5	AbB VII 169: 3	As	0.0.1 i.giš ina ^{dug} al-lu-ha-ri
6	VS 22 83: 37	ca. Sd 16	1 ^{dug} al- ^r lu [¬] -a-ru ša ì.nun.na [!]

TABLE 1: Late Old Babylonian attestations of alluharum-pots.

of oil for the purchase of male sheep. At the end of these lines describing these transactions (ll. 1-11) comes a single line before the date, apparently unrelated to the previous ones, reading simply: 1 ^{dug}al*lu-a-rum ma-har* PN.⁴² Example 3 is an inventory of a dowry of household goods (*numātu*) including copper and bronze vessels, stone rings, furniture, a seal, etc. — returned to a bride-to-be after her betrothed died.⁴³ Here, the alluharum-vessel is specified to have been "empty," rīqum.⁴⁴ Example 4 is likewise an inventory text, this time of vessels distributed to various cult places and households. Here, a total of seven alluharum-vessels appear in five different consignments, alongside (but distinguished from) ca. 18 other "storage vessels" (dug.i.dub, našpakum). Three of the consignments go to private households, including two to the household of Iddin-Ea (almost certainly the well-known judge by that name), and once to an oil-pressing workshop (é ì.šur); the other two listings are in broken contexts. The *našpakum*-vessels, by contrast, were sent to building spaces: to courtyards (kisallum), shrines (papāhum),⁴⁵ and two temples (Babylon's Emah and Esagil temples).⁴⁶ In no instance are the two vessel types sent to the same (type of) destination; the lexical and functional distinctions between našpakum- and alluharum-vessels in this text suggest that they were used in different ways.⁴⁷ Example 5 is a letter informing the unnamed recipient that a ten-liter alluharum-vessel filled with sesame-oil was being sent.⁴⁸ The letter notes that the vessel has been sealed (aknukam). The sixth and final text, Example 6,49 is also a letter, likewise noting that an *alluharum*-vessel has been sent for sesame-oil; the provenance may be traced to the city of Babylon.⁵⁰

Notwithstanding Walther Sallaberger's 1996 passing recognition that a vessel called "*alluharum*" must have existed,⁵¹ what has generally and awkwardly been understood of these writings has otherwise been that the vessels contained *alluharum*-dye—despite the fact that they were clearly used to hold wine and oil in three of the examples, and empty in a fourth. Rivkah Harris in her review of CT 48 understood Example 1 to mean that "the man must here be commissioned to

⁴³ See Stol 2016: 91 and n. 273 for brief discussion. Compare with the conjecture of Barjamovic and Fairbairn 2018: 267, that wine from Mamma was purchased "perhaps in preparation for a marriage."

⁴⁴ See discussion of empty pots below.

⁴⁵ A *kisallum* could, of course, be any kind of courtyard, and a *papāhum* could also be a small shrine in a private house; it is the mention of the two temples in the text that makes one think of these as temple spaces. Compare with Chambon 2009: no. 93 and ARM XII 316, with wine vessels brought into the <<grand salle>> (*ina papāhim ... ublunim*).

⁴⁶ That the temples are in Babylon only indicates the destination of the vessels, not the provenance of the text. It

is well-established, by contrast, that the judge Iddin-Ea, also mentioned by the text, lived in Sippar.

⁴⁷ See below, on the absence of *našpakum* to describe wine vessels at Mari.

⁴⁸ The letter is datable prosopographically: see Rosel Pientka 1998: 316 n. 186 (with literature), who notes that AbB VII 169 belongs to a group of letters which can be dated to the Late OB period and concern the affairs of palace merchants. See also AbB II 116, which mentions Marduk-mušallim son of Utul-Ištar, otherwise known from BE 6/1 103 (Aş 1) and BAP 74 (Aş 13).

⁴⁹ Noted by Stol 1980: 533.

⁵⁰ The correspondent Uqnītum also appears in VS 22 61 and 68, both likely dated Sd 16; see also Pientka 1998: 305 n. 122. See discussion by Kraus 1983: 49–52.
 ⁵¹ Sallaberger 1996: 83 s.v. 5.2.4: "Transportgefäße, die

⁵¹ Sallaberger 1996: 83 s.v. 5.2.4: "Transportgefäße, die auch für Öl verwendet werden können, sind wahrscheinlich: *alluhārum, šikinnum; mashartum,* häufig in aB Briefen für Öl, dagegen wohl nur Funktionsbegriff;" however, see also p. 110, where he clarifies: "*alluharu*, eigentlich 'Alaun' (für Wein, Ghee, Öl)."

 $^{^{42}}$ The editors apparently hyper-emended the first sign (i.e., the numeral "1") as níg, misunderstanding the line to have read 'níg'.ga *aluārum* rather than 1 $^{dug}aluārum$. The name found in l. 12 (Iddin-Gula) is not otherwise found in the Dūr-Abiešuh corpus. There is no reason to think that the 100 liters of oil have anything to do with the *aluārum*-vessel.

purchase two vessels containing *alluharum* dye ša x."⁵² Marten Stol later identified "x" in this text as geštin — rather clearly indicating that the vessels held or were meant to hold wine — but nevertheless reiterated that these were "special vessels" for the storage of *alluharum* which could simply otherwise be used also for other purposes,⁵³ and that "this fact suggests that *alluharu* was a liquid substance."⁵⁴ Seth Richardson made the same error in 2010 when he published TLOB 1 40: despite the fact that the five entries of this inventory were directly parallel to (as he wrote) consignments of dug.i.dub (*našpakū*), "storage vessels," he understood dug *alluharum* as "pot(s) of *alluharum*" rather than "*alluharum*-pots."

The error is now clear from more than one direction. First, most of the attestations indicate that the vessels held substances other than *alluharum* (wine, oil, and ghee); conversely, none of them are actually said to contain dye. Second, it runs against the general nomenclature of Mesopotamian vessels to name them after the thing they hold. There are dug.geštin, "vessels of wine," but no vessel called a "karānum-vessel"; dug.ì.giš, but no "šamnum-vessel;" and so forth. Likewise, CT 48 112 and VS 22 83 do not mention "wine-vessels" or "oil-vessels," but "alluharum-vessels" holding wine and oil. In keeping with typical constructions with karpatum ("vessel") as part of a compound noun (i.e., as *karpatum* [ša] $\{x\}$), it is clear that phrases like ^{dug}alluharum ša geštin/i.nun should mean "alluharum-vessel containing wine/oil," and not "alluharum-vessel called 'wine/oil (-jar)'."⁵⁵ Third, all five examples are discrete objects, enumerated and not measured by capacity or weight, only by the quantities of other material they hold; it would be impossible to read any of the entries in Table 1 as indicating any quantity of *alluharum*-dye.⁵⁶ Fourth and finally, the orthographies include examples which cleave more closely to OA aluārum than to Babylonian alluharum, including ^{dug}al-lu-<ha>-rum (with -ha- restored), ^{dug}al-lu-a-rum, and ^{dug}al-^rlu¹-a-ru in exs. 2, 3, and 6, respectively. Conversely, none uses either of the ideographic writings used to write the name of the mineral dye (i.e., AL.LA.HU.RU OF AN.NU.HA.RA), though these writings may not yet have existed. It is not possible to maintain, then, that dugalluharum meant "vessel (full) of alluharum." Rather, it was rather the name of a special kind of storage jar called an alluharum, which (as we argue below), probably had nothing to do with the mineral dye.

We face one of two possibilities for these two lemmata: either the references to the dye and to the vessels are the same words in different usage, perhaps only differently spelled or vocalized;⁵⁷ or these are two different words, near-homophones with different meanings and perhaps distinct etymologies. To the first possibility, the context of use does not clarify the issue much. What could "*alluharum*-pot" mean if it was named for the dye but not filled with it? It is possible, we suppose, that the name could describe the appearance of the vessel, e.g., to indicate that it was painted with *alluharum*, or at least was decorated bright white (as *alluharum*-dye is understood to have been colored), giving it an *alluharum*-like appearance. It could even be guessed that the name indicated that *alluharum* was

⁵² Harris 1970: 318.

⁵³ Stol's full comment (1980: 533, omitting the references he cited): "Zur Aufbewahrung von *alluharu* dienten spezielle Krüge, die aber auch zu anderen Zwecken verwendet werden konnten. Diese Tatsache lässt vermuten, dass alluharu eine flüssige Substanz war. Im Altertum kannte man einen 'feuchten' Alaun, der ganz durchscheinend, milchig, im Gefüge gleichmässig, durch und durch saftig und frei von Steinchen 'gewesen sein soll.' Auch die Farbe, 'milchig', stimmt mit der Farbe des *alluharu* ('weiss') überein."

⁵⁴ None of which is to say, however, that *alluharum*-dye could *not* be found in liquid form, measured volumetrically, or come in ten-liter quantities: AbB III 41 may describe at least the latter two conditions, with a man apparently ordering the shipment of 0.0.1 *an-nu-ha-ra-am*. Having said that, it is not clear that even this broken letter means *alluharum-dye*. According to the copy, we see 0.0.1 *ran'-nu'-*[*ha*]*-ra-am*, which depends fairly heavily on restoration. And the other item sent with it (1. 19: 0.0.1 *hu-x* x [x o]) is unlikely to be a commodity, as nothing measurable begins with *hu-* except madder, *hūratum*. While madder is indeed a

dye and would fit a context for *alluharum*, the word was only written in OB times at Mari. Meantime, many terms for vessels begin with *hu: hubūnum*, *hubūru*, *huhpum*, etc. In all, it is also possible that what is meant here is an *annuharam*-jar of 10-liter capacity, and a 10-liter vessel of another type.

³⁵Note, however Old Babylonian YOS XI 29: 6: "soak alluharu-mineral in top-quality oil, it should stand overnight under the stars" (CAD R s.v. *rasānu* v. 1a). Thus the possibility of oil, wine, or ghee dyed with alluharum cannot entirely be excluded, along with the later medical recipes calling for the drinking of various dyed substances. Notwithstanding, I feel this option would be better represented in the OB evidence if these were (among) the uses of alluharum.

⁵⁶ Only example 5 indicates the capacity of a vessel, i.e., 10 liters.

⁵⁷ Rebecca Hasselbach points out (pers. comm.) that the absence of a separate sign to indicate a glottal stop in Old Assyrian (or even the omission of a guttural) may mean that only our normalization of *aluārum* versus *alluharum* creates an apparent difference between two forms of the same word.

mixed into the clay, temper, or other material in the matrix of the pot itself. Such explanations cannot be excluded, but they are unlikely: We are unaware of any context in which *alluharum* was painted onto ceramics or mixed into clay. Rather, it was used on leather, wood, and cloth.

It is more likely, then, that the second option is the right one, and that *aluāru* and *alluḩaru* are two different words: homophones overlapping for only one brief century in the Babylonian dialect of Akkadian. Whereas *alluḩarum*, then, was indeed a kind of mineral dye (used in substantially different ways before and after ca. 1500 BC), *aluārum* (as we will hereafter distinguish it⁵⁸) was a type of pot principally known from North Syrian and Old Assyrian contexts which made its way to Babylonia in the 17th-century. With the latter word, we are looking at a homophone assimilated into Babylonian Akkadian from Old Assyrian, *aluārum* →*alluḩarum*, perhaps on the simple basis of Late OB scribes misunderstanding the word they were hearing on the docks of the Sippar *kārum* as another they already knew how to write.

The unsteady range of orthographies for Akkadian *alluharum*, "dye," already suggests its labile morphology: the word was written also *allaharu*,⁵⁹ *annuharum*, and (at Mari)⁶⁰ *innuharum*, alongside Sumerian AL.LA.HU.RU⁶¹ and AN.NU.HA.RA.⁶² Given that the name of the mineral was already so protean, it is not hard to understand how a similar-sounding word might have been assimilated to a known Akkadian one. The inexact writings also point towards the word as having a specifically foreign as well as non-Akkadian origin: Markus Hilgert suggests it as a loanword into Akkadian based on its consistent lack of mimation in Ur III writings.⁶³ To this observation, one could add that the word does not present any readily apparent Semitic root,⁶⁴ and is absent not only from vernacular use, but from the list of ca. 510 vessel names given in HAR-ra=hubullu.⁶⁵

What that other word *aluārum* was and meant, however, is difficult to determine. With no clear etymology, we offer one possible (but hardly conclusive) explanation for the origin and meaning of the word, that it may be related to a town in the Karasu valley called Alawari.⁶⁶ This town was the subject of a border dispute between Niqmepa of Mukiš and Šunaššura of Kizzuwatna, known from texts from LBA Alalakh IV, probably of the late 15th-century. It has been suggested that the place-name Alawari also persisted in later periods: an "Alawari/a" is attested in the 8th century BC ASSUR letter, where it is the source of "good, big drinking horns" desired by the sender, who may have been in Karkemiš;⁶⁷ the classical city of Aliaria has also traditionally been located in the Karasu valley.⁶⁸ It is possible, then, that the town of Alawari and the word *aluārum* are etymologically related — the pot named for the place, or less likely the place for the pot. As noted earlier, the Karasu valley is well known as a region producing the highest-quality wines already in the Middle Bronze Age.⁶⁹ We propose, then, that it is at least possible that, much like modern wine-producing regions like C/champagne, the name of Alawari over time became interchangeable with that of its most famous product.

⁵⁸ Orthography notwithstanding; the spelling also puts it in line with the Old Assyrian examples put forward by Barjamovic and Fairbairn 2018.

⁶² But note also ^úAN.NU.HA.RA for *uhultu* (OA, Bogh., Nuzi, SB), soda ash derived from plants used to make alkali.

⁶⁴ *Pace* I. Gelb (MAD 3: 38), who proposed a quadriliteral root '*LHR*.

65 Civil 196: 134-58.

⁶⁶ We would like to thank Virginia Herrmann for this suggestion. It is possible that the toponym Alawari may further be related to the name Zalwar, likely the ancient name of Tilmen Höyük. However, there were apparently

several places with similar names, including a Zalpah on the Balih, a Zalpuwa on the Black Sea, and an Assyrian Zalpa on the Euphrates. We make note also of an Aruwar, mentioned only once, but apparently located near Uršum, identified variously as modern Gaziantep (Archi 2008) or nearby Tilbeşar. We do not presume to propose a solution to this vexed question here, but see Barjamovic 2011: 107– 122, 198. Zalwar in turn may be related to the name later used by Šalmaneser III for the Karasu river itself, as "Saluara" (^{id}sa-lu-a-ra; see RIMA A.0.102.2:10; 3:91; 5:3; 28:23; 29:25; 34:9), at a time when Tilmen Höyük was not occupied; it was at this location that Šalmaneser erected an image of himself alongside an inscribed image of Anum-hirbi.

⁶⁷ We thank Mark Weeden for bringing this to our attention. Drinking horns: letter f+g §36 (Hawkins 2000: 537); association with Karkemiš: letter *a* §6 (Hawkins 2000: 536). The sender may otherwise have been located in central Anatolia; the letter itself was found in Aššur, presumably taken there as booty.

⁶⁸ Either near Islahiye or farther north near modern
 Nurdağı: Astour 1963: 236; von Dassow 2008: 48 and Fig. 2.
 ⁶⁹ See above, n. 20.

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⁵⁹ Including *a-al-la-ha-ru*, BIN 9 80 and *passim*.

⁶⁰ See below, n. 96 on the word *ulluwuru*.

⁶¹ Butz 1983: 283.

⁶³ Hilgert 2002: 152, though a Sumerian origin seems unlikely. However, one notes both Sum. a-lá, a type of vessel (ETCSL 1.1.3: 400), and $^{(dug)}$ hara_{4/5} or $^{(dug)}$ ha-ra, a type of large container, probably the origin of Akkadian *harû* A. Could the term be decomposed as Sum. a-lá har-ra, or the like? See Dossin 1970: 163 on the alternation of n/1 in Akkadian, citing specifically *alluharu* and *annuharu*.

However, it is also the case that nomenclature for vessels in Akkadian generally does not derive from toponyms. Among about 700 Sumerian and Akkadian terms for vessels analyzed by Miguel Civil in a 1996 study, for instance, there is one "Amorite bowl" (Hh X 54, ^{dug}utul₂ mar-tu) — but more likely an ethnonym than a toponym — and one possible "Malgium jar" (Hh X 294'), but Civil acknowledged the writing more likely to be $s\bar{a}g\hat{u}$ (*sa-a-gu-ú*). If a toponymic root is to be sought for *aluārum*, then it almost certainly would have to be outside of the Akkadian language and lexical tradition.⁷⁰

It may not be possible, in the end, to understand the relationship between the word, the vessel, the product, and the place. Notwithstanding, if we accept the foregoing identity of Late OB *alluharum*-vessels with Old Assyrian *aluārum*-vessels, it seems necessary to think about how they (and the word) came to Sippar in the 17^{th} -century BC specifically. The plain sense of it would be that trade goods from north Syria were reaching northern Babylonia during this century. A trade context would further help to explain the assimilation of *aluārum* \rightarrow *alluḥarum*, given that it is more probable as an aural than a strictly orthographic error according to the suggestion made above.

Is it possible that despite the paucity of information about trade contacts in this Late OB time that people in Sippar and Babylon were drinking wine from Mamma, or at least receiving the region's signature storage vessels as trade goods, down through the whole of the 17^{th} -century $_{\text{BC}}$?⁷¹ Certainly the range of places to which Late OB traders were journeying already suggests that this is perfectly likely (see Fig. 5). One pair of letters from Sippar — unfortunately undatable — between two merchants further demonstrates that shipments of "fine wine" (geštin *tābum*) coming to Sippar, along with other products associated with north Syria, were regular at some point in the period:⁷²

AbB VI 52: Speak to Ahuni: thus says Bēlānum. May Šamaš and Marduk grant you good health. I told you before you left to come back, but you did not come back. Buy for me 60 pine-logs (of such-and-such a size) and 60 more of the Euphrates poplars for door-posts. Pay even a high price to have them shipped within five days to Babylon. (Meanwhile), the ships from the trading trip arrived here; why did you not buy fine wine (geštin *tābam*) and have it sent to me? Bring me my fine wine, and furthermore come and appear before me within ten days.

AbB XIV 187: Speak to Ahuni: thus says Bēlānum. May Šamaš grant you good health. Buy for me the myrtle and the sweet-smelling reeds, of which I spoke to you, and also — now that a boat of wine has arrived in Sippar — wine for ten shekels of silver. Take it along and come sometime tomorrow to Babylon and meet me there.

What is particularly nice about these examples is that they speak about a trade in Syrian wine at Sippar in terms that suggest its regularity. What is problematic, however, is that overt evidence for direct trade between Babylonia and north Syria has been lacking for the 17th century, in contrast to the preceding 18th and 19th centuries.

The distribution of globular flasks certainly supports the idea of a 17th-century trade system. At Sippar itself, only one flask has been published, from a tomb associated with the final phase of occupation of the house of Ur-Utu in Sippar-Amnānum.⁷³ This phase corresponds to years 5–17 of the reign of Ammişaduqa, in roughly the third quarter of the 17th century BC. Unlike other flasks found in mortuary contexts, this one was incomplete, with only the upper half (the neck, shoulder, and part of the belly) preserved, bearing a decoration of incised concentric circles on the belly. The flask was apparently not intended as a funerary offering; rather, the large fragment was used to cover the body of the deceased, housed in a different vessel. This context of use suggests that the

⁷⁰ Civil 1996: 108, 114 (cf. 116). On the other hand, such naming practices are perhaps not entirely outside the Hittite tradition: Tablet 12 of the Hišuwa festival texts contains several references to a Haššuwan wine vessel (DUG *ha-aš-šu-wa-wa-un-ni-in* GEŠTIŇ) used in the ceremony (KUB 20.52 +KBo 9.123 obv. I 25'). While the rituals described take place primarily in neighboring Cilicia, Hawkins and Weeden (2017: 287) have characterized their scope as "trans-Amanian," and the explicit nature of the reference seems to further imply that the wine-vessels of these regions just east of the Amanus (Anum-hirbi's former stomping grounds: see

above, n. 26) retained their cachet well into the Hittite period, whether due to their container, their contents, or both. We again thank Mark Weeden for this observation.

⁷¹ I.e., example 1 in Table 1 probably corresponds to ca. 1703 BC, whereas example 6 corresponds to 1610 BC.

 72 See also other letters between these same correspondents: AbB VI 36, discussing a shipment of cedar, myrtle, reed, and pine; VI 39, on fodder for donkeys; AbB XIII 88, discussing boxtrees, is likely also from this same Ahuni.

⁷³ T 250, Level IIIb: Gasche 1989, 91 and figs. 23, 37.

vessel could have been an heirloom, but it would be surprising if it had survived more than a few generations, thus making a seventeenth-century date for the flask's arrival in Sippar more than likely.

Upriver from Sippar, the evidence from Khirbet ed-Diniye, ancient Harādum, is more robust. The flasks appear in all Bronze Age levels at Harādum, from its foundation at the time of Zimri-Lim (Level 3D) until its abandonment in Ammişaduqa 18 (Level 3A). The excavators observe that the flasks appear in increasing numbers throughout Levels 3C and 3B2, and peak in Level 3B1, which is dated by documentary evidence to "between the reigns of Abi-eshuh and Ammiditana," or ca. 1675–1650 Bc. The flasks then sharply decline in Level 3A, wherein the only documents found date to Ammişduqa, i.e., to the third quarter of the seventeenth century.⁷⁴

That the flasks occur at Harādum in increasing quantity throughout the first half of the seventeenth century — corresponding precisely to the period when they are found at both Zincirli Höyük, as a local product, and Kültepe-Kaneš, as conspicuous imports — suggests not only that the trade relations between north Syria and northern Babylonia hinted at in texts existed, but that they were flourishing. Moreover, the conspicuous decline in attestations of the flasks at Harādum after ca. 1650 BC indicates a disruption of the supply chain that may well be connected to contemporary destructions at sites such as Zincirli Höyük and Tilmen Höyük in the wine- and flask-producing region.⁷⁵ Taken together, the textual and archaeological data clearly point towards the persistence into the 17th century of a trade in wine based in north Syria that extended at least as far as central Anatolia and northern Babylonia, though perhaps via several commercial circuits;⁷⁶ one in which, in both cases, north Syrian actors were sufficiently directly engaged as to preserve and export their own vessel-name, *aluārum*, along with the product it contained (as perhaps they had not been in earlier times).

As we argue in the Appendix below, some evidence can be marshalled for a continued Euphrates trade between north Syria and Sippar as late as the end of Samsuditana's reign. This comes through archives of traders in the 1720s; the existence of distance trader's property still extant in Sippar in the 1690s; the continuation of trade via Haradum closer to 1650 BC; and a collection of references to northern trade as late as 1602 BC. Altogether, this evidence shows that a segmented trade connecting Babylonia to the Zincirli/Tilmen-Zalwar/Mamma region, if even indirectly, prevailed in the 17th-century, perhaps reviving a direct trade that had connected the Karasu valley with Babylonia even earlier in the 19th-century.⁷⁷

Discussion

The appearance of the terms *aluārum* and ^{dug}*alluharum* in texts from central Anatolia and northern Babylonia in the early 19^{th} and 17^{th} centuries _{BC}, respectively, hints at a previously unsuspected connection between these two far-flung regions that, though intriguing, is difficult to parse. At the least, and notwithstanding the uncertain etymology of *aluārum/alluharum*, the texts provide us not only with a rare before-and-after instance of a loanword in reception, but one in which an aural context for transmission is most probable. It is clear in all contexts that the word refers to a specific, recognizable, and specialized container for the transportation and storage of liquids: most often of wine, and most often explicitly from north Syria, and/or in association with other

⁷⁴ Kepinski-Lecomte in Joannès 1992, Type 7.1: 218–19, 355. The flasks represent 1.06% of the total ceramic assemblage in Level 3D, after which the site was temporarily abandoned; upon its reoccupation in Level 3C, they represent 0.26% of the assemblage; in 3B2, 1.29%; in 3B1, 3.09%. In 3A they decline again to 1.06% of the assemblage Absolute numbers for the assemblage in each phase are not provided, however, the overall observation confirms the trend that they suggest: "cette sous-classe est en três forte progression jusqu'au niveau 3B1; en 3A, elle est déjà beaucoup moins représentée."

⁷⁵ Radiocarbon dates for the MB II destruction at Tilmen Höyük have not yet been published in detail, but Marchetti (2010: 370, n. 6) refers to "a rich set of high precision 14C datings... [that] suggests that the origin of the monumental building phase at the site took place during the 19^{th} century BC, while its destruction during the second half of the 17^{th} century BC."

 76 See again Barjamovic 2018 on the continuation of Assyrian trade into the 17^{th} century _{BC}.

⁷⁷ See Marchesi 2013: 3, discussing a door sealing found at Tilmen Höyük in 2007 bearing the name of an official identified as a servant of Sumu-la-El of Babylon. For the publication, see Marchetti 2011: 109–112 (no. 21); see also a second Babylonian sealing published as no. 22 (ibid.: 113– 115; perhaps identical to no. 18, pp. 102–104). See now Marchesi and Marchetti 2019 for updated information on this evidence. The removal of Mari's control over a large stretch of the Euphrates may also have enabled the resumption of this direct contact. products from the north Syrian region. That both Old Assyrian and Old Babylonian used a loan-word to describe the container in question presents two possibilities: either the word was separately but contemporaneously acquired by Assyrians and Babylonians from the same source, presumably the vessel's place of origin; or one took the term from the other, more probably the Babylonians (where it appears later, and in a range of contexts) from the Assyrians (where it appears earlier, and consistently in the context of north Syrian trade). Either scenario points toward the existence of a thriving trade centered on north Syria in the first half of the 17th century BC, whose reach extended far to the north and south.

The few historical details we can glean concerning the kingdom of Mamma allow us to go one step further. In Kültepe texts, Mamma most often appears alongside Uršum as a stop on a less-frequented southern route from Assyria to Anatolia, an alternative to the well-known road through Hahhum.⁷⁸ But the increase in references to Mamma in Level Ib texts, noted above, and the continued discovery of likely aluārum-vessels in Level Ia, implies that the Mamma trade took on greater importance in the mid-18th and 17th centuries—that is, in the years following the reign of Anum-hirbi, its most visible political actor. It is worth noting here that Anum-hirbi is referred to as king of Mamma in the Waršama letter, but king of Zalwar to in texts from Mari, apparently confirming the restriction of Mamma and Zalwar to separate commercial circuits; he was perhaps only briefly able to maintain control of both. Mamma and Zalwar were neighboring cities that only under Anum-hirbi are known to have been part of the same political unit. Mamma evidently continued, after Anumhirbi, to have access to the central Anatolian trade, and (we now have reason to believe) Zalwar to the north Babylonian trade. Whatever their subsequent political makeup, it is clear that Mesopotamians and Anatolians alike continued to have a healthy appetite for wine for both social and ritual purposes, which, according to the analysis of Barjamovic and Fairbairn, was not limited to the elite.⁷⁹ It would seem that the wine-producers of the Karasu valley continued to capitalize on their interstitial position, simultaneously peripheral to and at the intersection of major exchange networks, well into the 17th century BC, on the strength of the desirable (and distinctively packaged) luxury commodity to which they controlled access.

This does not provide an entirely satisfying explanation for the transmission of the term dugalluharum to northern Babylonia, not least because only one of the attested jars is specified as containing wine. Both the archaeological and the textual evidence point toward the Babylonian *aluārum* being (re)used for other purposes, e.g., for sesame oil in Examples 5 and 6 (Table 1). This type of reuse speaks to the utility, as well as the relative rarity, of the globular flask form: as noted above, one would only keep records of an empty vessel if it had some value unto itself. It may be salient here to draw a parallel to the workings of the wine trade at Mari, where there was a clear standardization of wine and wine jars in bulk. Dozens of texts from Mari document the shipment of jars of wine and wine jars (i.e., not infrequently shipped "empty" [rīqātu]⁸⁰ by boat, in the hundreds at a time (see above).⁸¹ As much as the scale of the trade are the occasional descriptions of the wine jars as *šūbultum* ("gift, shipment, consignment") or *rēš makkūrim* ("available assets").⁸² A similar standardized exchange of wine-jars is implied by the system analyzed by Grégory Chambon, studying, among other similar phrases, "Y dug geštin (ana) tamlīt X dug geštin:" "Y wine-jars (as) replacements for X wine-jars." Chambon notes that the parity of numbers between empty and full jars deserve special attention; and that both the quality of the wine and the type of container required general compatability. A system of jar-exchange would also make sense of the documentation of broken jars (see above), and the standard practice of accounting for full jars alongside empty ones within single texts.⁸³ It may further be said that a system of transfer such as

⁸³ See Chambon 2009: 34–37 and nos. 81, 93, and 161; cf. other texts discussed there with more complex formulae

⁷⁸ Barjamovic 2011: 196. There is some suggestion that this road was only taken in times of dire necessity: see the letter from Aššur-idi in Assur to his son Aššur-nada, leading a caravan to Kaneš: "If you are afraid (to go) to Hahhum, then go to Uršu instead. Please, please! Go alone!" (OAA 1, 18; quoted in Barjamovic 2011, 195–96).

Barjamovic and Fairbairn: 2018: 266.

⁸⁰ E.g. Chambon 2009: nos. 24, 37, 79, 111, 143, a.o. The value of the jars is further indicated by at least one note of a jar as "broken" (1 dug he-pé-et): Chambon 2009: no. 62:6. ⁸¹ E.g. Chambon 2009: nos. 10 (248 jars), 24 (373 jars), 33

⁽²⁰⁷ jars), 54 (461 jars), 111 (293 jars), and 117 (144 jars). See Chambon 2009: nos. 49 and 66.

this would have required the standardization of both the quality of wine and the vessels which contained it. It seems possible that the distinctive shape and decoration of the *aluārum*-vessel served to indicate and facilitate this re-use/exchange function: a distinct, standard vessel type which could be traded back as a deposit-container in exchange for new jars of wine.⁸⁴ On that understanding, the jars were used within a regional system of standardized bottling, where refillable or reuseable jars were worth tracking and exchanging between producers, traders, and consumers. We may thus consider, by context and comparison, that an implicit meaning of *aluārum* was to designate a vessel with such a function.

The significance of the chronological concordance among the terms and the flasks at Kültepe, Zincirli, and in northern Babylonia should not be overlooked. That the vessels occur in their greatest numbers in Harādum Level 3B1, datable by associated texts to the reigns of Abi-ešuh and Ammiditana, and in the final destruction of MBA Zincirli (Local Phase 4, Area 2), radiometrically dated to 1661–1631 cal. BC, bolsters arguments for the duration of Kültepe Level Ia, where they also appear, into the mid-17th century.⁸⁵ It also lends further support to the Middle Chronology, which places the accession of Ammisaduqa, and thus the *terminus ante quem* of Harādum 3B1, at 1646 (High Middle) or 1638 (Low Middle) BC.⁸⁶ Zincirli's destruction at this time may well have been at the hands of Hattušili I, who, in his Annals, claims responsibility for the destruction of the nearby palatial centers of Tilmen Höyük, MBA Zalwar, and Tell Atçana, MBA Alalakh (Level VII).⁸⁷ If Hattušili's rise to power was concomitant with the destruction of Zincirli in the mid-17th century, this makes one more argument in favor of the Middle Chronology. This explanation would reassemble several isolated storylines — the end of Assyrian trade, the rise of the Hittite kingdom in Anatolia, and the Fall of Babylon — and bring them together to illuminate an otherwise invisible century.

The rationale behind Hattušili I's campaigns in north Syria remains poorly understood: provoking the anger of the regional power of Yamhad seemingly posed an unnecessary risk to the still-nascent Hittite kingdom.⁸⁸ If, however, a burgeoning trade in wine from Mamma was providing economic support for a potential rival — one practically on Hattušili's doorstep: the letter of Anum-hirbi to Waršama suggests that Kaneš and Mamma shared a border, located somewhere near the Göksün pass — we could imagine that Hattušili sought to eliminate competition in supplying wine to Anatolia, access to which he could then leverage as political capital.⁸⁹ A truism often attributed to Napoleon goes that an army marches on its stomach; given the evidence marshaled here for the pivotal role played by the wine trade in strengthening cross-cultural interaction and ushering in sociopolitical change in the ancient Near East, it seems more apt to consider that the Hittite army was driven by drink.⁹⁰

such as "X dug geštin *ana pî* dug geštin Y dug geštin *ana šutamlîm ruqqā*" and the like. The editor rather understands these as instances of wine being transferred from one jar to fill an emptied one, rather than an exchange of (full) jar for (empty) jar, but we do not see that this latter possibility is excluded. Note, e.g., that *malû* $\tilde{S}/2$ can have the sense of "to make up a complement/fixed number" as well as "to fill"; and that *râqu* may also carry the senses of "unloaded" or "idled" rather than "emptied." Note further nos. 25, 26, and 33, with, e.g., "X dug geštin *rīqātu ša karpatam ana karpatim ušriqqā*," "28 (now-)empty jars of wine that have been emptied (or: "unloaded") jar-for-jar." Standardized jars may also be suggested by Chambon's observations (*ibid.*: 35–36) of the jars' nominal customary value when empty of 3 še of silver, and their regular capacities.

⁸⁴ Note the bulla excavated at Tilmen Höyük discussed in Marchesi 2013: 2–3. The bulla bore the three cuneiform signs IB LA DU written "in Old Babylonian ductus"; among the options for reading this laconic inscription was to understand it as *iplātu* (*ip-la-tù*), for *iplētu*, "exchange merchandise." ⁸⁵ As argued by Emre (1995: 183) and Kulakoğlu (1996: 74) on the basis of the archaeological evidence; see also Barjamovic et al. 2012: 40 and fn. 140.

⁸⁶ For textual and scientific evidence from Anatolia in support of the Middle Chronology, see also Barjamovic et al. 2012, Manning et al. 2016, and Manning et al. 2017.

⁸⁷ See Herrmann and Schloen forthcoming.

⁸⁸ Bryce 1999, 75–77.

⁸⁹ Recent reconstructions of the Hittite political economy suggest that it was organized, at least in part, along a wealth finance model, wherein the Hittite state apparatus focused on the control of trade routes and the acquisition of resources for the production of luxury items, to be used and displayed in high-visibility contexts (Burgin 2016; Vigo 2019; see also Frangipane 2012). It is worth noting that Emre (1994) published several examples of locally made, 'imitation' globular flasks from LBA Hittite sites in central Anatolia — hinting that the vessel itself may have acquired some kind of symbolic value.

⁹⁰ With apologies to Dietler (1990).

Appendix: Babylonian evidence for trade with north Syria after 1749 BC

A proposal for a Late OB wine trade with north Syria in the 17th century faces at least two historical problems. First, it is curious that the term "*alluharum*-vessel" should be absent from Babylonian texts of the preceding 18^{th} -century, when interregional trade (including trade in wine) is so much better attested.⁹¹ The word as a name for a vessel was not even used at Mari,⁹² which, given its intermediary position, one might have expected to reflect North Syrian words more than Babylonia did. As mentioned above, almost 200 Mari texts document the shipments of both jars of wine and wine jars, in the hundreds (see above, ad loc. fn. 81). These shipments included "good wine" (geštin du₁₀-ga)⁹³ and wine from Karkemiš, Aleppo, Eluhut, Apišal, and Uršum; and the texts note the distribution of wine to envoys from Terqa, Aleppo, Qatna, Ugarit, Uršum, Ašlakka, and other northern lands, as well as for "Babylonians."⁹⁴ But despite the volume and frequency of this trade, the terms *aluārum/alluharum* never appear in Mari texts, either as names for vessels or for dye;⁹⁵ it is highly unlikely that the Mariote term *ulluwuru* is relevant in this context.⁹⁶ Neither is the vessel name known from texts of Shemshara, Karana, Leilan, or Terqa. We cannot explain this absence.

Second and more broadly, a Babylonian/North Syrian connection in the 17th century seems unlikely, given that the kingdom of Babylon was largely cut off from the outside world during this time, with little direct evidence for interregional trade. Evidence for diplomatic contact with the north is utterly absent, and no Babylonian campaign stretched any farther north than Saggaratum after 1716 _{BC}, the date of Samsuiluna's restoration work there in his 33rd year.⁹⁷ This furthest northern reach was still more than 250 km short of places like Halab, Zalwar, Haššum, Karkemiš, and Emar; no information allows us to believe that Babylonian power ever extended anywhere near that far north either before or after this date.

But at this point, we can go a few steps farther. To begin with, it helps to state what we know of the Late OB trade. Present evidence already shows that Assyrian trade continued with Babylonia up to the very first years of Samsuiluna's reign.⁹⁸ Assyrian trade manifests from Sippar published by Christopher Walker and Klaas Veenhof as texts A, B, and C demonstrate this contact.⁹⁹ The manifests documented, among other products, goods most likely originating in north Syria or Anatolia brought into the Sippar *kārum*, including emery (*šammu*), crocus (*andahšum*), and juniper (*burāšum*).¹⁰⁰ The texts named merchants with clearly Assyrian names, and made reference to several Assyrian commercial terms and institutions. Both Walker and Veenhof connected Texts A, B, and C to other documents of the same era, especially a number of undated letters, to flesh out the business of these merchants in the Sippar harbor district in this time, with mention of

⁹¹ See Powell 1996: esp. pp. 106–114 and Chambon 2009.
⁹² See generally Chambon 2009 and ARM VIII 80, IX §§
39-44 (pp. 270–73, noting *tābum* as a recognized quality of wine, "good," along with Chambon 2009: no. 25), and ARM XVI1 537–39. Thus, despite the noted presence of wine from the Karkemiš region imported by boat to Mari (with size and price suggesting standardization of production and shipping), and the widespread presence of the vessels at Mari as discussed above, the term *aluārum* is absent.

⁹³ E.g. Chambon 2009: no. 25.

⁹⁴ Chambon 2009: nos. 6, 21, 54, 76, 77, 86, 112, 120, 124, as above.

⁹⁵ At most, the vessels are called *karpātim* (e.g., ibid.: nos. 25, 26); no. 20 mentions a *šurāmum*-vessel, probably much larger. Cf. ibid: pp. 27–30 on *kannum* and *kannišum*. Perhaps significantly, they are not called *našpaku* ("storage vessel"). At least one other vessel type is identified within the corpus, for perfumed oil, the *kirippu* (no. 8).

⁹⁶ See Jean-Marie Durand's note "a" to ARM 26/I 298. Compare the writing {#} dug geštin *ul-lu-wu-ru* in ARM IX 15–16 and XXI 98 (p. 118 n. 2), as well as Chambon 2009: nos. 81, 107, 109 and 110–111. The editors of ARM IX understood *ulluwuru* to be a personal name; the editors of ARM XXI and Chambon understand it as a quality of wine (cf. Chambon 2009: no. 66 [sumun, "cellared"]). Chambon (ibid.: p. 8 n. 19) proposes a possible Hurrian etymology meaning "second quality" (cf. his text no. 81, reading *ulluwuri ruqqa*, which would oddly modify the quality of wine as "empty"). Despite these interpretive problems for *ulluwuru*, no syntax favors reading it as a variant of *alluharulaluāru* — one would want to see, e.g., d^{ug}ulluwuru geštin rather than the attested dug geštin *ulluwuru* — and the unlikeliness of the identity is magnified by the improbable vocalic shifts which would have to intervene: in chronological order, this would be *aluāru* in 19th/18th c. OA parlance; *ulluwuru* at 1760s Mari; and then back to *alluharum* at 17th-c. Sippar.

⁹⁷ Saggaratum was situated about 50km above Terqa, near the confluence of the Euphrates and the Habur.
 ⁹⁸ Here and following, "Assyrian" refers to a trade in which

⁹⁸ Here and following, "Assyrian" refers to a trade in which Assyrians participated, but perhaps did not organize or control; Barjamovic (2018) feels this is likely to be a part of a circuit which connected Emar, Zalwar, and Sippar rather than (necessarily) Aššur as such.

⁹ Walker 1980 and Veenhof 1991.

¹⁰⁰ Note AbB XII 94, also mentioning juniper berries and Emar; unfortunately, the date of this letter cannot be determined. contacts as far as Aleppo, Ekallatum, Emar, and Aššur.¹⁰¹ In a separate article, Veenhof showed that the manifests (improbably dated by an Assyrian *limmu*-date) were probably drafted in the first year or two of Samsuiluna's reign, perhaps 1749 or 1748 BC.¹⁰² This seems to conform to what prosopographic evidence there was, i.e., a few related documents clustering in the decade of the 1740s.

Following this time, however, we have no direct indication of Babylonian trade with the north, and such evidence as there was dries up, such as the presence of Old Syrian seals on Sippar texts known as late as the early years of Samsuiluna.¹⁰³ The apparent recession of trade data is likely related to the increasing isolation of Babylon after the southern revolts ending around 1740 BC, the period of disorder in Aššur following the end of Išme-Dagan's reign (ca. 1735 BC), and the breakup of Assyrian trade into smaller networks following the end of *kārum* Kaneš Ib (ca. 1700 BC).¹⁰⁴

We gather here, however, some disparate evidence which points to a gradual recession of this trade rather than any decisive termination, with a continued existence down into the 17th century. We may first note, as background context, circumstantial evidence for northern/Euphratean trade in the Late OB period, already long known, all the way down to the reign of Samsuditana, in six categories:

- the continued Late OB drafting of commercial loans for journeys (e.g., *ana erēb girri*) as late as 1602 BC (Sd 24),¹⁰⁵ including one loan specifically identified for a journey up the Euphrates in 1613 BC (Sd 13);¹⁰⁶
- 2. temple loans for trade issued by Šamaš, at least as late as Sd 12;¹⁰⁷
- 3. the continued corporate existence of the Sippar $k\bar{a}rum$, at least as late as Sd 14;¹⁰⁸
- the related Late OB incidence of *ipterū*-ransoms in payment of mercantile debts, at least as late as Sd 10[?] (BM 97138);¹⁰⁹
- 5. continued Babylonian access to slaves from northern lands,¹¹⁰ as far to the northwest as Hahhum¹¹¹ and Uršum,¹¹² perhaps via Aššur,¹¹³ as late as Sd 12;¹¹⁴ and
- 6. the presence of other northerners in Babylonia, from Hana, Halab, Emar, Kaneš, and elsewhere, as mercenaries and workers, as late as Sd 14.¹¹⁵

¹⁰¹ See esp. Walker 1980: 15 n. 6, citing AbB VII 1, 11, 15, 76, and 145. See also AbB II 143–44, noting juniper along with cypress oil, myrtle oil, chicory, galbanum-resin, and other products from Uršum; unfortunately, the texts cannot be dated. ¹⁰² Veenhof 1987–1988. A nagging discrepancy between

¹⁰² Veenhof 1987–1988. A nagging discrepancy between the *limmu*-date in Texts A, B, and C and the formula listed by KEL G 110 (Günbatti 2009: 128) and used in texts at Tell Leilan (Vincente 1991) is that the manifests alone name Habil-kēnu's father, dumu Şilli-Ištar. Typically within the KEL lists and date formulae, the inclusion of a patronym indicates a year-name distinct from one of the same name without a patronym, just as much as for one with a different patronym. For instance, the eponymy of Šū-Sîn son of Şillīya (KEL A 36) was more than a century before that of Šū-Sîn (KEL G 39, without patronym). Under these conditions, the *limmu*-year Habil-kēnu son of Şilli-Ištar could potentially pre- or post-date the *limmu* Habil-kēnu (without patronym), and potentially post-date the KEL G tradition altogether. The recognition of this potential problem, however, comes with no obvious solution.

¹⁰³ Marchetti 2003.

¹⁰⁴ See fn. 7, above.

 105 See Skaist 1984: 183–86 and CSS I: 340–41, with references.

¹⁰⁶ See Finkelstein 1962: 75 and Richardson 2002 I: 235 fn.
 31. Note also AbB XII 11, concerning caravans and boats on the Euphrates; Pientka 1998: 392 fn. 260 thinks the letters of this Nabium-atpalam may date to the reign of Ammişaduqa.
 See perhaps also AbB II 162 and VIII 101.
 ¹⁰⁷ See Veenber 2004, DM 2006 (2014).

¹⁰⁷ See Veenhof 2004. BM 78606 (Sd 12), the latest temple loan known to us, is most likely a consumptive loan and not for trade; the latest probable commercial loan known to us is BM 80871 (Aş 14?), to be repaid "(upon the realization of) profits" (*ina nēmelim* [*ipp*]*al*).

¹⁰⁸ See e.g. BE 6/1 115 (Sd 14), specifying a silver loan for a trading expedition.

¹⁰⁹ See Richardson 2002 I: 342–344; note especially the use of the Mariote orthography *ip-te*₄-*er* PN, pointing to a Euphratean context.

^{f10} See Richardson (in prep.).

¹¹¹ Note also a munus $Hahhum^{ki}$ in CT 45 45 (Ad 4?).

 112 van Koppen 2004: 24 nos. 5, 6, 15, 16, and 17 (note esp. slaves of Hahhum and Uršum). In general, however, slaves from northern places came from localities other than those identified as trade destinations.

¹¹³ Note that both of the only men with known Aššur family names in Late OB texts appear as the sellers of slaves: Šurmazani(?) s. Aššur-asû (CT 45 44:7–8 [Ad 2]) and Paziya(?)-Aššur s. Aššur-bāni (YOS 13 35:4 [Aş 6]). The former may be the son of the trader Aššur-asû who appears in AbB II 141 and 155, and XI 49 (holding the "purse" [*kīsu*] of a man; the letter also mentions a Hajabni-El, an unusual name which is also found in the Walker-Veenhof manifests). See the discussion in Walker 1980: 16, and Barjamovic 2018, with evidence for Assyrian trade with Hahhum as late as the end of the 17th c.

¹¹⁴ See Finkelstein 1962.

¹¹⁵ Walker (1980: 16) noted already the name of a slave woman called Kanišītum ("the woman from Kaneš", CT 8 32b:2 [Si 21]). For an overview of northerners in Babylonia in this time, see Richardson 2019a esp. 25 fn. 70 and 2019b. As with slaves, however, northern worker and mercenary troops did not come from cities or lands identified as trading cities in the Late OB. These phenomena are too broad to analyze to any certain conclusion, but suggest on a general level that travel to and trade with the north was still possible throughout the Late OB, even if not as easy or institutionalized as in former times. Below, we discuss three pieces of evidence which push the date of trade down towards the 17th-century in new and more specific ways.

Babylonian Trade with Syrial Aššur datable to ca. 1727 BC

We can now date two archives of OB trading letters to about 20 years after the trading manifests, to about 1727 BC. These are the contemporaneous¹¹⁶ dossiers of the traders Nanna-intuh (AbB XII 32-50)¹¹⁷ and Sîn-erībam/Awīl-ilim (AbB XII 51-58).¹¹⁸ These were texts which Veenhof (1991: 302 n. 33) noted only in passing, probably for the good reason that they are unrelated to the group of traders he discusses. The letters of the former trader mention dealings in Amaz (no. 38),¹¹⁹ Abattum (no. 39), Jablija (no. 40), as well as caravans (no. 40), the import of Subarian slaves (no. 32), and "merchandise" (no. 50). The latter letters discuss trade with Emar (no. 51), Haššum (no. 51), Aššur (nos. 54, 56, 57, 58), Jablija (no. 55), Samānum (no. 56),¹²⁰ Suhûm (nos. 56, 57), textiles (nos. 51, 54), and again caravans (nos. 53, 55), Subarian slaves (nos. 56¹²¹), and "merchandise" (nos. 52–53).

The date of the activities cannot easily be identified from these ca. two dozen texts alone, for the typical reason that the absence of patronyms and titles in letters do not easily permit prosopographic analysis;¹²² indeed none of the names can with certainty be linked to that of any person known from a dated text. But a coincidence of personal names in the land-sale text MHET II 6 871 (Si 22, = 1727 BC) allows us to make the probable conclusion that the trade discussed in these letters dates to about twenty years after the manifests published by Walker and Veenhof. The sale document names an empty house plot (é kislah) being sold as the property of the "city-house" (bīt ālim, an Assyrian term¹²³) and the rabiānum (1. 7); the co-sellers of the plot are identified as Awīl-ilim rabiānu and the elders of the city (šībūt ālim, l. 8).¹²⁴ Awīl-ilim's close associate Sîn-erībam is both the owner of a neighboring plot (ll. 3-4) and the purchaser of this one (l. 9);¹²⁵ the witnesses include two names matching Awīl-ilim's known associates, Ilī-u-Šamaš¹²⁶ and Rīš-Šamaš (ll. 17, 20). The land sale, moreover, comes from the same 1902-10-11 collection in the British Museum from which all the AbB XII letters derive. Altogether, the terms of the land sale suggest that the trade discussed in these letters was carried out ca. 1727 BC (Si 22),¹²⁷ about a generation after the Walker-Veenhof manifests.

The house of Mannašu dam.gàr ca. 1692 BC

A second piece of evidence tells us something about the existence of the Sippar trading community in the next generation, down into the 17th century. The life of this group is difficult to reconstruct,

¹¹⁶ Actors common to both sets of letters include Ibbatum and Şilli-bēl-binim; the Awīliya who writes Nanna-intuh in AbB XII 35 may be Awil-ilim. Note also the possibility that the preceding dossier of the merchant Nabium-atpalam, though acting more locally, may also date to the Late OB (see fn. 106 above). ¹¹⁷ Note also AbB XII 110 mentioning Qatanum (Qatna)

and 129 (mentioning Ilu-u-Šamaš); and possibly XII 98 (as "Dingir-intuh," mentioning a "business trip" [girru]).

¹¹⁸ Note also AbB IX 29, mentioning a partnership, donkeys, and the hire of a slave; IX 78, mentioning Awīl-ili and a "journey at night" (mušītam alākam); IX 130, to Sînerībam, mentioning merchandise, caravans, and a person named Bakkatum (an unusual name which also appears in AbB XII 52 and 55).

¹¹⁹ AbB XII 38. Barjamovic 2011: 110 fn. 315, cites an itinerary which sets Amaz close to Aššur, between Apum and Nahur.

¹²⁰ Located just north of Terqa.

¹²¹ Note in this connection the much later slave sale text CUSAS 8 9 (As 18), in which the woman is said to have come from the "city of Awīl-ili." ¹²² See e.g., the letters AbB II 84, XII 69, and XII 119,

which may mention trade ties with Aleppo/Emar, Idamaraș, and Assyria, respectively, adduced by DeGraef 1999: 8, 11 (and then by Marchetti 2003: 166 fn. 21). Unfortunately, it is not certain that these texts date to the late OB period. 123 W/H to 200 m^{-1}

Walker 1980: 17.

¹²⁴ It is possible, however, to read this line as three entities rather than two: Awil-ilim, the rabianu, and the elders; note then the Apil-Adad rabianu who is a witness to the text (l. 21). This reading, however, need have no effect on whether or not this is "our" Awīl-ilim. Note the rabiānum and elders acting in concert in AbB XII 47, and (at Kullizu) in MHET II 6 903 [Aş 12?]).

¹²⁵ Note that the plot is being sold for arrears of deliveries of baskets (l. 11). Note then the discussion of a "confrontation" over baskets mentioned in AbB XII 45, though this letter mentions neither man.

Note AbB II 177, in which a person of this name discusses a caravan arriving in Qatna (as "Qatana") rather than Emar.

¹²⁷ It may be relevant that the year-name for the very next year, Si 23/1726 BC, was named for the Babylonian king's conquest of Šehna and Apum, one of the events which closed through-trade between the regions (his attack on Saggaratum a decade later [Si 33] being another such event. Jesper Eidem (2008: 32) has already linked the earlier event as the possible cause for the termination of limmu-dates at Šehna.

because the people mentioned in the Walker-Veenhof texts and their descendants are almost textually invisible outside of the manifests themselves: as informative as the three 1749 BC trading manifests are, they present almost no external connections to other Sippar texts. Other than the well-known Overseers of the Merchants, only five people named in the Walker-Veenhof manifests even possibly appear in other texts.¹²⁸ Otherwise, the persons named in those texts are virtually invisible to us prosopographically.

But we may now identify at least one certain exception: Mannašu, son of Kalumu, a merchant who acts in the 1749 BC manifests A and C (A: 13–14 and C: IV 21), reappears ca. 1690 BC as the owner of property in a much later list of fields (MHET II 5 656). This transaction is a seizure of Mannašu's property for back taxes, included as the second record in a summary of fields (the other three are all sales). This summary document dates to the latter half of Abi-ešuh's reign (post-Ae 19^2 / post-1692 BC), almost 60 years after the manifests were written. To be sure, it is explicitly noted that Mannašu by this date was "dead and without heirs" (*mīt kinūnšu belīma*).

But the text provides several important pieces of information, and it is worth reproducing the relevant passage of MHET II 5 656. Column 2 of the text gives:¹²⁹

- ' ⁶0.0.2' (+ x) iku 'a.šà' a.gàr 'bu-ra'-a^{ki} i-'ta' a.šà. bu-ut-ta-tum kù.dím dumu rd'EN.ZU- 'i-mi'-[ti] ù i-ta a.šà ка ка ал * x x * sag.bi.1.kam ^{id d}EN.ZU sag.bi.2.kam ^{id d}a-a-hé.'gál'
- 5.' a.šà ma-an-na-šu dam.gàr dumu ka-lu-mu a-na guškin ne-me-et-tim ša kar zimbir^{ki}-am-na-nu-^rum³ ša i-na mu a-bi-e-šu-uh lugal.e ^{id} idigna giš bí.in.^rkešda³ šar-rum i-mi-du-šu-nu-ti ^mma-an-na-šu dam.gàr mi-it ki-nu-un-šu bi-li/-ma
- 10.' *a-na ki-iš-da-at* ^m*ma-an-na-šu* dam.gàr 1 *mu-ša-ad-di-in* guškin kar zimbir^{ki}-*am-na-ni-im i-si-ir-ma a-na a-pa-al* é.gal *ù* rdEN¹.ZU-*i-di-nam* di.ku₅ dumu ^dšEš.KI-a.mah
- 1.' 2+ iku of field in the watering district of Burâ, bordering the field of Buttatum the goldsmith, son of Sîn-imitti, and bordering the field of ... its first main side against the Sîn-canal, and its second against the Aja-hegal canal:
- 5.' the field of Mannašu the merchant, son of Kalumu, for the gold-tax of the *kārum* of Sippar-Amnānum of the year Abi-ešuh "o," levied by the king, Mannašu the merchant, dead and without heirs,
- 10.' for the share of Mannašu the merchant,¹³⁰ the tax-collector of gold

MHET II 361 (Si 2); and the Iškur-zimu s. Ilšu-bāni of manifest B: 34 and C: I 24 may be the Iškur-zimu appearing as dub.sar in MHET II 4 471 (Ae 19?), HSM 1890.3.3 (early Ad), and VS 22 14 (Ad 4), and/or without title in MHET II 3 438 (Si 22). ¹²⁹ For the fidelity of the reading, I render this translation

¹²⁹ For the fidelity of the reading, I render this translation line-for-line; this results in the usual stilted language, but hopefully makes clear the meaning of all the phrases. ¹³⁰ Cf. Stol 2004: 770, gives "Erworbene hat" for *kišdātum*,

¹³⁰ Cf. Stol 2004: 770, gives "Erworbene hat" for *kišdātum*, that the tax was on gold which Mannašu had "acquired."

¹²⁸ Intriguingly, however, three of these five possible matches may be found in the Awīl-ili land-sale discussed above (MHET II 6 871): the Sîn-erībam s. Sîn-[] in manifest C: II 12 may be the Sîn-erībam s. Sîn-iddinam in I. 9; the Šamaš-rabi s. Akšak-erība in manifest A: 58–59 may be the same Šamaš-rabi of l. 1. 26; and the Izzaya of manifest B: 29 is possibly hypocoristic for *I-zi-<na>-bu-ú* in 1. 26. Two other persons may also appear in other texts: the Hajabni-El identified for the two names (as $PN_{1/2}$ ša Hajabni-El) in manifest B: 17–18, 21–22 may be compared to the appearance of Šūbula-iddinam ša Hajabni-El in

exacted payment upon the $k\bar{a}rum$ of Sippar-Amnānum, to satisfy (the demand) of the palace and of Sîn-iddinam the judge, son of Nanna-amah.¹³¹

This document gives us information on trade and traders at both the individual and collective level. At the individual level, the text reveals a thread of local property ownership descending from the traders of 1749 BC down to some point soon after 1692 BC, and may exemplify a wider phenomenon. We learn that Mannašu was indeed a "merchant" (dam.gàr); that he owned productive land in the territory of Sippar-Amnānum;¹³² that he died without heirs, implying that his property would otherwise have been heritable; and that this property was (by default?) under the authority of the *kārum* of Sippar-Amnānum.

The late date of the text, however, must give us pause. Although it is impossible to know when Mannašu of MHET II 656 died, the strong presumption is that it would not have been long before Ae "o." We may assume this because tax delinquencies, when noted, were never long outstanding. From available attestations, whenever a taxable year is mentioned as it is here, *nēmettum* was levied only for the same year or the year previous to the document's date. From what we know, *nēmettum* was never collected for long-lapsed payments.¹³³ To believe that the Mannašu of the 1749 BC manifests only died shortly before 1692 BC, however, would require us to understand that the earlier Mannašu would have been old enough at the beginning of Samsuiluna's reign to be entrusted with goods for the bīt naptarim, and yet still an active merchant almost sixty years later, well into the reign of Abi-ešuh. This seems unlikely, but cannot be proved or disproved on present evidence. This leaves us with three options: either the recently-deceased Mannašu of MHET II 656 was the same (but much older) man appearing in the manifests; or the Mannašu of MHET II 656 was the grandson of the man appearing in the manifests, named for him according to papponymic practices;¹³⁴ or the conjecture that the *n* \overline{e} mettum due was recent is not correct, and was instead indeed long outstanding and the original Mannašu had died any number of years before 1692 BC. Regardless of which interpretation is correct, we still come to the conclusion that taxable family property of Assyrian traders still existed at Sippar in the early 17th century.

At the corporate level, we learn that the Assyrian commercial activities were situated in the $k\bar{a}rum$ of Sippar-Amnānum specifically, a fact the Walker-Veenhof manifests A, B, and C do not make clear.¹³⁵ The "city-house," the $b\bar{t}$ naptarim, and any other owned property of the merchants were therefore attached to this particular merchants' guild. We may further be able to infer, if cautiously, that the $k\bar{a}rum$, at least as a taxable body, included Assyrians among its members, since they were individually liable for nēmettum to the kārum. The kārum was thus not only a corporation of local north-Babylonian traders trading locally and outward from Sippar, but included resident aliens from the north who could buy and sell real property, and be taxed for it. Finally, we learn that the Crown depended on the kārum not only for (import) taxes generally, but for gold in particular, which comports with the delivery of gold, as well as silver, to the governor of Sippar in manifest C I:22. While silver passed hands relatively freely in the Babylonian economy, it was likely that the import of gold was controlled by the state and its merchants.

¹³¹ See also Sîn-iddinam's dealings with the *kārum* of Sippar in a letter from Abi-ešuh (AbB II 65); as witness in Edzard ed-Dēr 53 (Ae); and earlier as a purchaser of a house in the same Burâ watering-district in BE 6/1 63 (Si 29). ¹³² Tanret 1998: 71: MHET II 6 894 identifies the Burâ

district as being *ina erset* Sippar-Amnānum. ¹³³ Compare with YOS XIII 281 and 317, *nēmettum* of Ilip

¹³³ Compare with YOS XIII 281 and 317, *nēmettum* of Ilip payable to the kārum of Sippar-Amnānum for the same or previous year (so also probably YOS XIII 238); TLOB 1 69 (Ad 28) is for *nēmettum* of the prior year for the town of Kullizu; TLOB 1 69a for the town Iškun-Ištar if probably for the same year; TLOB 1 62 is also a same-year transaction, but rests on an officer rather than a place (*nēmetti* PN). YOS XIII 238, 281, and 317 are all same-year obligations. Note AbB VI 27, a letter from Ammişaduqa, in which the king commands officials to bring the *nēmettum*payment "to me quickly!" (*arljiš šābilānim*). ¹³⁴ Note also TLOB 1 84 (Aş 14), in which the daughter of a

¹³⁴ Note also TLOB 1 84 (As 14), in which the daughter of a Hajabni-El rents out a house in Sippar-Amnānum; it is possible the father was a third- or fifth-generation descendant of the man of the same name mentioned in the manifests.

¹³⁵ As Veenhof (1987–1988) points out, neither the mention of the "governor of Sippar" ($\bar{s}\bar{a}pir$ GN) or the Overseers of the Merchants ("of both Sippars") was "helpful" in answering this question. For later unpublished OB mentions of the *kārum* of Sippar-Amnānum, attesting to its continued operation, see BM 86149:13' (Aş), mentioned together with the granary of Sippar-Jaḥrūrum (l. 15'); BM 78656:12 (Aş 5); BM 80346:8 (Aş 11); and BM 16958:15 (As 12).

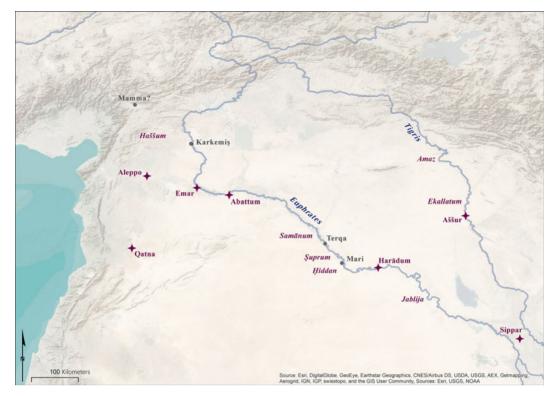


Fig. 5 Map of Trade Destinations attested for Late Old Babylonian merchants from Sippar. Credit: Lucas Stephens.

From this text and its contexts, we may learn little about trade per se, other than that the $k\bar{a}rum$ had ongoing obligations to deliver gold to the Crown as the tax on its commercial activities. But if we cannot see anything of the trading activities of the "Assyrian" merchants in this later time, we can see at least that their property and corporate identity survived in Sippar at least down into the early 17^{th} -century.

The trading reach of Haradum, mid- to late-17th c. BC

Third and finally, we can take note of the northern trade contacts maintained by the Babylonian fortress of Haradum in the next two generations, as a forward trading post for Babylon. This activity is attested as late as Ammiditana's reign, and perhaps into Ammişaduqa's, as revealed by documents from excavated contexts. One letter (KD 65, Ad/Aş) quotes a merchant (šaman₂-la₂) who says that he delivered a large quantity of silver (1 talent, 20 minas) in Aššur to an Ahlamu soldier called a "guard of the *kārum* of Haradum" (lú *maṣṣar karri* ^{uru}Haradi^{ki}).¹³⁶ A second letter (KD 97, Ad) concerns a legal dispute over silver which had been brought from Haradum to the city of Emar.¹³⁷ Other letters mentioning Şuprum, Hiddan, and Yahurru also refer to Haradum's connections to northerly places.¹³⁸ Among products mentioned, KD 81 (Ad/Aş) documents the import of cypress and cedar; KD 99 (Aş 18), a slave from the *birīt nārim* region, presumably above Terqa, where the Euphrates and Habur part;¹³⁹ and several other trading expeditions are also

¹³⁶ Haradum II: pp. 112–13. This quantity is already the second largest single amount of silver mentioned in any Late OB text (see notes to TLOB 1 45).

¹³⁷ Haradum II pp. 137–38 (cf. YOS XIII 291 [Ad 30], silver loaned by a man of Emar [lú Emar^{ki}]); a second letter (KD 70:25, pp. 119–20) may also mention a trading venture by merchants in Emar.
¹³⁸ Haradum II nos. 6, 14, and 60. RGTC 3 identifes

¹³⁸ Haradum II nos. 6, 14, and 60. RGTC 3 identifies Suprum as lying between Mari and Terqa (RGTC 3 p. 214); Hiddan as near Mari (ibid., p. 97); and Yahurru as a variant spelling for the tribal lands of Jahruru, perhaps as far north as Ekallatum (ibid., p. 120). Cf. Haradum's contact with Hanat (no. 15), Jablija (no. 23–24, 63), and Hurratum (no. 23), all downstream from Haradum in the direction of Sippar. ¹³⁹ For this term, see also Haradum II no. 78: 2", also

¹³⁹ For this term, see also Haradum II no. 78: 2", also apparently concerning a slaving(?) expedition. Babylonian business in Terqa via Haradum may explain the existence of

mentioned.¹⁴⁰ One letter mentioning a "river toll" (*miksu*) leads the editor to conclude that Haradum "was an official point of control on traffic on the Euphrates."¹⁴¹

Texts from the site also reflect documentary conventions of more northerly regimes. One Haradum text is dated by a year-name of a king of Terqa (Işi-Sumu-abi), contemporaneous to the time Abi-ešuh or Ammiditana.¹⁴² Two other texts use Assyrian *limmu*-dates, both of which must at least post-date 1719 BC, but very likely belong to the early 17^{th} century. The first is KD 29, the *limmu* of Abi-Sîn (*limu a-bi*-xxx). The name is not found in the late date-list KEL G published by Cahit Günbatti, and must at least post-date its list (i.e. post-1719 BC),¹⁴³ but the Habbasanu appearing in this text appears in others dated to the late reign of Abi-ešuh, so a date after 1700 BC is more likely. The second text, KD 41, is broken, and preserves only [*li-m*]*u wa-ar-k*[*i...*]), but prosopography again connects the text to an Abi-ešuh or Ammiditana date, closer to 1675 BC. Finally, at least one Haradum text (KD 113, Ad/Aş), dating nearer to 1650 BC, features an Old Assyrian sealing, with a fragmentary chariot scene; Gudrun Colbow compares this to sealings known from Kültepe of earlier vintage (~level II).¹⁴⁴ Such clues, along with the many wine jars mentioned above, show us that Haradum remained in touch with the north Syrian trade ecumene after 1650 BC.

Haradum was at the same time, of course, in close contact with Sippar and Babylon. Almost all the documents found there used the date formulae of the Babylonian kings from Samsuiluna to Ammişaduqa. A legal settlement from Sippar (TLOB 1 95) connects people known from Haradum to the judicial venue of Babylon, and one Haradum document (KD 18) funds a journey to the southerly Babylonian fort of Dūr-Abi-ešuh.¹⁴⁵ What seems more probable, however, than direct and regular connections between Sippar and Haradum is that the town of Jablija acted as a halfway trading post between the two.¹⁴⁶ In sum, Haradum is perhaps better understood as one of a number of way-stations for a point-to-point trade which eventually came to replace what had, a century before, been an interregional trade in which merchants traveled over distances in the hundreds of kilometers.

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two texts excavated there dated to Late OB kings. These remain unpublished, but see the brief discussion by Podany 2002: 56.

¹⁴⁰ Haradum II nos. 4? (Si/Ae), 70 (Ad/As), 73 (Ad/As).

¹⁴¹ Haradum II no. 53 (Ad?); see also no. 11 (Ae/Ad). Cf. Chambon 2009: no. 117 (with discussion on pp. 19–20) for wine jars as *miksum*.

¹⁴² Haradum II no. 16 contains a personal name not indexed in the volume, Aiadâdu, found also in Haradum II no. 41 (discussed in the above paragraph). That a text with a date formula of Terqa is found in Haradum bears comparison to the two Babylonian-dated documents excavated at Terqa (see fn. 139 above). Neither instance certifies that Babylonian kings conquered or controlled Terqa, only that portable documents might be brought by traders from one place to another.

¹⁴³ Günbatti 2009: 117.

¹⁴⁴ Notably, this text sells a slave said to be a "houseborn slave of Sippar": Haradum II pp. 153–54 and 161–62; note also Colbow's discussion of middle Euphrates sealing styles on Haradum texts, ibid., p. 163.

¹⁴⁵ Noting that Dūr-Abi-ešuh texts (see CUSAS 29), in turn, reveal that that fortress hosted troops from Aleppo, Idamaras, Numha, Qatna, "Sangar," and "Zulpah" into the reign of Ammiditana.

¹⁴⁶ There were also attested *kārums* at Kullizu, upstream from Sippar (e.g., BM 97822 [Aṣ 10]), and Mankisum (BM 72763 [Ad 7]).

Bibliography

- Akdoğan, R. 2019. "Kahramanmaraş'taki Mamma Şehri," in C. Kabakcı, İ. Solak, A. Ceylan, O. Dumankaya, M. Canlı and Ö. Y. Ova (eds), Uluslararası Antik Çağ Döneminde Maraş Sempozyumu 17–18 Kasım 2018. Kahramanmaraş: Fikir Ajans. Pp.120–35.
- Algaze, Guillermo. 1990. "Period III: Early Bronze-Middle Bronze Transition," in G. Algaze (ed.) Town and Country in Southeastern Anatolia, Vol. 2: The Stratigraphic Sequence at Kurban Höyük. Oriental Institute Publications 110. Chicago: The Oriental Institute of the University of Chicago. Pp. 369–89.
- Alkım, U. B. 1974. "Eine Linsenflasche aus Tilmen Hüyük". Baghdader Mitteilungen 7: 9-12.
- Archi, A. 2008. "Haššum/Hassuwan and Uršum/Uršaum from the Point of View of Ebla," in T. Tarhan, A. Tibet, and E. Konyar eds., *Muhibbe Darga Armağanı*. Istanbul: Sadberk Hanım Müzesi. Pp. 87–102.
- 2015. Ebla and its Archives. Texts, History, Society. Studies in Ancient Near Eastern Records 7. Berlin: DeGruyter.
- Astour, M. C. 1963. "Place-Names from the Kingdom of Alalah in the North Syrian List of Thutmose III: A Study in Historical Topography". *Journal of Near Eastern Studies* 22: 220–41.
- Barjamovic, G. 2011. *A Historical Geography of Anatolia in the Old Assyrian Colony Period*. CIN Publications 38. Copenhagen: Carsten Niebuhr Institute.
- 2018. "Interlocking Commercial Networks and the Infrastructure of Trade in Western Asia during the Bronze Age," in K. Kristiansen *et al.* eds., *Trade and Civilisation. Economic Networks and Cultural Ties from Prehistory to the Early Modern Era.* Cambridge: Cambridge University Press. Pp. 113–42.
- Barjamovic, G. and A. Fairbairn. 2018. "Anatolian Wine in the Middle Bronze Age." *Die Welt des Orients* 48/2: 249–84.
- Barjamovic, G., T. Hertel, and M. T. Larsen. 2012. Ups and Downs at Kanesh: Chronology, History and Society in the Old Assyrian Period. Publications de l'Institut Historique-Archéologique Néerlandais de Stamboul 120. Leiden: Nederlands Instituut voor het Nabije Oosten.
- Benati, G. 2016. "High, Low, and In Between: Patterns of Bureaucracy, Storage and Mobilization of Resources in Middle Bronze Age (2000–1600 Bc) Northern Levant," *Studia Eblaitica* 2: 123–76.
- Bryce, T. 1999. The Kingdom of the Hittites. Oxford: Oxford University Press.
- Burgin, J. 2016. Aspects of Hittite Religious Administration in the Hittite Late New Kingdom. (PhD Dissertation. University of Chicago).
- Butz, K. 1983. "On Salt Again ... Lexikalische Randbemerkungen." Journal of the Social and Economic History of the Orient 27/3: 272–316.
- Carter et al. In preparation. Surveys and Excavations along the Syro-Anatolian Frontier. Vol. I, The Kahramanmaraş Survey.
- Çatalbaş, M. 2008. Evaluating the Oylum Höyük MBA Painted Ware Within the Frameworks of the Syro-Cilician, Levantine and Khabur Painted Ceramic Cultures (M.A. thesis, Bilkent University, 2008).
- Çayir, M. 2012. Kültepe'de 1997'de Bulunan Tabletlerin Değerlendirilmesi (Ph.D. dissertation, Ankara University, 2012).
- Chambon, G. 2009. Les archives du vin à Mari. Mémoires de N.A.B.U. 12, Florilegium marianum XI. Paris: SEPOA.
- Corti, C. 2018. "The Knowledge of Viticulture in Hittite Anatolia: An Interdisciplinary Approach," *WdO* 48/2: 285–98.
- Civil, M. 1996. "har-ra = hubullu : Tablet X dug = karpatu," in Walther Sallaberger, *Der Babylonische Töpfer und Seine Gefässe*, MHE II Memoirs III. Ghent: University of Ghent. Pp. 129–60.
- DeGraef, K. 1999. "Les étrangers dans les textes paléobabyloniens tardifs de Sippar (Abi-ešuḫ Samsu-ditana, 2 ième partie." *Akkadica* 112: 1–17.
- Dietler, M. 1990. "Driven by drink: The role of drinking in the political economy and the case of Early Iron Age France." *Journal of Anthropological Archaeology* 9 (4): 305–407.
- Donbaz, V. 1998. "Inscribed Spear Heads and Some Tablets in the Gaziantep Archaeological Museum." *Altorientalische Forschungen* 25 (1): 173–85.
- Dossin, G. 1970. "Le nom de signe «(m)ušlânu»." Revue d'Assyriologie 64/2: 162-163.
- Duru, R. 2003. A Forgotten Capital City: Tilmen / Unutulmuş Bir Başkent: Tilmen. Istanbul: TÜRSAB Kültür Yayınları.
- Eidem, J. 2008. "Old Assyrian Trade in Northern Syria: The Evidence from Tell Leilan" in J. G. Dercksen, ed., Anatolia and the Jazira during the Old Assyrian Period. PIHANS 111. Leuven: Peeters. Pp. 31–41.
- Einwag, B. 2007. "Early Second Millennium Pottery of the Euphrates Region" in P. Matthiae *et al.*, eds., *From Relative Chronology to Absolute Chronology: The Second Millennium BC in Syria-Palestine; Proceedings of the International Colloquium, Rome, 29th November–1st December 2001.* Rome: Bardi. Pp. 195–208.

- Emre, K. 1994. "A Type of Syrian Pottery from Kültepe/Kanis" in P. Calmeyer, K. Hecker, L. Jakob-Rost, and C. B. F. Walker, eds., *Beiträge zur Altorientalischen Archäologie und Altertumskunde. Festschrift für Barthel Hrouda zum 65. Geburtstag.* Wiesbaden: Harrassowitz. Pp. 91–96.
- 1995. "Pilgrim-Flasks from Level I of the Karum Kanish." Bulletin of the Middle Eastern Culture Center in Japan 8: 173–200.
- Engin, A. 2011. "Oylum Höyük Kazılarında Ele Geçen Bir Grup Orta Tunç Çağı Yapı Adak Eşyası." *Belleten* 75/4: 19–49.
- Finkelstein, J. J. 1962. "Mesopotamia." Journal of Near Eastern Studies 21/2: 73-92.
- Frangipane, M. 2012. "The Evolution and Role of Administration in Anatolia: A Mirror of Different Degrees and Models of Centralisation," in M. E. Balza, M. Giorgieri and C. Mora (eds), Archives, Depots and Storehouses in the Hittite World. New Evidence and New Research. Studia Mediterranea 23. Genova: Italian University Press. Pp. 111–26.
- Franken, H. J. and A. van As 1994. "Potters Who Used Euphrates Clay" in H. Gasche et al., eds., Cinquante-deux réflexions sur le Proche-Orient ancien offertes en hommage à Léon De Meyer. Mesopotamian History and Environment Occasional Publications 2. Leuven: Peeters. Pp. 507–18.
- Gasche, H. 1989. La Babylonie au 17e siècle avant notre ère: approche archéologique, problemes et perspectives. Mesopotamian History and Environment Series II Memoirs I. Ghent: University of Ghent.
- Gates, M-H. 1988. "Dialogues between Ancient Near Eastern Texts and the Archaeological Record: Test Cases from Bronze Age Syria." *Bulletin of the American Schools of Oriental Research* 270: 63–91.
- Goldman, H. 1956. *Excavations at Gözlü Kule, Tarsus,* Vol. 2: *From the Neolithic through the Bronze Age.* Princeton, NJ: Princeton University Press.
- Gorny, R. L. 1996. "Viniculture and Ancient Anatolia" in P. McGovern, S. J. Fleming and S. H. Katz (eds) The Origins and Ancient History of Wine. Amsterdam: Gordon and Breach Science Publishers. Pp. 133–74.
- Günbatti, C. 2009. "An Eponym List (KEL G) from Kültepe." Altorientalische Forschungen 35/1: 103-32.
- Harris, R. 1970. review of J. J. Finkelstein, CT XLVIII. *Journal of the Social and Economic History of the Orient* 13: 315–18.
- Hawkins, J. D. 2000. Corpus of Hieroglyphic Luwian Inscriptions, Vol. I: Inscriptions of the Iron Age. Studies in Indo-European Language and Culture 8.1. Berlin: de Gruyter.
- Hawkins, J. D. and M. Weeden. 2017. "Kizzuwatna and the Euphrates States: Kummaha, Elbistan, Malatya: Philology" in M. Weeden and L. Z. Ullmann (eds.), *Hittite Landscape and Geography*. Handbook of Oriental Studies Vol. 121. Leiden: Brill. Pp 281–94.
- Herrmann, V. and D. Schloen. 2018. "Zincirli Höyük, Ancient Sam'al: A Preliminary Report on the 2015 Excavation Season" in B. Horejs, C. Schwall, V. Müller et al. (eds) Proceedings of the 10th International Congress on the Archaeology of the Ancient Near East, 25–29 April 2016, Vienna. Wiesbaden: Harrassowitz. Pp. 521–34.
- 2020. "Zincirli Höyük, Ancient Sam'al: A Preliminary Report on the 2017 Excavation Season" in A. Otto, M. Herles, and K. Kaniuth (eds) Proceedings of the 11th International Congress on the Archaeology of the Ancient Near East, 3–7 April, 2018, Munich. Volume 2: Field Reports. Wiesbaden: Harrassowitz. Pp. 129–40.
- Forthcoming. "Middle Bronze Age Zincirli: The Date of 'Hilani I' and the End of MB II." *Bulletin of the American Schools of Oriental Research.*
- Hilgert, M. 2002. Akkadisch in der Ur III-zeit, IMGULA 5. Münster: Rhema Verlag.
- Joannès, F. 1992. Haradum I. Une ville nouvelle sur le moyen Euphrate (XVIIIème–XVIIème S. av. J.-C.), with contributions by C. Kepinski-Lecomte and G. Colbow. Paris: Éditions Recherche sur les Civilisations.
- 2006. Haradum II: Les textes de la période paléo-babylonienne (Samsu-iluna Ammi-saduqa), with contributions by C. Kepinski-Lecomte and G. Colbow. Paris: Éditions Recherche sur les civilisations.
- Karakaya, D. and K. R. Morgan. 2016. "New Evidence for the Middle Bronze Age in the Islahiye Valley: Archaeobotanical Results and Archaeological Context of a Recently Excavated Destruction Layer at Zincirli, Turkey." Poster presented at the Annual Meeting of the American Schools of Oriental Research, San Antonio, TX, November 16–19, 2016.
- Kelly-Buccellati, M. and W. R. Shelby. 2007. "Middle Euphrates Ceramics in the Third and Second Millennia: A View from Terqa" in M. al-Maqdissi, V. Matoïan, and C. Nicolle, eds., Céramique de l'Âge du Bronze en Syrie, Vol. 2: L'Euphrate et la région de Jézireh. Bibliothèque Archéologique et Historique 180. Beirut: Institute Français d'Archéologie du Proche-Orient. Pp. 119–54.
- Kraus, F. R. 1983. Review of H. Klengel, Spät-altbabylonische Briefe aus Babylon. Altorientalische Forschungen 10: 49–63.
- Kulakoğlu, F. 1996. "Ferzant-type Bowls from Kültepe." *Bulletin of the Middle Eastern Culture Center in Japan* 9: 69–86.
- Kulakoğlu, F. and S. Kangal. 2010. Anatolia's Prologue, Kultepe Kanesh Karum, Assyrians in Istanbul. Kayseri: Kayseri Metropolitan Municipality Cultural Publication No: 78.

- Laneri, N. 2018. "The Impact of Wine Production in the Social Transformation of Northern Mesopotamian Societies during the Third and Second Millennia BCE." *Die Welt des Orients* 48/2: 225–37.
- Luschan, F. von, and W. Andrae 1943. Ausgrabungen in Sendschirli, Vol. 5: Die Kleinfunde von Sendschirli. Berlin: Walter de Gruyter.
- Manning, S., C. B. Griggs, B. Lorentzen, G. Barjamovic, C. B. Ramsey, B. Kromer, and E. M. Wild 2016. "Integrated Tree-Ring-Radiocarbon High-Resolution Timeframe to Resolve Earlier Second Millennium BC Mesopotamian Chronology. *PLoS One* 11 (7): e0157144. https://doi.org/10.1371/ journal.pone.0157144
- Manning, S., G. Barjamovic, and B. Lorentzen 2017. "The Course of C14 Dating Does Not Run Smooth: Tree-Rings, Radiocarbon, and Potential Impacts of a Calibration Curve Wiggle on Dating Mesopotamian Chronology." *Journal of Ancient Egyptian Interconnections* 13: 70–81.
- Marchesi, G. 2013. "Tilmen Höyük: An Inscribed Bulla from the 1962 Campaign." Gaziantep Regional Project Occasional Paper 2013:7, 1–16. OrientLab: doi: 10.12877/grpop201307.
- Marchesi, G. and N. Marchetti. 2019. "A Babylonian Official at Tilmen Höyük in the Time of King Sumu-la-el of Babylon." *Orientalia* 88: 1–36.
- Marchetti, N. 2003. "Notes on an Old Syrian Seal Impression from Sippar." Iraq 65: 161-69.
- 2010. "A Preliminary Report on the 2007 and 2008 Excavations and Restorations at Tilmen Höyük" in P. Matthiae, F. Pinnock, L. Nigro, and N. Marchetti, eds., Proceedings of the 6th International Congress on the Archaeology of the Ancient Near East, May 5th–10th 2008, "Sapienza" Università di Roma, Vol. 2. Wiesbaden: Harrassowitz, pp. 369–83.
- 2011. Kinku: Sigilli dell'età del Bronzo dalla regione di Gaziantep in Turchia. Orientlab 1. Bologna: Università Bologna.
- Michel, C. 2009. "Dis-moi ce que tu bois…' Boissons et buveurs en haute Mésopotamie et Anatolie au début du IIe millénaire av. J.-C.," in X. Faivre, B. Lion and C. Michel, eds., *Et il y eut un esprit dans l'Homme. Jean Bottéro et la Mésopotamie.* Paris: De Boccard. Pp. 197–220.
- Miller, J. 2001. "Anum-Hirbi and His Kingdom." Altorientalische Forschungen 28 (1): 65-101.
- Miller, N. 2008. "Sweeter than Wine? The Use of the Grape in Early Western Asia." Antiquity 82 (318): 937-46.
- Morgan, K. R. and S. Soldi. Forthcoming. "Middle Bronze Age Zincirli: An Interim Report on Architecture, Small Finds, and Ceramics from a Monumental Complex of the 17th Century B.C." *Bulletin of the American Schools of Oriental Research*.
- Nashef, K. 1987. Rekonstruktion der Reiserouten zur Zeit der altassyrischen Handelsniederlassungen. Wiesbaden: Reichert.
- Özgüç, T. 1953. "Vorläufiger Bericht über die Grabungen von 1950 in Kültepe ausgeführt im Auftrag des Türk Tarih Kurumu." *Belleten* XVII: 101–27.
- Parrot, A. 1959. Mission archéologique de Mari, Vol. 2: Le palais, documents et monuments. Paris: Geuthner.
- Pientka, R. 1998. Die Spätaltbabylonische Zeit: Abieshuh bis Samsudituna: Quellen, Jahresdaten, Geschichte, 2 vols. IMGULA 2. Münster: Rhema Verlag.
- Podany, A. 2002. The Land of Hana: Kings, Chronology, and Scribal Tradition. Bethesda, MD: CDL Press.
- Powell, M. A. 1996. "Wine and the Vine in Ancient Mesopotamia: The Cuneiform Evidence," in P. McGovern et al. eds., The Origins and Ancient History of Wine. Amsterdam: Gordon and Breach Science Publishers, pp. 97–122.
- Richardson, S. 2002. *The Collapse of a Complex State*, 2 vols. (Ph.D. dissertation, Columbia University, New York).
- Richardson, S. 2010. *Texts from the Late Old Babylonian Period*. The Journal of Cuneiform Studies Supplemental Series 2. Boston: ASOR.
- 2019a. "By the Hand of a Robber: States, mercenaries and bandits in Middle Bronze Age Mesopotamia," in R. Evans and M. De Marre (eds) *Piracy, Pillage and Plunder in Antiquity: Appropriation and the Ancient World.* London: Routledge. Pp. 9–26.
- 2019b. "Aliens and Alienation, Strangers and Estrangement: Difference-Making as Historically-Particular Concept," in J. Mynářova, M. Kilani and S. Alivernini (eds) Crossroads III: A Stranger in the House: Foreigners in Ancient Egyptian and Near Eastern Societies of the Bronze Age, Prague: Charles University. Pp. 307–40.
- ----- in prep. "The Origin of Foreign Slaves in the Late Old Babylonian Period."

Rodenberg, J. J. 1980. "Premiers resultats des recherches archéologiques à Hayaz Höyuk." Anatolica 7: 3-19.

- Sallaberger, W. 1996. Der babylonische Töpfer und Seine Gefässe : nach Urkunden altsumerischer bis altbabylonischer Zeit sowie lexikalischen und literarischen Zeugnissen, MHE II Memoirs III. Ghent : University of Ghent.
- Scheil, V. 1921. "Vocabulaire Pratique: Suse, Époque d'Ur." Revue d'Assyriologie 18/2: 49-78.
- Schwartz, G., H. H. Curvers, S. S. Dunham, and B. Stuart. 2003. "A Third-Millennium B.C. Elite Tomb and Other New Evidence from Tell Umm el-Marra, Syria." American Journal of Archaeology 107: 325–61.
- Skaist, A. 1984. The Old Babylonian Loan Contract: Its History and Geography. Ramat Gan: Bar-Ilan University.

- Sigrist, M. 1981. "Le travail des cuirs et peaux à Umma sous la dynastie d'Ur III." *Journal of Cuneiform Studies* 33/3–4: 141–90.
- Stol, M. 1980. "Leder(industrie)." RLA VI: 527-43.
- 2004. "Wirtschaft und Gesellschaft in altbabylonischer Zeit," in D. Charpin, D.O. Edzard and M. Stol (eds) Mesopotamien: Die altbabylonische Zeit. Fribourg: Academic Press. Pp. 643–975.
 - 2016. Women in the Ancient Near East. Boston: DeGruyter.
- Tanret, M. 1998. "Le *namkarum*. Une étude de cas dans les textes et sur la carte," in H. Gasche and M. Tanret (eds) *Changing Watercourses in Babylonia*, vol. 1. Ghent: University of Ghent. Pp. 65–132.
- Ünal, A. 2015. "A Hittite treaty tablet from Oylum Höyük in southeastern Turkey and the location of Haššu (wa)." *Anatolian Studies* 65: 19–34.
- van Koppen, F. 2004. "The Geography of the Slave Trade and Northern Mesopotamia in the Late Old Babylonian Period," in H. Hunger and R. Pruzsinszky (eds) *Mesopotamian Dark Age Revisited*, ed.. Wien: Verlag der Osterreichischen Akademie der Wissenschaft. Pp. 9–34.
- Veenhof, K. R. 1987–1988. "The Sequence of the 'Overseers of the Merchants' at Sippar and the date of the yeareponymy of Habil-kēnum." JEOL 30: 32–37.
- 1991. "Assyrian Commercial Activities in Old Babylonian Sippar," in D. Charpin and F. Joannès (eds) Marchands, Diplomates et Empereurs (FS Garelli). Paris, Éditions Recherche sur les Civilisations. Pp. 287–303.
- 2004. "Trade with the Blessing of Šamaš in Old Babylonian Sippar," in J. G. Dercksen (ed.) Assyria and Beyond: Studies Presented to Mogens Trolle Larsen. Leiden: Nederlands Historisch-Archaeologisch Instituut in het Nabije Oosten. Pp. 551–582.
- Vigo, M. 2019. "Staple and Wealth Finance and the Administration of the Hittite Economy," in M. Hutter and S. Hutter-Braunsar (Hrg.) (eds) *Economy of Religions in Anatolia: From the Early Second to the Middle* of the First Millennium BCE. Alter Orient und Altes Testament Band 467. Münster: Ugarit-Verlag. Pp. 141–51.
- Vincente, C. A. 1991. The 1987 Tell Leilan Tablets Dated by the Limmu of Habil-kinu. 2 vols. Ph.D. dissertation, Yale University.
- Von Dassow, E. 2008. *State and Society in the Late Bronze Age: Alalah under the Mittani Empire*. Studies on the Civilization and Culture of Nuzi and the Hurrians 17. Bethesda, Maryland: CDL Press.
- Walker, C. 1980. "Some Assyrians at Sippar in the Old Babylonian Period." Anatolian Studies 30: 15-22.

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> خمر من مامّا: أواني اللُخاروم في القرن السابع عشر قبل الميلاد بقام: كاثرين آر مورغان و سيث ريتشاردسون

سمحت لنا الأدلة الجديدة ان نشير الى وجود تجارة إقليمية ربطت شمال سوريا مع كل من منطقة الأناضول الوسطى وبابل طوال معظم القرن السابع عشر قبل الميلاد. وتشير الأدلة الأثرية الى تواجد إناء من نوع معين هو القارورة الكروية التي كانت تنتج في منطقة زنجرلي هويوك في اواسط القرن السابع عشر قبل الميلاد يستخدم لخزن ونقل الخمور . التواجد المتزامن لهذه القوارير في مناطق متباعدة Sippar-Amnānuk مثل كلتيبي Kültepe و سيبار - أمنانوم Sippar-Amnānum يتوافق مع ما شهد به في العصر البابلي القديم المتأخر عن ذكر لأواني اللخاروم في القرن السابع عشر قبل الميلاد في نصوص من سيبار Sippar-Amnānum و دور أبيعشوح Dūr-Abiešuh. وهنا نحن نجادل بأن هذه لابد وأن تشير الى نفس الأواني التي تدعى باسم الوارم aluārum في نصوص آشورية أقدم من كلتيبي Kültepe من القرن التاسع عشر قبل الميلاد. و عند أخذ هذه الأدلة مع بمجموعها نجد أنها تشير الى وجود شبكة تجارية لم يشك أحدا بوجودها سابقا مركزها الدولة السورية القديمة مامتا Mamma التي كانت مزدهرة خلال العقود ما بين انهيار الشبكة التجارية الأشورية القديمة وتولي حاتوشيلي الأول Hattušili الحكم. ومن خلال حوار بين أدلة كتابية وأثرية نتمكن ليس فقط من الكثف عن وجود تبادل تجاري بين مناطق بعيدة عن بعضها طوال قرن من I الزمن كان يعتقد بعدم وجوده خلاله، بل كذلك تحديد ظروف أكثر للتغير السياسي الذي حصل في نهاية العصر البرونزي الأوسط.