

## THE DATE OF THE BEGINNING OF Khabur WARE PERIOD 3: EVIDENCE FROM THE PALACE OF QARNI-LIM AT TELL LEILAN

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In 1997 the present writer proposed that the sequence of Khabur ware, spanning in time from *ca.* 1900 B.C. to *ca.* 1400 B.C. or possibly into the 14th century B.C. in particular within the upper Khabur basin of Syria<sup>1)</sup>, should be subdivided into four phases, *i.e.*, Khabur Ware Periods 1–4 in the present writer’s terms [Oguchi 1997: p.196ff.]. When proposing this, the present writer also suggested a date of *ca.* 1700 B.C. for the beginning of the third phase of the Khabur ware sequence (*i.e.* Khabur Ware Period 3) in consideration of circumstantial evidence from several sites producing Khabur ware [Oguchi 1997: p.205, for the date of the end of Khabur Ware Period 2]. The basis for the subdivision for Khabur Ware Period 3 lay in the view that one of the ceramic indicators of the third phase might be Khabur ware with distinctive bird decoration, differentiated from such earlier bird decoration as occurs on Khabur ware from stratum 4 at Tell Billa<sup>2)</sup> (Fig.1). The later decoration, in dark paint on a light ground, is composed of stylized birds, often arranged in a running frieze, each of which is drawn in a distinctive style with a round head, a dotted eye, a streamline back and a drooping tail; and they, often combined with dark-painted geometric patterns, occur often on straight/concave-sided beaker-type vessels (also called “grain measures”)<sup>3)</sup>, occasionally on jars, pots, bowls, plates and stands<sup>4)</sup>, and rarely on cylindrical-shaped goblets (“open-form goblets”)<sup>5)</sup>. It goes without saying that the occurrence of such distinctive bird motifs on these pottery vessels in dark paint characteristic of Khabur ware provides the basis for Helene J. Kantor’s conceptualizing them as “transitional Khabur-Mitannian” ware<sup>6)</sup> and for Joan Oates’s view on “late” Khabur ware [see Oguchi 2000: pp.107–109 and p.115].

However, when the present writer suggested the date for the beginning of Khabur Ware Period

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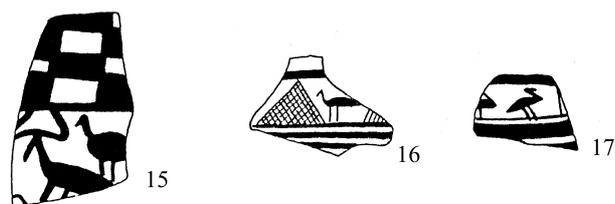
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- 1) The results of the excavations at Tell Brak (ancient Nagar/Nawar) in area HH that were conducted by the late David Oates suggest that not only three types of so-called “*jūngere*” Khabur ware but also the so-called “grain measure” type of Khabur ware and some Khabur ware jar, pot and bowl types are likely to have continued in use till some time in the 14th century B.C., before the final stage of occupation of Mitanni in the upper Khabur basin, which is, needless to say, supported by the evidence of stratified pottery in area HH at the site itself, being able to be chronologically connected, if partly and not directly, with datable textural evidence from the Mitanni palace of the site [Oates, Oates & McDonald 1997: pp.1–37 and pp.61–79]. In addition to this, we must keep it in mind that the terminal date of Khabur ware naturally varies from site to site, and we should further bear it in mind that at sites except in the upper Khabur basin, Mitannian occupation was replaced by Middle Assyrian occupation at dates earlier than in the upper Khabur basin, *i.e.*, the core area of the Mitanni kingdom. Moreover, these lead us to the recognition that an approximate date of *ca.* 1400 B.C. for the lower date of Khabur ware may be applicable to sites except in the upper Khabur basin, while such a date is inapplicable to sites in the upper Khabur basin, where Khabur ware disappears before the final stage of occupation of Mitanni, *i.e.*, in the 14th century B.C. Thus the final phase of Khabur ware in the upper Khabur basin is now to be added to the present writer’s phasing of the sequence of Khabur ware as Khabur Ware Period 4b; and his former Khabur Ware Period 4 (*ca.* 1550–1400 B.C.) is now described as Khabur Ware Period 4a.
- 2) See and *cf.* Speiser 1933: Pl.LXXII, for the earlier bird decoration at Tell Billa. In addition, a Khabur ware jar decorated with birds drawn in earlier style between geometric motifs, comparable rather with Khabur ware examples from Dinkha Tepe, a site outside of the main distribution zone of Khabur ware, has been found at the northern extreme slope of Tell Jigan, a site in the Eski Mosul Dam Salvage Project area of Iraq [see Gesuato 1993: Pl.LXVIII:20].
- 3) For example, see Faivre 1992: Fig.24:13.
- 4) For example, see Speiser 1933: Pl.LXXIII, Mallowan 1946: Fig.11:6, and Faivre 1992: Fig.12:5 and Fig.14:8.
- 5) For example, see Mallowan 1946: Fig.11:10.
- 6) For her theory, see Kantor 1958: p.21ff.

Later distinctive bird (and animal) motifs



Earlier bird (and possibly animal) motifs



**Fig. 1** Khabur ware decorated with bird motifs (scale 1:5).

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| 1. Mallowan 1947: Pl.LXXVIII:5. Tell Brak.     | 10. Mallowan 1947: Pl.LXXVII:1. Tell Brak.                         |
| 2. Mallowan 1947: Pl.LXXVIII:9. Tell Brak.     | 11. Weiss 1985a: Ill. on p.13. Tell Leilan.                        |
| 3. Mallowan 1947: Pl.LXXVIII:8. Tell Brak.     | 12. Weiss 1985a: Ill. on p.13. Tell Leilan.                        |
| 4. Mallowan 1947: Pl.LXXVIII:11. Tell Brak.    | 13. Faivre 1992: Fig.24:13. Tell Mohammed Diyab.                   |
| 5. Mallowan 1947: Pl.LXXVIII:6. Tell Brak.     | 14. Spanos 1990: Abb.12:1. Tell Hamad Agha as-Saghir.              |
| 6. Mallowan 1946: Fig.11:6. Tell Jidle.        | 15. Hrouda 1957: Taf.14:11. (=Speiser 1933: Pl.LXXII). Tell Billa. |
| 7. Mallowan 1946: Fig.11:10. Tell Jidle.       | 16. Hrouda 1957: Taf.14:11. (=Speiser 1933: Pl.LXXII). Tell Billa. |
| 8. Faivre 1992: Fig.12:5. Tell Mohammed Diyab. | 17. Hrouda 1957: Taf.14:11. (=Speiser 1933: Pl.LXXII). Tell Billa. |
| 9. Faivre 1992: Fig.14:8. Tell Mohammed Diyab. |  |

3 (= the end of Khabur Ware Period 2), some pieces of evidence from the acropolis-northeast excavations at Tell Leilan (ancient Šubat-Enlil/Šeḫna) still remained to be assessed, because the Leilan evidence alone was uninformative to an inference in dating, drawn on circumstantial evidence from several other sites.

By the time when the present writer had such a view, the Leilan acropolis-northeast excavations revealed three building levels (I–III) producing Khabur ware, cuneiform tablets and clay sealings with inscribed seal impressions, of which the second level (II) was marked by monumental temple architecture as a rebuilding of the original temple of the lowest level (III) [Weiss 1985a: pp.7–13; *idem* 1985b: pp.281–284]. Further, the Leilan level III temple was said to be directly comparable with the temple, probably constructed by Šamši-Adad I, of Tell al-Rimah (see note 41 below). At Leilan, epigraphic evidence from both of the II and III temples, on the other hand, enabled us to infer their approximate dates in construction and in use. In her Ph.D. dissertation submitted to the University of North Carolina at Chapel Hill, Julia E. Frane well summarizes this point [1996]. In drawing an inference on epigraphic ground, she concludes that the construction of the Leilan level III temple is reasonably attributable to Šamši-Adad I, and may have been completed as early as a date of *ca.* 1810 B.C., and that with regard to the Leilan level II temple with later architectural modifications and presumably with a southern extension unfinished (which has so far been denoted as building level “X”), the construction can also be attributed to the same king, is likely to have begun late in the reign of the king, and may have been in use only for a short period of time in his reign [Frane 1996: pp.39–49 and p.58]. Furthermore, she points out that the ceramic material from the level II temple is later than the time of Šamši-Adad I on the ground of the epigraphic evidence, showing the final or later occupation phase of the level II temple, of inscribed seal impressions revealing the names of two later rulers at Šubat-Enlil, *i.e.*, Turum-natki and Ḫaya-abum<sup>7)</sup> [Frane 1996: p.58]. This is an important point which concerns the topic of this article, which will be again discussed below.

It was when the contents of a report on the Leilan acropolis-northeast excavations were taken into consideration that the present writer was confronted with a problem, with the result that evidence from Leilan, concerned with the topic of this article, remained to be assessed. The problem was that two examples small in size, with distinctive bird motifs, of the straight/concave-sided beaker (or “grain measure”) type as has been noted above were illustrated in Harvey Weiss’s 1985 report as those which had been recovered from the level III temple, considered contemporary with the period of *Karum* Ib at Kültepe (overlapping in the early part with the time of Šamši-Adad I) on epigraphic ground<sup>8)</sup>, or the level II temple, considered to have been “in use during the reign of Shamshi-Adad, and/or possibly shortly thereafter”<sup>9)</sup> [see 1985a: the illustration on p.13]. In this respect, the present writer, who hypothesized that such distinctive bird motifs as occurred on vessels could be regarded as characteristic of later Khabur ware ranging from Khabur Ware Period 3 (*ca.* 1700–1550 B.C.) to Khabur Ware Period 4<sup>10)</sup> (*ca.* 1550–1400 B.C.), wrote that their stratigraphic attribution to level II or III was questioned, and that if the beaker-type vessels with such bird motifs could be no doubt attributed to II or III, a different picture would emerge regarding the chronology for the sequence of Khabur ware [Oguchi 1997: p.203].

At Tell Leilan, however, an important discovery was made in 1991 in operation 7 in the northeastern quadrant of its lower town area, where the presence of a major mud-brick building, considered as a palace, was disclosed. The remains of the palace itself lay, marked as a single building level, below the modern surface of this area [see Pulhan 2000: Fig.6 on p.258]. The mud-brick building, called the “northern lower town palace” of Tell Leilan, revealed an archive of 643 cuneiform

7) See also Weiss 1985b: pp.283–284.

8) Weiss 1985b: the table on p.281; Whiting 1990: p.571 with n.97–100, for which see also Veenhof 1985: p.204.

9) Weiss 1985b: p.281 and p.283.

10) For Khabur Ware Period 4, see and *cf.* note 1 in the present article.

tablets written in Old Babylonian and consisting of administrative texts, most of which bore multiple seal impressions of which the majority were inscribed seal impressions showing the name of a certain seal owner described as “servant of Qarni-Lim” [Pulhan 2000: p.61 and p.187]. This discovery was made in room 12 of the building. In the room, the tablets were found clustered in and around four jars, which suggested that they had been kept in the ceramic containers [Pulhan 2000: p.61]. From the Mari texts, Qarni-Lim is known as king of Andariq, the capital city, located to the south of Jebel Sinjar, of the land of Iamtbalum<sup>11)</sup>, and as one of the rulers who occupied Šubat-Enlil after the death of Šamši-Adad I. Hence the building that yielded the tablets was considered the palace of this king, Qarni-Lim, at Šubat-Enlil, which was further regarded as having coexisted with another palace discovered at Leilan itself in operation 3. The latter palace, in which four building levels were confirmed, was called the “eastern lower town palace” of the site, the construction of which originated in the time of Šamši-Adad I (building level 4). The building level that was connected in time with the palace of Qarni-Lim was regarded as level 3, in the time of which Išme-Dagan (son of Šamši-Adad), Turum-natki (the ruler of an unknown country), Zuzu (son of Turum-natki), Ḫaya-abum (son of Turum-natki) and the *sukkalmah* of Elam were considered as having resided there; and from historical points of view<sup>12)</sup>, Qarni-Lim’s palace was regarded as contemporary with the time of Ḫaya-abum who, supported by Qarni-Lim of Andariq and Zimri-Lim of Mari, had become the ruler of Šubat-Enlil after his brother, Zuzu [Pulhan 2000: p.iii and pp.16–17]. Thus, in reference to Zimri-Lim’s date-formulae, the co-rule of Šubat-Enlil by Qarni-Lim and Ḫaya-abum was dated *ca.* 1775–1760 B.C. [Pulhan 2000: p.17]. Of significance is the fact that the Khabur ware vessels which this palace also yielded included those decorated with such distinctive bird motifs [Pulhan 2000: *e.g.* p.108 and p.147].

In his Ph.D. research on the materials from the Qarni-Lim palace at Leilan, Gül Pulhan, paying attention to the occurrence, associated with the palace, of the painted pottery with such distinctive bird decoration, and treating it as important evidence added to pieces of evidence from other areas excavated at the site, thus points out that at Leilan itself, its occurrence is dated to the first half of the 18th century B.C., and claims that in particular the date of the beginning of Khabur Ware Period 3 (*ca.* 1700–1550 B.C.) set in the present writer’s periodization for Khabur ware should be reconsidered [2000: pp.147–148]. This is also an answer for the present writer’s question regarding Weiss’s 1985 report on the acropolis-northeast excavations, as noted above. In addition to this, Pulhan further points out that “grain measure”-type Khabur ware should be dated *ca.* 1770–1760 B.C. on the ground of evidence from the Qarni-Lim palace [2000: pp.147–148]; but evidence recently adduced both at Tell al-Rimah and Tell Brak suggests that the occurrence of this type of Khabur ware ranges in time from the second quarter of the 18th century B.C. at the latest, certainly into the 14th century B.C. before the final stage of occupation of Mitanni in the upper Khabur basin [see Oguchi 2000: pp.120–121]: accordingly, this is no longer a problem which is to be discussed.

In fact this claim of Pulhan’s tempts the present writer to reconsider the date of the beginning of Khabur Ware Period 3. In reply to Pulhan’s claim put forward in his Ph.D. dissertation submitted to Yale University, the present writer thus attempts to give reconsideration to this particular problem through the present article.

### **Chronological reassessment of the Leilan evidence**

The occurrence at Leilan of Khabur ware decorated with distinctively stylized birds in dark paint is in the acropolis-northeast temple area, in the eastern lower town palace (in operation 3) and in the so-called Qarni-Lim palace (*i.e.* the northern lower town palace in operation 7).

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11) Pulhan 2000: pp.177–178, for the location of Andariq.

12) See Pulhan 2000: pp.199–205, for the reconstructed history of Šubat-Enlil after the death of Šamši-Adad I.

Most significant evidence for dating the distinctively decorated Khabur ware at Leilan itself comes from the Qarni-Lim palace, from the courtyard (also described as room 10) of which, sherds of Khabur ware vessels decorated with distinctive bird motifs were recovered together with other Khabur ware sherds and sherds of unpainted, associated pottery [Pulhan 2000: p.57, illustrated with Fig.5:1 (520) (a bird motif cup sherd) on p.399<sup>13</sup>]. The majority of the potsherds found are of cups and bowls, and the others, of pots and jars [Pulhan 2000: p.57]. As other finds in the courtyard, there are a tablet as a receipt for a delivery of peas, fragments of tablets recording barley issues, a fragment of an inscribed jar sealing, a stone axe, a fragment of a grinding stone, a bronze needle, animal terracotta figurines and a spoked wheel of a chariot model [Pulhan 2000: pp.55–56]. Animal bones are also among the finds in the courtyard, where four ovens, one of which can be associated with a “jar hearth”, were set. On the evidence of the presence of decorated cups of fine ware, bowls and ovens, Pulhan presumes that the courtyard would have functioned as a place for banquets and celebrations [2000: p.58]. Next to the courtyard to the east is room 12 in which the archive of cuneiform tablets mostly recording beer issues and deliveries was found [see Pulhan 2000: Fig.3 on p.255]. The datable tablets have been so far considered as suggesting the date of the potsherds recovered from the courtyard, as well as the date of those from other rooms of the Qarni-Lim Palace, as claimed by Pulhan himself<sup>14</sup>. What is problematical is, however, the fact that complete ceramic vessels showing that they lie *in situ* are almost absent from the Qarni-Lim palace<sup>15</sup>, which indicates that when the date of such material is determined, cogitation is required, but which conversely means that the palace itself did not suffer sudden, severe destruction, and was gradually abandoned<sup>16</sup>. With regard to potsherds in such an archaeological context, cogitation on the premise that datable tablets discovered do not necessarily reflect the date of potsherds found there, is always needed. Even if there is a case where intact pottery vessels are found in the same level where tablets are discovered, the date of pottery recovered does not necessarily correspond to the date of tablets found there: tablets themselves used to be kept for a certain period of time, which would be longer than the lifetime of pottery vessels breaking easily in daily life use<sup>17</sup>. In fact, rather than tablets, pottery remaining in an architectural feature can be regarded as an object representing its final occupation phase. There is thus no reason to deny a possibility that the palace itself may have been in use after Qarni-Lim’s possession dating to *ca.* 1775–1760 B.C. on the epigraphic evidence. If so, till when did the palace continue in use? In this respect, what we bear in mind is the fact that there were found three graves cut into the deposits of the palace (marked as a single building level below the modern surface of the area), one of which, a vaulted chamber grave, yielded as part of the associated grave goods a Khabur ware jar decorated with horizontal bands of paint [Pulhan 2000: pp.169–173, and see Figs. 1–2 on pp.487–488]. In sum, these graves become a *terminus ante quem* for the Qarni-Lim

13) In Pulhan’s dissertation, the illustrations of two other bird motif cup sherds have been adduced, which are likely to be from the same courtyard [Pulhan 2000: Fig.2:2 (454) on p.395 and Fig.6:1(458) on p.400, the provenance of which is 35L19 Lot x, next to 35L20 Lot 6 for Fig.5:1 (520), as shown in the plan of Fig.3 on p.255].

14) Pulhan 2000: *e.g.* p.149.

15) For this, see Pulhan 2000: p.220.

16) This is also pointed out by Pulhan himself [Pulhan 2000: p.220].

17) In a sense, this is well illustrated with archaeological and historical interpretation through the late D. Oates’s excavations at Tell Brak in the Mitanni palace: the destruction of the Mitanni palace, in which two tablets describing the names of two Mitannian kings, *i.e.*, Artasšumara and Tušratta (presumably dated to the early 14th century B.C.), were found, is ascribed to the Middle Assyrian kings Adad-nirari I (*ca.* 1305–1274 B.C.) and Shalmaneser I (*ca.* 1273–1244 B.C.) on the ground of historical probability [Oates, Oates & McDonald 1997: p.14 and p.23]. At Brak, the final destruction of the Mitanni palace is thus dated sometime in the second quarter of the 13th century B.C. [*ibid.*: p.14]. This dating of course differs from the presumable date assigned to the two tablets discovered there. Furthermore, there is a significant view added in this connection. The view is that such delicate objects as pottery *etc.* have only a restricted lifetime of no more than one generation, thus representing the last occupation phase of a building excavated [Stein 1989: p.54]. This view, reasonable and persuasive, is available for the reassessment of the Leilan evidence, now under discussion.

palace; and the Khabur ware jar found associated with the vaulted grave suggests that the final date of the use of the palace naturally falls within the period in which Khabur ware was in use. With this in mind, we now turn our eyes to other excavation areas yielding Khabur ware with distinctive bird decoration.

When claiming that the bird motif vessels of Khabur ware should be dated to the first half of the 18th century B.C., Pulhan states that bird motif Khabur ware was also found in another palace at the site, *i.e.*, the eastern lower town palace, which is the place in which Ḫaya-abum, a co-ruler of Šubat-Enlil, was present (level 3) [2000: p.147]. The eastern lower town palace has four building levels<sup>18)</sup>. As briefly noted above, the lowest palace (level 4) can be assigned to the time of Šamši-Adad I on epigraphic evidence from the level itself<sup>19)</sup>, and on the other hand, the succeeding level 3 palace<sup>20)</sup>, regarded as having been constructed also by Šamši-Adad I, is considered to have continued in use after the king's death<sup>21)</sup>, *i.e.*, during the times of Išme-Dagan, Turum-natki, Zuzu, Ḫaya-abum and the *sukkalmah* of Elam. In the next overlying level, 2, after the violent destruction, perhaps by Atamrum of Allaḫad, also a ruler of Andariq, of the level 3 palace, the palace itself, re-built with modifications, is recognizable on epigraphic ground as belonging to the times of Ḫimdiya (the successor of Atamrum), Mutiya (probably a brother of Dari-epuḫ), Till-abnu (perhaps a nephew of Mutiya) and Iakun-aššar (a brother of Till-abnu), from the second ruler of whom the site almost certainly enters the period when it was again called Šeḫna, the capital of the land of Apum<sup>22)</sup>. The level 2 palace is considered to have been destroyed by Samsuiluna of Babylon in *ca.* 1728 B.C. (the 22nd regnal year of the king) as known from the king's 23rd date-formula<sup>23)</sup>; the destruction itself is, needless to say, with the result that an archive of cuneiform tablets was left there. This situation, however, should be regarded as different from that of the Qarni-Lim palace, where another archive of tablets was also left not through destruction but in the course of gradual abandonment. In fact, a small mud-brick wall and several pits (level 1) have been found overlying the Iakun-aššar's palace destroyed, and immediately below the modern surface of this area<sup>24)</sup>. One of the level 1 pits is said to have contained a small Khabur ware jar decorated with birds [Akkermans 1990: p.547]. Otherwise, with regard to bird motif vessels from the eastern lower palace area, Frane's information is now available [Frane 1996]. Khabur ware with distinctive bird decoration occurs in the mud-brick collapse of the level 2 palace [Frane 1996: Fig.55:3 (described as a carinated cup) on p.344]. This example is very similar in type to one of the bird motif vessels recovered from the Qarni-Lim palace in the form of potsherds<sup>25)</sup>. However, Frane's information on such bird motif vessels is confined to her reporting solely the one example as one of the pottery vessels from the eastern lower town palace area; and now, to our regret, no other information is available. Frane merely mentions that with respect to painted decoration occurring on the pottery from the acropolis-northeast temple area and the eastern lower town palace area, "birds are uncommon but known" [1996: p.73]. These mentioned above, at least, indicate that the occurrence of Khabur ware with distinctive bird decoration is in the level 2 palace debris and the later level 1 pit of the eastern lower town area. What is of importance here is Frane's further mention. She mentions that "the ceramics from the level 2 palace probably date to the third quarter of the eighteenth century B.C." [Frane 1996: p.52].

18) See Akkermans & Weiss 1987–88: pp.91–92, and Akkermans 1990: pp.543–547.

19) See Akkermans & Weiss 1987–88: p.92.

20) See Akkermans & Weiss 1987–88: p.93, and Akkermans 1990: pp.545–546.

21) See Frane 1996: p.52.

22) Frane 1996: pp.52–54.

23) Eidem 1987–88: pp.110–111; Whiting 1990: p.575; Eidem 1991: p.112.

24) Akkermans 1990: p.547.

25) Compare Frane 1996: Fig.55:3 on p.344 with Pulhan 2000: Fig.5:1 (520) on p.399. The strong resemblance between them is also pointed out by Pulhan [Pulhan 2000: p.108].

On the other hand, Frane illustrates the occurrence, in the acropolis-northeast temple area, of such bird motif pottery by giving one example of Khabur ware, which is a rim sherd of a cup/chalice coming from on the floor of room 8 of the level II temple [1996: Fig.56:4 on p.346]. As briefly noted, the epigraphic evidence obtained from the level II temple, *i.e.*, the impressions of seals with inscriptions describing the names of rulers (Turum-natki and Ḫaya-abum) at Šubat-Enlil after the death of Šamši-Adad I, indicates that the use of the temple can be extended later than the reign of Šamši-Adad. On this evidence, Frane suggests that the date of the level II temple pottery is placed “in the twenty years or so following the death of Shamshi-Adad I”, and further that the level II temple pottery is roughly contemporary with the rise of the kings of Apum [1996: pp.58–59]. If the bird motif sherd is the only example from among the deposits of the temples underlying level I, represented by the remains of a mud-brick platform and of hearths, and immediately lying under the surface of the excavation area<sup>26)</sup>, or if no bird motif sherds occur below the level II temple, it can be concluded that in this area, the occurrence of bird motif Khabur ware lies in the level II temple of which the materials are dated later than the time of Šamši-Adad I, and possibly in later level I (*cf.* the addendum below).

To sum up, given that the occurrence of Khabur ware sherds with distinctive bird motifs is confined to the provenance which Frane reports, the evidence from the eastern lower town palace area and the acropolis-northeast temple area suggests a date of later than the time of Šamši-Adad I (*ca.* 1813–1781 B.C. on the middle chronology) for the occurrence of Khabur ware with distinctive bird decoration. In the case of the eastern lower town palace area, bird motif Khabur ware occurs in the mud-brick collapse of the level 2 palace, destroyed by Samsuiluna of Babylon in *ca.* 1728 B.C. This fact indicates that such objects as ceramics breaking easily fall within a life span of no more than one generation (nearly three decades) immediately before the 1728 B.C. destruction. On the other hand, in the case of the acropolis-northeast temple area, bird motif Khabur ware, though being a rim sherd, occurs on the floor of the level II temple. In this case, however, what matters is the date till which the level II temple were in existence in use. Had the level II temple already been abandoned at the time when Iakun-aššar resided in the level II palace? The view that the level II temple was in use also in the time of Iakun-aššar, king of Apum the capital of which was Šeḫna (formerly called Šubat-Enlil), seems more reasonable and plausible at the moment. If so, the bird motif Khabur ware sherd also falls within a reasonable life span of nearly 30 years immediately before the 1728 B.C. destruction. This assumption may be able to be applied to the case of the Qarni-Lim palace, in the courtyard of which three bird motif sherds occur, as noted above<sup>27)</sup>. This northern lower town palace itself would have been used after the death of Qarni-Lim of Andariq, *i.e.*, also by Atamrum who, on the one hand, conquered Andariq and who was, on the other hand, perhaps responsible for the destruction of the eastern lower town level III palace at the time when he conquered Šubat-Enlil. In this respect, Pulhan also presumes that “he resided in the Northern Lower Town Palace when he was in the city” after his conquest of Šubat-Enlil [2000: p.210]. After Atamrum came Ḫimdiya, son of Atamrum<sup>28)</sup>, who would have naturally resided in the same palace where his father was present<sup>29)</sup>. But Ḫimdiya himself seems to have also reconstructed the eastern lower town palace that had been destroyed by his father, Atamrum: the eastern lower town level II palace has yielded epigraphic sources relevant to Ḫimdiya, such as a legal document sealed by his servant, a fragmentary letter addressed to him and some sealings with seal impressions describing his name<sup>30)</sup>. Ḫimdiya is said to be dated to 1761 B.C. around<sup>31)</sup>, which is almost contemporary with the time when

26) Weiss 1985a: p.7; *idem* 1985b: p.281.

27) In addition to the text above, see also note 13 in this article.

28) Pulhan 2000: p.212; *cf.* Frane 1996: p.54, mentioning that Ḫimdiya was a lieutenant of Atamrum of Andariq.

29) See and *cf.* Pulhan 2000: pp.212–213.

30) Pulhan 2000: p.212 with n.141, citing Eidem 1991: pp.114–116.

Ḫammurabi of Babylon “smote Mari in battle” in his 32nd year (*ca.* 1761 B.C.), as recorded in his 33rd date-formula, and “destroyed the walls of Mari” in his 34th year (*ca.* 1759 B.C.), as recorded in his 35th date-formula. The eastern lower town level II palace thus continued to be the place where Mutiya, Till-abnu and Iakun-aššar resided after Ḫimdiya. There, the possibility arises that also during the period of the rule of Mutiya and Till-abnu, and till some time in the period of the rule of Iakun-aššar, the northern lower town palace (which was formerly of Qarni-Lim) may have been also used, and then may have been abandoned by the time when Šeḫna (=Šubat-Enlil) was destroyed by Samsuiluna of Babylon in *ca.* 1728 B.C. This may be the reason why the northern lower town palace has no signs of destruction or conflagration<sup>32)</sup>. If so, the northern lower town palace potsherds including the three bird motif sherds can also fall within a life span of nearly 30 years immediately before 1728 B.C.

The date 1728 B.C., needless to say, provides a *terminus ante quem* for “Leilan period I” at the site itself, which is in fact marked as part of the period in which Khabur ware was in use in north Mesopotamia. At Leilan, there has been hitherto no evidence for particular occupation after Samsuiluna’s destruction. There were only found burials placed in time after the destruction on stratigraphic evidence, which are labelled “Leilan period 0”, defined as post-Leilan period I of which ceramics are said to be close in time to “Nuzi ware assemblages”<sup>33)</sup>.

### Contemplating the problem in perspective

The foregoing indicates that the Leilan evidence suggests that the chronological boundaries, at the site itself, of Khabur ware decorated with distinctively stylized birds can be defined within one generation, *i.e.*, nearly 30 years, immediately before Samsuiluna’s 1728 B.C. attack upon Šeḫna. Possible dates are thus suggested for the occurrence of bird motif Khabur ware at Leilan itself, which are of *ca.* 1760/1750–1728 B.C. in reason. At any rate, this upper date is no doubt earlier than we have so far thought. However, the problem is whether or not such an earlier upper date for the appearance of distinctively bird-ornamented Khabur ware can now be attested at other sites. By good fortune, we can now examine the authenticity of the upper date provided at Leilan through the latest report on the pottery from Tell al-Rimah<sup>34)</sup> (ancient Karana/Qaṭara<sup>35)</sup>).

At Rimah, distinctively bird-ornamented Khabur ware occurs most certainly in the “late Old Babylonian” period<sup>36)</sup>, a period and a term defined at the site itself<sup>37)</sup>, which is reasonably considered as dating from *ca.* 1700 B.C.<sup>38)</sup> [J. Oates 1997: p.53]. The “late Old Babylonian period” of Rimah is chiefly represented by the level 6a “kitchen” of site C, three vaulted chambers of domestic character, which overlay some rooms of the palace abandoned of Aqba-ḫammu (the final building phase 3b of the palace, *i.e.*, the final stage of occupation of site C level 6 consisting of phases 2 and 3a-b) that yielded the archive of Iltani, the wife of Aqba-ḫammu [Postgate, Oates & Oates 1997: p.30]. Together with this archive occurs a sherd decorated with a bird motif<sup>39)</sup>, the style of which, however, appears earlier, as illustrated with the earlier bird ornament of Khabur ware from stratum 4 at Tell

31) Frane 1996 p.54, citing Eidem 1987–88: p.111.

32) See and *cf.* Pulhan 2000: p.210.

33) For this, see Weiss 1994: p.126.

34) Postgate, Oates & Oates 1997.

35) For the most recent argument about the ancient name of Tell al-Rimah, see Postgate, Oates & Oates 1997: pp.18–20.

36) For example, see Postgate, Oates & Oates 1997: Pl.76:826,833 and Pl.78:865.

37) The discovery at Rimah of tablets written in Old Babylonian enables the use of the term “Old Babylonian” [Postgate, Oates & Oates 1997: p.17]. In this respect, J. Oates further comments as follows: “we have deliberately chosen to avoid at least some of the problems of stylistic chronology by using ‘historical’ terminology, a solution well-justified by the number and historical content of cuneiform texts found at the site” [J. Oates 1997: p.54].

38) For this date, see Postgate, Oates & Oates 1997: p.36.

39) J. Oates 1997: p.53.

Billa [compare Postgate, Oates & Oates 1997: the upper right of Pl.19e with Speiser 1993: Pl.LXXII]. No matter whether this sherd said to be from site C level 6 phase 3b is suspected of being intrusive in connection with “late Old Babylonian” pits dug into the palace deposits<sup>40)</sup>, it can be regarded as decorated in earlier bird style, and should be differentiated from later Khabur ware decorated with distinctively stylized birds. In this case, however, it may be rather appropriate to take a view that the sherd said to be from site C level 6 phase 3b is associated with the Iltani archive, because of the ornamentation of birds earlier in style. Another bird motif sherd also occurs on the level 3 destruction floor of later date of a monumental temple complex<sup>41)</sup> in site A [J. Oates 1997: p.53, illustrated with Postgate, Oates & Oates 1997: Pl.91:1059]; and the temple level 3 destruction has been considered dated some time in the middle of the 18th century B.C.<sup>42)</sup>, and has been further considered perhaps contemporary with the destruction of the phase 3 palace<sup>43)</sup>. The bird ornament of this site A sherd, though appearing somewhat different from usual stylized birds in respect to the form of legs and feet drawn, lies in the category of later distinctive bird style relevant to the subject of this article. Those which have been further reported at Rimah are some sherd examples similar in decorative bird style to the site A sherd, which are recorded as coming from “site A level 3”<sup>44)</sup>, a provenance description leading us to the assumption that in reference to the site A sherd noted here, they would perhaps come from the same destruction level and/or later floors in the temple. These mentioned above indicate that assuming that the destruction of the phase 3 palace coincided with that of the level 3 temple, the appearance of distinctive bird motifs on Khabur ware vessels may be towards the end of the site C level 6 palace, or that a chronological boundary of stylistic change with respect to bird motifs may lie between the end of the site C level 6 palace and the beginning of the site C level 6a “kitchen” of “late Old Babylonian” date.

According to the inscription of one of his two seals seen on seal impressions from the palace and some texts of the Iltani archive (room VI of the palace), Aqba-ḥammu, also connected with Karana in the Mari texts, is known to have been subject to Ḥammurabi of Babylon [Dalley 1976: pp.31–32 and p.35; *idem* 1984: pp.39–44]. This is the palace phase that is perhaps concerned with the occurrence of the Khabur ware sherd decorated in earlier bird style. Of importance is the fact that on the ground of the epigraphic evidence, it has been suggested that the phase, 3b, described as the latest phase of the level 6 palace differentiated from “late Old Babylonian” level 6a (a later building yielding distinctively bird-ornamented Khabur ware), lies within the final decade of the rule of Ḥammurabi (*ca.* 1792–1750 B.C. on the middle chronology) of Babylon [Postgate, Oates & Oates 1997: p.30]. At the moment, this chronological view seems to be able to be accepted as a *terminus post quem* for the occurrence of Khabur ware decorated with distinctively stylized birds of later date. Cogitating on such information from Rimah, we can now thus consider, at least, that the appearance of such distinctive bird motifs on Khabur ware vessels is not earlier than 1750 B.C., which in fact corresponds to one of the alternative upper dates, reassessed here, of bird motif Khabur ware occurring at Leilan.

What should not be overlooked here is, however, the fact that the use of distinctive bird motifs on Khabur ware vessels continues into the period of Mitannian occupation<sup>45)</sup>. This is now well corroborated by evidence from Tell Brak, where bird-ornamented Khabur ware occurs in Mitanni house levels 7–3 in area HH<sup>46)</sup>. The sequence of Mitanni houses (area HH levels 6–2) runs parallel

40) See J. Oates 1997: p.53.

41) It is noted additionally that it is said that the façade decoration of the Rimah temple at the earliest stage closely parallels that of the earliest version of the Leilan temple [Postgate, Oates & Oates 1997: p.23].

42) Postgate, Oates & Oates 1997: p.23.

43) Postgate, Oates & Oates 1997: p.36.

44) For example, see Postgate, Oates & Oates 1997: Pl.76:818,827,828.

45) Cf. Pulhan 2000: pp.147–148.

to the phases (1–2) of the Mitanni palace that was found adjacent to the houses, together with the Mitanni temple that lay on the southwest side of the palace [Oates, Oates & McDonald 1997: pp.1–37, *inter alia* Table 1 on p.35]. Two complete cuneiform tablets were found in the phase 2 destruction debris of room 11 of the Mitanni palace, which, though each bearing the impression of Saustatar’s seal, mention the names of two other Mitanni kings, *i.e.*, Tušratta and Artaššumara respectively [Oates, Oates & McDonald 1997: p.23]. This unequivocally corroborates the presence of Mitannian occupation at the site. Most important at this site in connection with this article is the fact that Khabur ware is absent only from area HH level 2 which, however, yields white-on-dark painted Nuzi ware [Oates, Oates & McDonald 1997: pp.67–71, *inter alia* p.71]. Area HH level 2 corresponds in time to the latest occupation in the Mitanni palace (phase 2) and temple, initially destroyed by the Middle Assyrian king Adad-nirari I and finally by his successor Shalmaneser I<sup>47)</sup>. Further, what deserves to be noted here is the fact that at Brak, white-on-dark painted Nuzi ware occurs in parallel with Khabur ware including bird-ornamented pottery. Indeed, white-on-dark painted Nuzi ware is a ceramic indicator for Khabur Ware Periods 4a-b (see note 1 in this article), in particular in the case where Khabur ware and Nuzi ware co-occur. At Brak, white-on-dark painted Nuzi ware occurs unequivocally in area HH levels 6–2, with exception of level 7 from which only one small sherd of Nuzi ware was recovered and level 8 in which were four Nuzi ware sherds strongly suspected of intrusion [Oates, Oates & McDonald 1997: pp.67–68 with Fig.92]. At any rate, the Brak evidence gives us indications that bird-ornamented Khabur ware occurs in parallel with white-on-dark painted Nuzi ware in the Mitannian period, and that white-on-dark painted Nuzi ware continues after the disappearance of Khabur ware including bird-ornamented pottery. Distinctive bird motifs occurring on Khabur ware vessels are in fact reproduced on Nuzi ware vessels in white paint on dark-painted broad bands, as pointed out in the latest Brak report that concerns Khabur ware and Nuzi ware<sup>48)</sup>. In many cases, the reproduction of bird motifs on Nuzi ware becomes more elaborate in design than those on Khabur ware<sup>49)</sup>. In short, Nuzi ware is the white-on-dark painted pottery that retains shapes of Khabur ware preceding, and paralleling, Nuzi ware in time.

If bird motif Khabur ware is found unassociated with Nuzi ware in a level, it may therefore be most appropriate that the level is assigned to Khabur Ware Period 3. For example, at Tell Der Hall<sup>50)</sup>, a site excavated by the Japanese Expedition of Kokushikan University in the Eski Mosul Dam Salvage Project area of Iraq, level 2, marked by a stone-built wall foundation, an associated floor and a destruction layer containing debris of mud-bricks, yielded white-on-dark painted Nuzi ware sherds as well as a dark-painted sherd decorated with a bird drawn in distinctive style and a triangle filled with dots (a design unusual as Khabur ware)<sup>51)</sup>, and on the other hand, the underlying level, 3, in which a stone-built wall foundation was retrieved, yielded a Khabur ware sherd with distinctive bird decoration and one type of so-called “*jüngere*” Khabur ware, but did not yield white-on-dark painted Nuzi ware or even its sherds. Accordingly, Der Hall level 2 is assigned to Khabur Ware Period 4a, and Der Hall level 3, to Khabur Ware Period 3. Needless to say, Der Hall level 3 is thus dated some time in Khabur Ware Period 3, or in this case, it may be dated late in Khabur Ware Period 3. To take another example, at Tell Hamad Agha as-Saghir, a site in the North Jazira Project area of Iraq, trench I yielded a rim sherd of a “grain measure”-type Khabur ware vessel with distinctive

46) See Oates, Oates & McDonald 1997: Fig.200: 455,457,458 on p.201 and Fig.201: 461–478 on p.203, from area HH levels 7–3 respectively.

47) See note 17 in the present article.

48) Oates, Oates & McDonald 1997: p.68, illustrating it with Pl.199:454 on p.199.

49) See Oates, Oates & McDonald 1997: *e.g.* Pl.199:449 on p.199.

50) For this site, see Matsumoto & Yagi 1987: p.54 and pp.56–61, or see Ohnuma & Matsumoto 1988: p.73ff.

51) Of interest in addition to these finds is the fact that a “face goblet” sherd was also found there, which is comparable to part of such a “face goblet” as occurs at Brak and is seen on Mallowan 1947: Pl.XL:2. The “face goblets” may be able to be treated as a ceramic indicator for Khabur Ware Period 4a.

Date (B.C.)	Oguchi 1997	Oates & Oates 1997		Pulhan 2000	Oguchi 2005 <sup>6)</sup>
1900  1800  1700  1600  1500  1400  1300  1200	Kh Periods	Rimah <sup>1)</sup>	Brak <sup>2)</sup> HH	Leilan <sup>4)</sup>	Kh Periods
	1	Early Khabur Ware			1
	(ŠA) 2	(ŠA) “Old Babylonian” Khabur ware		L.B. Kh <sup>5)</sup>	(ŠA) 2 E.B. Kh
	3	“Late Old Babylonian” Khabur ware	8 “LOB” Kh		L.B. Kh 3
	4	“Mitanni” Khabur ware + Nuzi ware	7 3) 6 “Mitanni” Khabur ware including “jüngere” Kh Nuzi ware		4a
			4		4b <sup>7)</sup> ↓
			3		
		Middle Assyrian pottery	2		
			1 MA pottery		

**Fig. 2** Khabur ware periodization and chronology.

⟨Abbreviations⟩

- Kh Periods ..... Khabur Ware Periods.  
 ŠA ..... Šamši-Adad I (ca. 1813-1781 B.C. on the middle chronology).  
 “LOB” Kh ..... “Late Old Babylonian” Khabur ware.  
 “jüngere” Kh ..... “jüngere” Khabur ware.  
 MA ..... Middle Assyrian.  
 E.B. Kh ..... Khabur ware vessels decorated with earlier bird motifs.  
 L.B. Kh ..... Khabur ware vessels decorated with later distinctive bird motifs.

Notes on Fig.2

- 1) Postgate, Oates & Oates 1997.
- 2) Oates, Oates & McDonald 1997.
- 3) The construction of the Mitanni palace and temple, which is marked as contemporary with level 6 in area HH.
- 4) Pulan 2000.
- 5) Pulhan’s suggestion that distinctively bird-ornamented Khabur ware (L.B. Kh) is dated to the first half of the 18th century B.C. at Tell Leilan itself.
- 6) Khabur ware periodization and chronology revised here.
- 7) See note 1 in the present article.

bird decoration as well as many sherds of other types of Khabur ware [Spanos 1990: pp.91–92, Abb.12:1 on p.111]. Since no white-on-dark painted Nuzi ware and no “*jüngere*” Khabur ware occur at the site itself, we can reach a deduction that a level dated some time in Khabur Ware Period 3 or most reasonably early in Khabur Ware Period 3 would lie in the mound. Although bird motif Khabur ware occurs at several sites<sup>52)</sup>, it goes without saying that careful consideration is needed for such phase assignment.

A conclusion in the present article is now thus reached that the date of the beginning of Khabur Ware Period 3 certainly requires revision (Fig.2). It must be raised to *ca.* 1750 B.C. Khabur Ware Period 3 is therefore newly dated *ca.* 1750–1550 BC. However, this brings a result that the time span of Khabur Ware Period 2 is compressed between *ca.* 1813 B.C. and *ca.* 1750 B.C. Although this fact tempts the present writer to raise the date of the beginning of Khabur Period 2 and to define Khabur Ware Period 1 as the phase that is exclusively concerned with the occurrence of the earliest versions of Khabur ware that are characterized by the application of irregular bands, or much broader bands, of paint<sup>53)</sup>, or by the combination of comb-incised horizontal and/or wavy bands and horizontal bands of paint<sup>54)</sup>: the occurrence of these earliest versions of Khabur ware seems to be virtually confined to the early part of the 19th century B.C. At the moment, however, there are no measures other than seeing Khabur Ware Period 1 from the point of view of pre-Šamši-Adad I<sup>55)</sup>, epigraphically and stratigraphically supported at Tell al-Rimah and Tell Taya [Oguchi 1997: p.202 and p.205]. The resolution of this problem depends entirely on whether new reliable evidence will be obtained through future excavations at some sites.

### Addendum

There is another problem as what should be taken into consideration in addition to the content of this article. The problem is that not all the materials that were recovered through excavations at a site are reported. At Leilan, there thus remains a possibility that distinctively bird-ornamented Khabur ware, if being of sherds, may have been either in the level III temple of the acropolis-northeast excavation area or in the levels 3–4 palaces of the eastern lower town excavation area (operation 3). It is therefore noted that if such bird motif Khabur ware vessels or sherds have been found in these places, reconsideration will be needed again.

52) Other sites at which distinctively bird-ornamented Khabur ware occurs are, for example, Nineveh (ancient Ninuwa/Ninua), Tell Mohammed Diyab [phase 6] and possibly Tell Barri (ancient Kaḥat), to which added is Alalah (modern Tell Atchana) [level V] as a site outside the main distribution zone of Khabur ware. Further added to the content of this article as sites at which distinctively bird-ornamented Khabur ware occurs, associated with Nuzi ware, are, for example, possibly Tell Billa (ancient Šibaniba) [stratum 3, said to divide into substrata the presence of which remains a problem in archaeological interpretation] and certainly Tell Jidle [level 2] (a site outside the main distribution zone of Khabur ware). As for their references, see Thompson & Hamilton 1932: Pl.LIX:11, a sherd illustrated together with painted Ninevite 5 sherds (from Nineveh, at which also occurs Khabur ware, for example as most recently illustrated in Reade 2005: Fig.15, to which further added with particular interest are the occurrences of (i) painted pottery decorated with birds in earlier style, as shown in Thompson & Hamilton 1932: Pl.LIX:12, which is rather comparable with Khabur ware examples from Dinkha Tepe, (ii) “*jüngere*” Khabur ware as shown in Thompson & Hutchinson 1931: Pl.XXXIV:10 and (iii) Nuzi ware as shown in Thompson & Hutchinson 1931: Pl.XXXIV:5,12), Faivre 1992: Fig.12:5, Fig.14:8 and Fig.24:13 (from Tell Mohammed Diyab), Pecorella 1990: possibly one Khabur ware sherd example decorated in large part with a checkerboard pattern in Pl.4:4 (from Tell Barri), Gates 1981: Ill.4:a (= Woolley 1955: Pl.XCV:ATP/39/279) and Woolley 1955: Pl.XCV:AT/46/275 (both from Alalah), Speiser 1933: Pl.X:3 and Pl.LXIII (from Tell Billa), and Mallown 1946: Fig.11:6,10 (from Tell Jidle). At any rate, for some of these sites, careful consideration is needed in respect of deducing their attribution to Khabur Ware Period 3 or Khabur Ware Period 4.

53) See Oguchi 2001: Fig.8 on p.83, or see J. Oates 1970: Pl.IX:2 (or Postgate, Oates & Oates 1997: Pl.64:621 on p.179).

54) See Oguchi 2003: Fig.4:28 on p.95.

55) See also Oguchi 1998: n.3 on pp.119–120.

## Bibliography

- Akkermans, P.  
 1990 ‘Operation 3 on the Lower Town’, in H. Weiss, P. Akkermans, G.L. Stein, D. Parayre and R. Whiting, “1985 Excavations at Tell Leilan, Syria”, *American Journal of Archaeology* 94, pp.542–547.
- Akkermans, P. and Weiss, H.  
 1987–88 “Tell Leilan 1987 Operation 3: A Preliminary Report on the Lower Town Palace”, *Les Annales Archéologiques Arabes Syriennes* 37–38, pp.91–109.
- Dalley, S.  
 1976 “Chapter II: The Iltani Archive”, in S. Dalley, C.B.F. Walker and J.D. Hawkins, *The Old Babylonian Tablets from Tell al Rimah* (The British School of Archaeology in Iraq, London), pp.31–161.  
 1984 *Mari and Karana. Two Old Babylonian Cities*, Longman, London.
- Eidem, J.  
 1987–88 “Tell Leilan Tablets 1987 — A Preliminary Report”, *Les Annales Archéologiques Arabes Syriennes* 37–38, pp.110–127.  
 1991 “The Tell Leilan Archives 1987”, *Revue d’assyriologie et d’archéologie orientale* 85, pp.109–135.
- Faivre, X.  
 1992 ‘La céramique de Mohammed Diyab, 1990–1991’, in J.-M. Durand (ed.), “Tell Mohammed Diyab, Campagnes 1990 et 1991”, *Mémoires de N.A.B.U.* 2, pp.55–89.
- Frane, J.E.  
 1996 *The Tell Leilan Period I Habur Ware Assemblage* (Ph.D. Dissertation, University of North Carolina at Chapel Hill), UMI Dissertation Services, Bell & Howell Information Company, Ann Arbor, Michigan.
- Gates, M.-H.  
 1981 “Alalakh Levels VI and V: A Chronological Reassessment”, *Syro-Mesopotamian Studies* 4/2, pp.1–40 (= pp.11–50).
- Gesuato, M.K.  
 1993 “Pre-Islamic Pottery from Tell Jikan”, in G. Wilhelm and C. Zaccagnini (eds.), *Tell Karana 3. Tell Jikan. Tell Khirbet Salih* (Baghdader Forschungen, Band 15, Verlag Philipp von Zabern, Mainz am Rhein), pp.269–277.
- Hrouda, B.  
 1957 *Die bemalte Keramik des zweiten Jahrtausends in Nordmesopotamien und Nordsyrien* (Istanbulur Forschungen, Band 19), Verlag Gebr.Mann, Berlin.
- Kantor, H.J.  
 1958 “III. The Pottery”, in C.W. McEwan, L.S. Braidwood, H. Frankfort, H.G. Güterbock, H.J. Kantor and C.H. Kraeling, *Soundings at Tell Fakhariyah* (OIP LXXIX, Chicago), pp.21–41.
- Mallowan, M.E.L.  
 1946 “Excavations in the Baliḥ Valley, 1938”, *Iraq* 8, pp.111–159.  
 1947 “Excavations at Brak and Chagar Bazar”, *Iraq* 9, pp.1–259.
- Matsumoto, K and Yagi, K.  
 1987 ‘Tell Der Hall’, part of H. Fujii (ed.), “Working Report on [the] First Season of Japanese Archaeological Excavation in [the] Saddam Salvage Project”, in The State Organization of Antiquities and Heritage, Baghdad (ed.), *Research[sic] on the Antiquities of Saddam Dam Basin Salvage and Other Researches*, p.54 and pp.56–61.
- Oates, D., Oates, J. and McDonald, H.  
 2001 *Excavations at Tell Brak Vol.1: The Mitanni and Old Babylonian Periods*, McDonald Institute for Archaeological Research, University of Cambridge (Cambridge) & British School of Archaeology in Iraq (London).
- Oates, J.  
 1970 ‘The date of the Phase 2 building — the evidence of the pottery’, in D. Oates, “The Excavations at Tell al Rimah, 1968”, *Iraq* 32, pp.16–20.  
 1997 “Chapter 2. The Pottery”, in C. Postgate, D. Oates and J. Oates 1997, pp.51–59.
- Oguchi, H.  
 1997 “A Reassessment of the Distribution of Khabur Ware: An Approach from an Aspect of Its Main Phase”, *al-*

- Rāfidān* 18, pp.195–224.
- 1998 “Notes on Khabur Ware from Sites outside Its Main Distribution Zone”, *al-Rāfidān* 19, pp. 119–133.
- 2000 “The ‘Late’ Khabur Ware Problem Once Again”, *al-Rāfidān* 21, pp.103–126.
- 2001 “The Origins of Khabur Ware: A Tentative Note”, *al-Rāfidān* 22, pp.71–87.
- 2003 “20th Century B.C. North Mesopotamia: An Archaeological Dilemma”, *al-Rāfidān* 24, pp.83–100.
- Ohnuma, K. and Matsumoto, K.
- 1988 “Lithic Artifacts from Level 6 of Tell Der Hall, Eski-Mosul (Iraq): A Preliminary Report”, *al-Rāfidān* 9, pp.73–89.
- Pecorella, P.E.
- 1990 “The Italian Excavations at Tell Barri (Kahat), 1980–1985”, in S. Eichler, M. Wäfler and D. Warburton, *Tall al-Ḥamīdīya 2. Vorbericht 1985–1987*, with Symposium: Recent Excavations in the Upper Khabur Region, Berne, December 9–11, 1986 (Oribis Biblicus et Orientalis, Series Archaeologica 6, Universitätsverlag Freiburg Schweiz), pp.47–66.
- Postgate, C, Oates, D and Oates, J
- 1997 *The Excavations at Tell al Rimah: The Pottery* (Iraq Archaeological Reports 4), British School of Archaeology in Iraq, London/Aris and Phillips Ltd., Warminster.
- Pulhan, G.
- 2000 *On the Eve of the Dark Age: Qarni-Lim’s Palace at Tell Leilan* (Ph.D. Dissertation, Yale University), UMI Dissertation Services, Bell & Howell Information and Learning, ProQuest Company, Ann Arbor, Michigan.
- Reade, J.
- 2005 “The Ishtar Temple at Nineveh”, *Iraq* 67 Part 1, pp.347–390, republished also in 2005 in D. Collon and A. George (eds.), *Nineveh. Papers of the XLIXe Rencontre Assyriologique Internationale, London, 7–11 July 2003*, Volume 2 (British School of Archaeology in Iraq, London).
- Spanos, P.Z.
- 1990 “Ausgrabungen in Tall Ḥamad Āgha aṣ-Ṣaḡīr 1988”, *Mitteilungen der Deutschen Orient-Gesellschaft* 122, pp.89–123.
- Speiser, E.A.
- 1933 “The Pottery of Tell Billa”, *The Museum Journal* 23, pp.249–308.
- Stein, D.L.
- 1989 “A Reappraisal of the ‘Sauštatar Letter’ from Nuzi”, *Zeitschrift für Assyriologie* 79, pp.36–60.
- Thompson, R. Campbell and Hamilton, R.W.
- 1932 “The British Museum Excavations on the Temple of Ishtar at Nineveh, 1930–31”, *Liverpool Annals of Archaeology and Anthropology* 19: pp.55–116.
- Thompson, R. Campbell and Hutchinson, R.W.
- 1931 “The Site of the Palace of Ashurnasirpal at Nineveh, Excavated in 1929–30 on Behalf of the British Museum”, *Liverpool Annals of Archaeology and Anthropology* 18, pp.79–112.
- Veenhof, K.R.
- 1985 “Eponyms of the ‘Later Old Assyrian Period’ and Mari Chronology”, *Mari, Annales de Recherches Interdisciplinaires* 4, pp.191–218.
- Weiss, H.
- 1985a “Tell Leilan on the Habur Plains of Syria”, *Biblical Archaeologist* 48, pp.6–34.
- 1985b “Tell Leilan and Shubat Enlil”, *Mari, Annales de Recherches Interdisciplinaires* 4, pp.269–292.
- 1994 ‘Leilan’, in H. Weiss, “Archaeology in Syria”, *American Journal of Archaeology* 98, pp.125–127.
- Whiting, R.M.
- 1990 ‘The Leilan Tablets: A Preliminary Report’, in H. Weiss, P. Akkermans, G.L. Stein, D. Parayre and R. Whiting, “1985 Excavations at Tell Leilan, Syria”, *American Journal of Archaeology* 94, pp.568–579.
- Woolley, C.L.
- 1955 *Alalakh. An Account of the Excavations at Tell Atchana in the Hatay, 1937–1949* (Reports of the Research Committee of the Society of Antiquaries of London, No.XVIII), Oxford University Press, Oxford.