Summary report on excavations at Tell Khaiber, an administrative centre of the Sealand period, 2013-2017

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Abstract

Excavations at Tell Khaiber by the Ur Region Archaeological Project have revealed a substantial building (hereafter the Public Building) dating to the mid-second millennium BC. The results are significant for several reasons: they shed light on Babylonian provincial administration; they reveal a previously unknown type of fortified monumental building; and they produced a provenanced, dated archive of the little-understood Sealand Dynasty. Here we give a summary of the main results, including the architecture and the material culture. There are also comments on the historical background, and a discussion of the form and function of the Public Building.

Elements of this article appeared in a preliminary report on the first three seasons of excavations, published in Iraq 78, 2017.[1] Here we report on the completed project, so some of our provisional conclusions as stated there have altered. A complete final publication is in preparation.

Historical background

The loss of control of southern Babylonia by the First Dynasty of Babylon, and the story of the Sealand kings, form an obscure episode of Mesopotamian history. The chronology is complex[2] and it is impossible to disentangle the political circumstances fully.[3] Periodic collapse of central states is a recurrent theme in Mesopotamia, and indeed in many other early complex societies,[4] but the specific narratives are hard to understand. In the case of the First Dynasty of Babylon, there are certainly external pressures from Kassites and Hittites, but internal stress and systemic failings should be examined too. Environmental degradation has also been proposed as a factor. However, collapse of societies is often incomplete, so the narrative of grand politics simplifies and overlooks the detail of the social impact. The trajectories of individual regions and local communities may vary considerably, and they may include resistance as well as successful adaptation to more general collapse. All this requires a much more nuanced approach than simply following the rise and fall of centralising dynasties.

Since 1977 it has been believed that the major urban centres of southern Babylonia were abandoned after central control by the Babylonian kings collapsed.[5] Then in 2009, 474 unprovenanced tablets from the Sealand Dynasty were published by Stephanie Dalley, who argued

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[1] Campbell, Moon, Killick, Calderbank, Robson, Shepperson and Slater 2017.

[2] Gasche et al 1998; Charpin 2004, Roaf 2012. We do not address the complex and unresolved matter of second millennium chronology here. All dates in this report follow the Middle Chronology, which dates the fall of Babylon to ca. 1600 BC.

[3] van Koppen 2010.

[4] Yoffee and Cowgill 1988; McAnany and Yoffee 2010.

that these texts show continuity of elite residences and cult centres at many of the traditional urban centres of southern Mesopotamia.[6] At the same time, there has been a long hiatus in field archaeology in southern Iraq. Iraqi archaeologists have conducted some notable excavations, struggling against a background of extensive looting and site destruction, but the input of international archaeological projects has been disrupted since the 1980s. In 2012 international cooperation became possible again, and five seasons of excavations were carried out from 2013 through 2017 by the Ur Region Archaeology Project.[7]

Tell Khaiber

Tell Khaiber is in Thi Qar Province, thirteen kilometres west of Nasiriyah. It is approximately 19 kilometres north-west of Ur, and 25 kilometres south of Larsa (Fig. 1). The toponym 'Tell Khaiber' in fact applies to two separate mounds, both part of the same archaeological landscape.[8] The two sites are of similar size, both approximately c.300 x 250 metres in extent. The focus of our excavation is the mound generally known simply as Tell Khaiber, where the main period of extant occupation dates to the Sealand Dynasty. The other mound (Tell Khaiber 2) lies about one kilometre to the north-west and is not contemporary: it dates to the Kassite period. It has been the subject of very limited investigation consisting of surface mapping and three soundings.[9]

The Khaiber mounds are situated close to an old branch of the Euphrates that runs to the south-west of its present course (Fig. 2). This branch forms part of the Ur channels of the Euphrates that, together with the Eridu channel which took off from the river further west, supported the extensive settlement of this area during the Old Babylonian period.[10] It would appear that the river continued in the same course in the later second millennium. Two parallel relict canals, probably taking off from the Euphrates to the north of the Khaiber mounds, are visible on the ground (marked with dotted white lines on Fig. 2).[11] They run between the low mounds of Tell Khaiber 2, immediately adjacent to a large building visible in satellite images, and then continue past the northern edge of

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[5] Stone 1977; Gasche 1989; more recently e.g., Van De Mieroop 2015: 123.

[6] Dalley 2009: 5-9.

[7] We are grateful to our colleagues and staff at the State Board for Antiquities and Heritage, Iraq, for their invaluable co-operation and assistance. For financial support we acknowledge above all the generosity of Baron Lorne Thyssen-Bornemisza at The Augustus Foundation. Other supporters included the British Institute for the Study of Iraq, the Gerald Averay Wainwright Fund for Near Eastern Archaeology, the British Embasssy, Iraq; DigitalGlobe Foundation; Gulfsands Petroleum Ltd; SKA International Group Unity Resources Group and Pilgrims Group.

[8] As the mounds have been given multiple and sometimes contradictory names in the recent past, the project has adopted the simple designations 'Tell Khaiber' and 'Tell Khaiber 2'. Both mounds were first documented by Henry Wright in the Eridu-Ur regional survey in 1965–6 (Wright 1981), in which Tell Khaiber is site 60, named Ishan Khaiber, while Tell Khaiber 2 is site 61, named Tell Gurra. In the *Atlas of the Archaeological Sites of Iraq*, Directorate General of Antiquities, Ministry of Information, Iraq 1976, both sites are called Ishan Khaiber (Map 73: Site 108 Ishan Khaiber = Tell Khaiber; Site 107 Ishan Khaiber = Tell Khaiber 2).

[9] Campbell, Calderbank, Killick and Moon 2017.

[10] Wright 1981: 330; Pournelle 2003: fig. 26.

[11] Two clearly distinct canal lines are visible at Tell Khaiber 2, each 15–20 metres wide and running adjacent to each other: they are presumably successive recuts of the same canal.

Tell Khaiber before heading south-west towards Ur. While the direct dating of the canal remains to be confirmed, one sounding at Tell Khaiber 2 suggested that it was cut from the same surface that has occupation associated with Kassite pottery and the upcast from its fill also contained characteristic Kassite ceramics. Our current hypothesis is that the same canal system served both settlements and remained in use throughout the Sealand Dynasty and the succeeding period.

Our investigations focussed on the layers dating to the mid-second millennium BC. There is in fact clear evidence of earlier occupation at the site. The earliest material is a handful of painted sherds, which are Ubaid 3–4 in date. There are small quantities of Jemdet Nasr (and possibly also Late Uruk) ceramics. For the third millennium, there is a substantial corpus of Early Dynastic I pottery from the surface of the mound and from fill of the Public Building.[12] A row of low humps to its north-west, with high concentrations of slag, indicates an industrial area. Investigation here in 2017 confirmed these structure as Early Dynastic I in date.

Geophysical prospection revealed possible buildings some [x] metres to the south of the PB. Limited excavation confirmed that these were also of Early Dynastic I date. It is clear that there was a substantial occupation of this period, much of it levelled off when the second millennium PB was constructed.

 A small hint of Ur III activity is shown by fragments of three baked bricks with inscriptions of Amar-Suen (see below xxx). As there is no pottery or other material of the Ur III period anywhere on the site, it seems likely that these bricks were brought from elsewhere at some point in antiquity.

Material from periods later than the Public Building is very scant. The only structure is a square, baked brick one on the south-eastern slope of the mound. It was investigated in 2017 and seemed to be a robbed grave, of uncertain date. Scraping at and just beyond the north-east limit of the Public Building produced a few Kassite period sherds, surviving only in tiny humps at the surface.

Our main investigation was the Public Building at Tell Khaiber, which occupies a substantial part of the north-east of the site (Fig. 3). We also excavated a small cluster of approximately contemporary buildings to its south. These are separated by what may have been an open area, and probably representing domestic houses.

The Public Building
The Public Building was originally built as a single rectangular block approximately 53 × 27.5 metres, with an external wall 3.3 metres wide and a single narrow entrance on the north-eastern side. On the corners of this block, and arranged at regular intervals along all four external sides, are projecting towers. These are integral to the earliest phase of the building: excavation against the external face of the main wall on the north-west side showed that both the main wall and the walls of the towers were built on the same surface. The construction horizon was also reached in the SW and SE corners of the central courtyard (Area 315) where the courtyard walls and the main wall all sat above a levelling deposit of compacted grey clay at least 20 cm thick.

The internal arrangement of the building at this time is only partially known. The main element in the southern corner is a series of six parallel vaults up to 1 m high almost 12 m long running from the main wall as far as the central courtyard. These cover an area of 148 sq m. Arches integral to the

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[12] The pre-second millennium pottery is treated in Calderbank and Moon 2016.

internal courtyard wall show that the vaults were open on this side and they supported either an above-ground floor or a superstructure: we do not know which, as the vaults were subsequently cut down and filled in. The original floor of the courtyard was a plastered surface that ran up to the bottom of the courtyard wall and spilled over into the voids under the arches. The vaults were confined to this part of the building and were not duplicated on the western side. The Level 1 wall demarcating the western boundary of the courtyard was partially exposed in excavation and no arches indicating vaults were present. To the south the courtyard extended all the way to the main wall. External tower 302 had a brick pavement floor which extended under the walls of the room, with occupation material above the floor. This suggests that from the beginning there was access into the interior of the towers, probably from above, since in no case were we able to identify any door associated with the construction level of these towers, neither in scraping, nor in excavation. The vaults were then demolished and the area divided up into administrative rooms in which many tablets were found. A large room (Area 314) was also inserted along the southern edge of the courtyard. Perhaps at the same time the building was enlarged substantially to the north-east, giving it overall dimensions of 53 × 83 metres. The secondary nature of this addition is clearly illustrated by the brickwork abutting the external room on the eastern corner of the original building. Where the bottoms of the walls of the new building were reached they were of comparable level to that of the original building and even in one case some 30 cm lower. This suggests that this enlargement of the building took place before any major phase of levelling and rebuilding of the original structure. On the southeast side, thick horizontal plaster layers associated the construction extended 9m away from the main wall before being truncated by a deep trench. The new building mimicked many of the features of the old, including the arrangement of a massive perimeter wall and external towers with brick floors and matching shallow internal buttresses. The plan of the northern extension was recovered mainly through surface scraping. However, wherever we have excavated, the main divisions of the plan produced by the surface scraping reflect the original foundation, in particular the arrangement of a central corridor leading through into the southern block and two parallel corridors, blocks of single rooms against the long sides of the unit, and wider blocks either side of the central corridor.

Private Houses

Satellite images of Tell Khaiber clearly show one or more buildings lying some 40 metres south-east of the Public Building, arranged on the same south-west to north-east alignment. Approximately 300 square metres of the mound surface were therefore scraped in this area, and elements of three separate buildings recovered (Private Houses 1 to 3; Fig. 6). Preservation of the walls on this low-lying part of the site is generally poor, so many of the walls stood only a few centimetres high, and doorways were problematic, either because the extant walls were not above threshold height or because of subsequent rebuilding. Nevertheless, the houses provide us with a different type of context through which to appraise life at Tell Khaiber in the mid-second millennium BC. The alignment of the houses suggests that there are two separate building phases, with Houses 1 and 2 pre-dating House 3.

House 1 is a free-standing building with four rooms, covering about 53 sq m. A narrow alleyway on the north-eastern side separates it from House 2. To the north-west is an open space, while sections of walling found close to the edge of the excavated area suggest that adjacent buildings are present

on the other two sides. Two rooms (Areas 403 and 412) were empty of any installations. In the south-eastern room (Area 405) there was a *tannur* in the eastern corner, and a freestanding bench of mud-brick in the southern part of the room. There was also a bench against the wall in Area 404.

House 2 as extant comprises three or possibly four rooms. As in House 1, the walls were not well-preserved, standing in places less than ten centimetres high. Its relationship to House 3 to the north is also unclear. The latter was well defined only on its western edge. It has at least four rooms (Areas 406, 413, 414, and 416) which cover approximately 97 square metres. Excavation was limited to one room (Area 414) so most of the plan is known only from the surface scraping.

The Archive
(Eleanor Robson)

Altogether one hundred and fifty-two inscribed tablets and fragments were found, after joins were taken into account, as well as numerous pieces of uninscribed tablet. Study of the inscribed material is ongoing. A selection was included in the preliminary report. The main results will be brought up to date and summarized here. Preliminary open-access text editions, photos and glossaries of all inscribed objects are available online at http://build-oracc.museum.upenn.edu/urap, where comments and contributions are welcome.

The tablets
The tablets almost all come from four rooms in the Public Building: Areas 300, 305, 309, and 311. Around eighty, mostly lists, accounts, and school texts, came from Areas 300 and 305, while the remainder, mostly letters and letter-orders, were found in Rooms 309 and 311. Each pair, 300/305 and 309/311, was originally one room that was later divided. Four tablets were found underneath the dividing wall of 300/305 and five under the wall separating 309 and 311, so we know these areas were for scribal use even before the division took place. Area 300/305 was clearly an archive room, as tablets were found in distinct clusters along the north-east and south-east walls of the room, apparently the remnants of a once well organised storage system. Although the doorway to Area 300 was not recovered, it is clear that it had no direct access to the courtyard, Area 315. It was therefore probably primarily used for the storage and manufacture of tablets and tablet clay rather than for their inscription. The room features a large round clay bin in the centre of the floor, measuring approx. 75 cm in diameter and 15 cm high. This was probably used to soak redundant tablets and re-model them into new ones.[13] Although the bin was empty when excavated, several small tablets and fragments were scattered on the floor around it, as if overlooked during the final cleaning process.[14] The majority of the Tell Khaiber tablets document the administration of grain and agricultural personnel in the Akkadian language, but a dozen or more fragments, mostly from the eastern corner of Area 300, represent the remnants of an elementary scribal training in Sumerian.

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13 On tablet recycling facilities, in both domestic scribal settings and institutional buildings, see Faivre 1995; Tanret 2002: 4–8; Robson 2008: 237. For further preliminary analysis of the archive, see Robson 2019.

14 Tablets found around the recycling bin: 3064:18, 3064:101, 3080:1–5.

The administrative tablets from Areas 300/305 are mostly unilateral records, storing information, rather than bilateral ones, being transactions between two parties.[15] We can divide them into three distinct types:[16]

- *Memoranda*: these are ephemeral notes for an informal record of one or more pieces of information. They are usually in the form of a prose narrative but sometimes a list, with horizontal rulings dividing the sections but no headings. They are all inscribed in landscape format (i.e., parallel to the long edge of the tablet) and most are dated to the month and day, one also to the year (see further below).[17]

- *Numerical lists*: in this archive, these are all two-column enumerations of workers, perhaps collated from memoranda or perhaps written as a primary document.[18] They may be in portrait, landscape or round format, apparently chosen according to the length of the list. Some were originally ruled in portrait format then rotated and written along the long side, with pointed stylus holes used to fill in the blank cells on the centre of the tablet.[19] Most concern small quantities of grain, typically specified as HAR.GAL.Ú(.MEŠ) *hargallû* or as ŠE(.GUR) ŠU.TI.A ENSÍ(.MEŠ) 'grain received (from) the farmers (*iššiakkū*)' in the cases where headings survive. A minority tally (usually) small numbers of unspecified commodities (or personnel) against each individual, either without formal headings or marked as *ma-hi-ir* 'received'.[20] No list is totalled, and none attributed to a named scribe or functionary. A few are dated to the month and day, one also to the year.[21]

- *Tabular accounts*: at Tell Khaiber, these typically tally expected quantities of incoming barley with the amounts that were actually received, using three quantitative columns followed by the name of the worker concerned. All accounts seem to have been written in portrait format, with headings, so far as the surviving tablets suggest. In most cases, the deficit (*muṭû(m)*, written LÁL.Ì) is recorded as paid off (Ì.SÁ, probably a writing for *išaru(m)*, lit. 'straight, proper').[22] As with the lists, there are no summations or attributions of accountability at the end of the document, though at least some (perhaps originally all?) were dated to the month and day, perhaps also to the year.[23]

The documents from Areas 309/311, by contrast, are primarily bilateral, recording transactions or communications between two or more members of the internal administration:

- *Letters*: five short letters, all written on landscape orientation tablets, are addressed to one or other of the two scribes of the archive, Atanah-ili and Mayašu. They open with the classic Old Babylonian greetings formula, e.g., [*a*]-*na a-ta-na-ah-ì-*[*lí*] / *qí-bí-ma* / *um-ma* DUMU-

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15 Postgate 2014: 414.

16 Postgate 2014: 414–7; Robson 2004: 116.

17 Memoranda: 3006:17, 3064:73, 3064:76, 3064:94, 3080:1–3, 3080:5.

18 Cf. Postgate 2014: 79–80.

19 E.g., 3064:67, 3064:72.

20 Cf. Rositani 2011: no. 79, a numerical list of the number of harvesters provided by each of eight *iššiakku*-farmers, probably from about Hammurabi year 40.

21 Numerical lists include: 1096:25, 3006:2, 3064:13, 3064:48–9, 3064:52–3, 3064:57, 3064:65, 3064:67, 3064:72, 3064:74, 3064:83, 3064:101, 3080:4, 3080:6.

22 Correcting Dalley 2009: 225, 239, 241, 247, 249, 258, 269, 271 who reads GÚ for LÁL.Ì and *ni-di* for Ì.SÁ without translation or commentary.

23 Tabular accounts include: 1096:26, 3064:12, 3064:15, 3064:18, 3064:26, 3064:33, 3064:51, 3064:89.

20.ᴋᴀᴍ / *a-hu-ka-ma*, 'Speak to Atanah-ili, thus Mar-ešra, your brother', and give either information or orders. The letters are undated.[24]

• *Payment orders:* sixteen tiny, landscape orientation tablets contain highly formulaic orders to pay members of the local workforce in either grain or silver or both. They rarely give the name of the authorising official and are dated to the month and day but not the year.[25]

In addition there are several fragments of administrative documents, inscribed either with capacity measures or with personal names, which are not complete enough to identify as either numerical lists or tabular accounts but must be one or the other.[26]

The documents are very similar in their format, content, terminology, ductus, and orthography to a subset of the Sealand Dynasty tablets from the Schøyen Collection published by Dalley (2009; 2010).[27] While that corpus does not appear to contain any memoranda, her 'allocations of *hargalû*-grain/flour' and 'personnel lists' map onto the Tell Khaiber numerical lists, while many of her 'ledgers' are similar to our tabular accounts (though on a much wider range of subjects). In particular the scribal habit of marking empty cells in a table with the pointed end of a stylus is shared by both groups of tablets.[28] Further, the four legible year names in our corpus read (in Sumerian), mu a-a-dara₃-galam-ma lugal-e 'Year: Aya-dara-galama became king', as also found on five of the Schøyen tablets (Fig. 7).[29]

According to later cuneiform tradition Aya-dara-galama was the eighth king of the Sealand Dynasty, which conquered southern Babylonia from Samsu-iluna.[30] Van Koppen's useful summary of the evidence implies that Aya-dara-galama was probably a contemporary of Samsu-ditana, the last king of Babylon, or Agum-kakrime, its first Kassite ruler, or perhaps his successor Burna-buriaš I.[31] Depending on one's allegiance to Middle, Low-Middle, Low or Ultra-Low chronology, that dates the Tell Khaiber archive to somewhere between c.1620 and c.1480 BC.

Finally, the archive room Area 300 has so far yielded some twenty fragments of tablets bearing elementary scribal exercises .[32] Their discovery was a complete surprise, given that almost all the known assemblages of Old and Middle Babylonian school tablets that have an archaeological context are from urban domestic settings.[33] Unlike the administrative tablets, many of which survive more or less intact, all but one of these had clearly been deliberately ripped up ready for recycling,

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24 ▯Letters: 1096:52, 1114:1, 1114:6, 1114:45, 3064:93.

25 ▯ Payment orders: 1114:7, 10, 11, 13, 16, 18, 21, 22, 25, 27, 29–34, 38, 39, 41, 43, 44, 49, 51, 52.

26 ▯Administrative fragments include: 1096:24, 1096:27, 3006:1, 3006:9, 3064:20, 3064:62–4, 3064:71, 3064:98, 3064:107–8, 3064:116, 3080:25.

27 ▯However, the tablets are not from Tell Khaiber, which shows no signs of looting.

28 ▯E.g. Dalley 2009: pls. CLXXVII no. 64, CLXXIX no. 375, CLXXXI nos. 371–5, 389, 394; 3064:67, 3064:72. But note too the same feature on two unprovenanced numerical lists from the as yet unlocalised Dur-Abi-ešuh (thought to be on the edge of the Tigridian marshes), both dated to Samsu-ditana 2 (Lerberghe and Voet 2009: nos. 59, 62).

29 ▯ Dalley 2009: 11 year name D; 3006:17; 3064:67, 3064:129, 3064:135.

30 ▯See Charpin 2004: 342–6, 360–1 for a detailed presentation of the evidence for Samsu-iluna's loss of control over the south, first in his 8th–11th regnal years and with further losses around his 30th.

31 ▯van Koppen 2010: 546–7, 462.

32 ▯From the northern corner of Area 300: 3064:14, 3064:97; from along the north-eastern wall: 3064:88; from the eastern corner: 3064:79, 3064:82, 3064:84, 3080:7, 3080:9–21; from the south-west area: 3064:106

33 ▯For convenient overviews and references to further literature, see Robson 2008: 94 (Old Babylonian); Veldhuis 2014: 242, 281, 297 (Middle Babylonian).

perhaps immediately after production. The fact that the great majority were found in the eastern corner of the archive room, slightly below the level of most of the administrative tablets, suggest that they had been emptied out of the tablet recycling bin and dumped in a corner, either prior to the laying of a new floor[34] or before the stored administrative tablets collapsed on top.

One tablet carries a very basic exercise in writing the elements of cuneiform script (Fig. 8). The eight further exercises that have been identified to date are all extracts from the thematic word list Ur$_5$-ra, a mainstay of elementary scribal education, which underwent substantial expansion over its long history.[35] The loosely standardised version used in eighteenth-century Nippur comprised around 3600 entries in monolingual Sumerian, formally divided into six chapters, but it had at least doubled in length and acquired optional Akkadian translations by Kassite times.[36] The Tell Khaiber fragments, not surprisingly, represent an intermediate phase in the development of Ura: they are all monolingual, they expand on the Old Babylonian version(s), and, like Kassite exercises, they often omit the first sign of a word if it is identical to the preceding entry.[37] Most of the fragments are from the chapters of Ura about metals and about stones; one is a list of wild animals and another may be from the chapter on leather objects. Together they are drawn from chapters 2–4 of the OB Nippur version, chapters 7, 9 and 10 of the Middle Babylonian recension.

Economy and society as seen through the archive

Even from these generic descriptions it is clear that the archive represents the output of an administration with a relatively light touch. When compared to agricultural documentation from other second-millennium sites, such as late Old Babylonian Sippar, Kassite Nippur, Middle Assyrian Dur-katlimmu and Tell Sabi Abyad, its laconic nature is even more striking.[38] The Tell Khaiber scribes, so far as we know, did not keep records of labour contracts (if any were ever written),[39] record field sizes, monitor agricultural activity throughout the year,[40] or account for seed grain, draft animals or field equipment such as ploughs or sickles. Of course, it is always possible that such documents were stored elsewhere, written on perishable media, and/or shipped elsewhere with the grain.[41] However, the tablets that do survive suggest that this was a small scale, relatively unhierarchical operation in which much was left undocumented. For instance, it was not always necessary to document whether grain was being paid out or coming in, as this was also apparently self-evident. As a first approximation, it seems reasonable to assume that the lists record outgoings, which did not need to be reconciled, while the accounts show actual income tallied against expected receipts. But no credits or debits are ever totalled, or compared against one another. Likewise, there appears to be no formal apparatus of accountability on the documents, such as sealings, or the names and titles of responsible officials or institutional authorities.

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34 A similar deposit of fragmentary school tablets is known from Level III of the *āšipus'* house (Ue XVIII/1) in late fourth-century Uruk: see Robson 2008: 227–8 & n35, 237–8.

35 Writing exercise: TK 1 3064:14; Ura: 3064:82, 3064:84, 3064:88, 3080:9, 3080:13–15, 3080:19.

36 Veldhuis 2014: 149–57, 228–9.

37 Cf. Veldhuis 2014: 250–2.

38 Rositani 2011 (late Old Babylonian Sippar); Sassmannshausen 2001: 103–9 (Kassite Nippur); Wiggermann 2000 (Middle Assyrian Tell Sabi Abyad); Postgate 2014: 313–25 (Midde Assyrian Dur-katlimmu).

39 See, for example, the harvest contracts from (mostly late) Old Babylonian Sippar published by Rositani 2011: nos. 1–78, which are closely contemporary with the Tell Khaiber tablets.

40 An accessible overview of these tasks is given by Mauer 1983.

41 Cf. the notes in alphabetic scripts on some of the tablets published by Dalley 2009: XXX.

The letters are between social equals—'brothers'—which also gives the impression of an informal, transparent community. Nevertheless it is possible to detect some formal chain of command, beyond the very fact that the tablets needed to be written at all. One tablet records the names of three ÉRIN.MEŠ *ša sa-ar-ta i-pu-šu*, 'workers who have behaved dishonestly', presumably in readiness for future punishment.[42] Amongst the recipients of grain and flour are three named scribes, DUB.SAR, including Atanah-ili, the recipient of the letter quoted briefly above. The fact that his correspondent Mar-ešra can give a scribe orders, and seemingly write a short letter in his own hand, suggests that he is, at least to some extent, in charge.[43] At least two different men by that name are attested in the archive, often on the same tablets: a date-palm gardener (NU.GIŠ.KIRI₆, three attestations), the son of Iluni (four attestations), and/or an Mar-ešra who is not further described (four attestations).

And then there are the dozen or so ENSÍs, *iššiakku(m)*-farmers, who are clearly a profession apart. They always appear as a group of ten (10⁻ᵗⁱ, *ešertu* 'decury'), either as the subject of their own documents or listed quite separately from the other men, either on the reverse of a tablet or at least separated from them by empty lines.[44] Given the laconic nature of the documentation, it is not yet possible to tell whether they are landowners paying tax, tenants paying rent, or state dependents working for rations. All three statuses have been proposed for second-millennium farmers.[45] If they had any superior to whom they reported, that person is never named. Certainly, on the evidence deciphered to date, they were much less closely managed than their counterparts elsewhere.

Nevertheless, it is now clear the farmers were not the top of the hierarchy. The headings on ten different tablets—from tiny memos to large accounts, all frustratingly fragmentary—each state that they record deliveries 'to the palace'.[46] The archive makes frequent mention of *ešertus* of ERÍN.TAH É.GAL, 'royal auxiliary troops', always receiving but never delivering grain.[47] Perhaps they were guarding the building. In addition, a few lists and accounts record grain deliveries and receipts from, or to, four or five GÉME É.GAL 'palace slave-women', often accompanied by their tailor.[48] Despite the term 'slave-woman' these individuals appear to have a similar high status to the ten male farmers. One memorandum also refers to grain measured 'by the royal measure'.[49]

The palace, then, was the ultimate authority. Whether it meant a particular building or a person representing the royal court we do not know, but in some ways it does not matter. It almost certainly does not mean the administrative building at Tell Khaiber, as there is nothing about its structure or contents to suggest that anyone even remotely wealthy or high status ever lived there. It does mean, however, that we need to understand the Tell Khaiber archive not as a closed system but as a rural node in a much larger network of palatial information flow.

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42 1096:25.

43 See http://oracc.org/urap/qpn-x-people for a current glossary of personal names from the archive. A full discussion of them will be given in a later publication.

44 Tablets mentioning the farmers, by name or as a cohort: 3064:33, 3064:48–9, 3064:53, 3064:57, 3064:67, 3064:72, 3064:83, 3064:94, 3064:101, 3064:107, 3080:2.

45 Cf. Rositani 2011: 28 (late Old Babylonian Sippar); Sassmannshausen 2001: 103–5 (Kassite Nippur); Wiggermann 2000: 188–90 (Middle Assyrian Tell Sabi Abyad); Postgate 2014: 313–8 (Middle Assyrian Dur-katlimmu). The Assyrian term for 'farmer' is *ekkāru*, ˡúENGAR.

46 1096:26; 1114.4, 1114.48; 1124.1, 1124:4; 3064:63, 3064:76, 3064:89, 3064:107; 3080:2.

47 1096:48; 1114:17, 1114:40; 1124:3; 3064:33, 3064:49, 3064:53, 3064:76, 3064:123, 3064:135; 3111:01.

48 1114:48; 1124:1, 1124:4, 1124:5; 3064:128.

49 3080:3.

Around 150 further individuals are named in the archive, many more than once. Some are identified by patronym, some by occupation, and others seem to require no further explanation. In some lists men are grouped by profession, and/or assigned to a 10^{-ti}, *ešertu* 'decury' or group of ten.[50] In the former case, the occupation of the first man is given and those following are described as TAB.A.NI, *tappašu* 'his partner'. In the latter case, the ten men PN1–PN10 may be identified by patronym or profession, followed by a summary line stating, 'decury of PN1'. The term *rab ešerti*, 'decury leader', is not used. Professions identified so far include:[51]

- *aškāpu(m)*, written AŠGAB, 'leather-worker'
- *ašlāku(m)*, written ^{lú}ÁZLAG, 'washerman'
- *atkuppu(m)*, written AD.KID, 'reed-worker'
- *bāʾeru(m)*, written ŠU.KU₆, 'fisherman'
- *hazannu(m)*, written syllabically, 'mayor'
- *huppû(m)*, written HÚB, a cultic dancer and/or weaver
- *iššiakku(m)*, written ENSÍ, 'farmer'
- *kabšarru(m)*, written KAB.ŠAR, 'stone-carver'
- *malāhu(m)*, written MÁ.LAH₄, 'boatman'
- *mukabbû(m)*, written ^{lú}TÚG.KAL.KAL.LA, 'tailor'
- *nagāru(m)*, written NAGAR, 'carpenter'
- *nāgiru(m)*, written *na-gi-rum*, 'herald'
- *nappāhu(m)*, written SIMUG, 'smith'
- *nāru(m)*, written NAR, 'musician'
- *neʾrār ēkalli(m)*, written ÉRIN.TAH É.GAL, 'royal auxiliary troops'
- *nuhatimmu(m)*, written MUHALDIM, 'cook'
- *nukaribbu(m)*, written NU.GIŠ.KIRI₆, 'date-palm gardener'
- *purkullu(m)*, written BUR.GUL, 'seal-cutter'
- *rēʾû(m)*, written SIPA, 'shepherd'
- *sasinnu(m)*, written ZADIM, 'bow-maker'
- *sīrāšû(m)*, written ^{lú}LUNGA, 'brewer'
- *ṣābū*, written ERÉN.MEŠ, 'labourers'
- *ṣāhitu(m)*, written Ì.ŠUR, 'oil-presser'
- *šangû*, written SANGA, 'priest'
- *ṭupšarru(m)*, written DUB.SAR, 'scribe'
- *usandû*, written MUŠEN.DÙ, 'bird-catcher'

In general these titles give the impression of a dispersed, mostly rural community who are pressed into agricultural service at harvest time, whether through a formal obligation such as *ilku(m)*-duty, moral pressure to serve the community, or the incentive of payment. We have not yet found any

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50 Professional groupings and decuries: 3064:33, 3064:49, 3064:53; professional groupings only(?):3064:48, 3064:57, 3064:107 (fragment), 3080:2 (note); decuries only(?): 3006:2 (fragment).

51 See the Akkadian glossary at http://oracc.org/urap/akk-x-oldbab/ for further details.

documentation of specialist agricultural occupations such as ploughmen or oxen-drivers.

Some of the harvest must have been stored locally, because there are two surviving accounts of ŠE LIBIR, 'old barley' from a previous year.[52] Ultimately, however, much of it was destined 'for the palace' *a-na* É.GAL, as documented on at least half a dozen tablets.[53]

Other cuneiform items

Three fragments of baked brick bear the stamped standard short inscription of the Ur III king Amar-Suen, known from many dozens of exemplars. Pieces of baked brick occur occasionally in excavation and in surface clearance, but not in the quantities one might expect, given their relative indestructability, if a building of royal patronage were represented, and we assume for now that they may originate elsewhere.

A headless fragmentary clay figurine of a seated animal has inscribed on its flank:[54]

A.ZU GAL ᵈGU. ⌜LA⌝ [...]	Great healer (of) the goddess Gula [...]
mu-bal-li-⌜iṭ⌝ [...]	reviver [...]
KUR GAL [...]	great land/mountain [...]

The symbol of Gula is a dog, and the figurine might be of one, although the paws, which survive, are more lion-like. It was found in surface clearance over the Public Building, and may belong to an eroded level of it.

Artefacts

The assemblage of objects and artefacts found in the Tell Khaiber Public Building and the nearby Private Houses conforms to that usually labelled 'Old Babylonian'.[55] Dating it specifically to the time of the Sealand kings would not be possible without the chronology supplied by the tablets. The most useful question we can ask of the material assemblage is 'How does it reflect or augment what we know about life in and around the Public Building from the textual information?'

Clay plaques are the most easily recognized 'Old Babylonian' artefact type from the excavations. Four complete ones were found, six more incomplete, and three further fragments, two probably from the same badly worn plaque. All depict a single human figure (Fig. 9). One is a male worshipper in a fringed cloak (Fig. 9a), one a naked female offering her breasts (Fig. 9d), and no less than five, actually cast from the same mould, depict a clothed female in a flounced dress and head-dress, with clasped hands (Fig. 9b-c). There was also a broken off female head.[56] They have no special associated context, as they were found in various places in and around the Public Building,

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52 ⸍Accounts of old barley: 1096:26, 3064:51.

53 ⸍Tablets mentioning deliveries 'to the palace': 1096:26, 3064:63, 3064:76, 3064:89, 3064:107, 3080:2.

54 ⸍1005:18

55⸍The British system of single-context numbering is used at Tell Khaiber. All numbers assigned to artefacts comprise a four-digit number denoting the context it was found in, followed by a number that designates that individual artefact. Certain finds (selected by the SBAH) are assigned an additional identification, beginning TK1 and followed by a number. These can include more than one object.

56⸍3064:06, from debris in Area 300, the room with most of the tablets.

and their find-spots were of course where they were discarded, not necessarily where they were used.

All the plaques are made in a mould, from lightly baked clay. They are crude, sometimes from a worn mould, and the clay is not fine or well-prepared. This is typical of the similar plaques that are attested from at least the Ur III to the Neo-Babylonian period, all over Mesopotamia.[57] There is an extensive repertoire of themes, including animals, double figures, gods and goddesses, musicians, demon masks and erotic scenes, but none of these were found at Tell Khaiber, which only produce single human figures. Much is written about these strangely compelling little artefacts: they feature in studies on religion, gender and sociology. It is reasonable to assume that the very portable nature of plaques means they were most probably for some kind of personal use, and the cheap and careless manufacture suggests they were not expensive to obtain.

The male worshipper and the clothed female have close parallels at Ur,[58] and, while there are many plaques with a single naked female facing front with her hands in front of her, she is generally slim, with a defined waist, hair in coils on her shoulders, and her hands clasped.[59] Our generously-built lady, with flowing, plaited hairstyle and hands cupping her breasts, is not so common. However, there is a similar one published from Larsa, albeit not closely provenanced.[60]

For the use of seals and sealings we have rather sparse evidence. No sealings with seal impressions were found at all, although there was a small number of what appeared to be unimpressed tags or sealings, of clay and bitumen. Negative evidence should not, of course be relied upon, and clay sealings can be very hard to spot. However, the majority of deposits were dry-sieved at Tell Khaiber, so we are fairly confident that the absence is a real one. We conclude that this was not a hub of commerce, nor a place to which goods were sent sealed for security or identity. Four cylinder seals were found. One, of stone, is of an early third millennium geometric style (Fig. 10a). Another stone one shows a worn presentation scene, and the other two were clay, one too worn to say much about. The best preserved one was of a style compatible with the date of the Public Building (Fig. 10b). It was found in occupation debris in Area 302. It is crudely made, of lightly baked clay, with a simple presentation scene, across which a flock of goats and a long-tailed bird are walking. Most cylinder seals in museums, collection or publication are beautifully carved stone examples, often unprovenanced. But as Al-Gailani Werr has pointed out, clay seals are in fact very widely attested, especially in the Old Babylonian period, and have the same subjects and styles as their more expensive stone cousins. Poorly-drawn presentation scenes like ours, with animals in casual attendance, can be seen on clay seals from Ur, Girsu, Khafajah, Susa and Ishchali.[61]

Almost all the metal artefacts and fragments found at Tell Khaiber to date are, as one would expect, of copper alloy, and verified by a systematic programme of metal analysis using pXRF.[62] There are generally low levels of tin in almost all the copper artefacts, but at concentrations that were unlikely

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57 Moorey 2014

58 Woolley and Mallowan 1976: pl.71, 68 and pl. 70, 56-60, respectively.

59 E.g. Hill, Jacobsen & Delougaz 1990: pl.61 b-d, from Khafajah.

60 Huot 2003: fig. 18 & fig. 30:18, provenance given as 'Région de Larsa'.

61 Al-Gailani Werr 1988: figs. 34, 48, 62, 79, 84; also pls. 1:48, II:62, III:84.

to give any benefit as deliberate alloys. This suggests re-use and re-smelting of metalwork, with increasing dilution and mixing between true bronzes and pure copper. This may be consistent with Tell Khaiber being in a position quite far down the supply chain, and reliant on re-use and recycling. Copper items also sometimes occur with patches of iron adhering to them. Whether this represents incomplete alloying (with the iron perhaps not melting fully) or the remains of composite objects, is uncertain, but it does suggest some experimentation with metals.

Although there were fragments of copper throughout the excavations, many of the more complete examples came from the area of the Private Houses. Among these were a spearhead and a mirror (Figs. 11 & 12), an awl or projectile, a chisel-like implement, and a bar with a loop on one end.[63] However, another spearhead was found in Area 301 in the Public Building,[64] and a complete spatula in Area 302.[65] There was also a copper bowl and an adze, both broken, found together and perhaps intended for re-cycling, in the northern corner of the Public Building. (Fig. 13). They belonged to a level now eroded away. The spearheads are obviously weapons, while the mirror, equally obviously, is not, but otherwise it is hard to determine whether some of the implements were intended for craft activities or violent ones. The fragments included pieces of wire, pieces of pins, rods and bars, sometimes with pointed ends, and scraps of copper sheet. All these indicate a working environment, of tools and fittings, perhaps elements of harness and fishing equipment. None of them were certainly used for decoration alone.

A double pot grave in the north corner of House 1 (see above xxx) contained a woman wearing a modest amount of jewellery, including two thick pins found in the pectoral area (Fig. 15).[66] From pXRF analysis we know that these were made from an alloy of silver and copper.[67] The woman in the grave also wore a necklace of 48 beads of various stones: agate, carnelian, turquoise and lapis lazuli.[68] The necklace had clearly been well-used, as there were many chips and much wear to the stones. The lapis is of poor quality and the turquoise and carnelian beads of indifferent workmanship, though the agate beads are finer. Either semi-precious stones were not readily available, or the woman was not very wealthy. While we have to guess a little at her social status, we can say she was important enough for an intramural burial in a good-sized house, in a neighbourhood wealthy enough that the use of substantial copper implements was not a rarity. So we conclude that there was not a lively trade with regions producing semi-precious stones.

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62 The instruments used were a Niton XL2 GOLDD (lent by Niton Uk in 2014) and a Niton XL3t GOLDD+ in 2015. A set of standards, included selected standards from the CHARM set of standard metals (Heginbotham et al: 2015), was used to confirm that the metal mode of analysis of the instruments correlated highly with the reference values. This suggests that readings can, with care, be used quantitatively. However, measurements were taken on the surface of cleaned metal artefacts where there was still corrosion present. We should therefore expect values for different elements to be impacted by enrichment and leaching.

63 4034:3, 4022:1 and 4003:8.

64 3039:4 , close to the mound surface, but probably associated with a high plaster floor.

65 3025:23.

66 4041:10 and 4041:11.

67 4010:01, 4065:01, 4074:01, and 3002:12.

68 TK1 133 (multiple individual find numbers).

Although there was little evidence for stone jewellery, there were many implements made from stone: querns, grinders, pounders, rubbers, tools of multi- or unknown purpose, door-sockets and vessels (Fig. 16).[69] In fact, items fashioned from stone are the most numerous artefacts we found, apart from pottery, which is a little unexpected in a landscape that is so poor in stone. Many of the coarser items are of a limestone similar to that occurring not far away, in the vicinities of Eridu and Samawa, and the colourful conglomerate beachrock used for some of the querns was probably relatively local as well, from the former shore of the Gulf. Other artefacts, however, appear to be of igneous or other types of stone, which must represent imports.

Stone vessels were not very numerous: 25 examples, all represented by fragments except two, and one of those was a typical third millennium shape, so probably residual from disturbed earlier levels.[70] The other near-complete one was found very near the mound-surface, but probably derives from Area 616.[71] It is made from a soft, green close-grained stone fairly typical for Tell Khaiber, also used for flaked and re-touched tools, for which it cannot have been well suited. Other stone bowl fragments showed evidence of repair too, a practice consistent with a scarcity of good stone.

The most numerous stone tools of all were querns, which we can assume were for grinding some of the grain for which the tablets provide so much evidence. Mostly they are found broken, often worn very thin in the middle, which presumably caused them to break. Many have been used on both sides. A large quern was found in Area 124, but as it was broken into two halves it was probably discarded rather than used in that location.[72]

The familiar notched flint blades that are elements of composite sickles were not uncommon: 47 examples altogether. Being so durable, some may be residual from the third millennium occupation, however none at all were recovered from our brief exploration of such levels outside the Public Building.

What were all the stone tools for? Several professions or occupations are mentioned in the texts, and while this does not mean they were being followed at the settlement itself, we do have physical corroboration for the work of the farmers (flint sickles, querns and grinders), the smith (metal implements), the cook (cooking pots and fire installations), and also the reed-cutter, if, as can be reasonably assumed, he used flint sickles and a boat. Perhaps the leather-workers and oil-pressers were among those who made use of stones with ends now pitted from pounding and their flat surfaces worn smooth from rubbing, as well as some of the other, smaller stone pieces that are enigmatic in shape but have clear traces of wear.

Bird, sheep and fish bones reinforce the presence of bird-catchers, shepherds and fishermen. Impressions of palm-leaf matting in dried clay and in the many fragments of bitumen encountered are already evidence of palm-gardening, even before we have specialist results from the botanical samples. For traditional female pursuits we are limited to fifteen (probable) spindle whorls and seven bone needles, which might just as well have been for leather working. Potsherds were

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69 Over 350 items, in addition to unidentifiable fragments.

70 1166:33, a squat, neckless, wide-mouthed small jar, with a horizontal bevelled rim.

71 6064:01.

72 1022:05 & 1094:01.

sometimes used as tools too, the most common type being roughly shaped pierced discs, often interpreted as net-sinkers, of which about fifty were found in Area 601 alone, perhaps representing all that was left of a net: a further trace of the fishermen.

Evidence for glass and glass compounds comes in the form of a composite 'eye-stone' of a brown, glass-like substance, with the white part made of paste or faience, and of fragments of a possible second one, white with a deep ultramarine centre: both were found in debris in Area 101. There is no evidence of an inscription on either. Eye-stones were 'decorative items and served neither as apotropaic objects nor as eye-inlays'. [73]

There were a few crude, simple objects made for baked or unbaked clay, the latter possibly the work of children. They included figurines, animal and human, models of boats and wheels, and two clay rattles, one complete with tiny pellets inside, as shown up by X-ray (Fig. 17)

Pottery

A full study of the second millennium pottery from Tell Khaiber has already been completed,[74] so it will suffice here to summarize the main characteristics of the assemblage and the broad conclusions.

Altogether about 150,000 pottery sherds were collected and examined, of which 9,319 were diagnostic (rims, bases, or with otherwise distinguishing features). In addition we recorded 483 complete or nearly complete vessels, and 234 further ones that were partially complete.[75] The assemblage comprises a limited range of vessel types which can be grouped into 19 'families' of distinctive shapes, made up of 78 types.[76] As well as the usual preponderance of cups and bowls, these families also include traditionally less well-recorded vessel types, such as pithoi with narrow base holes, often interpreted as beer brewing vats, as well as cylindrical beakers with structured volumetric separations on the exterior surface, which have been interpreted as measuring equipment.

All of the pottery contained a certain amount of grit and sand, probably naturally occurring. Vegetable matter, in the form of straw or chaff, had been added to at least 62% of the fabrics. Very few vessels contained deliberately added minerals, these being generally coil-made cooking pots. Almost all of the pottery can be grouped into 8 fabric types, based essentially on the amount and fineness of vegetable matter added. The very few exceptional wares are probably imports. As is

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73 See Clayden 2009: 36. For an provenance eyestone from an Old Babylonian context see Kepinski-Lecomte 1992: m472 on p. 383, and fig. 167.

74 Calderbank 2018.

75 Every piece of pottery recorded was given a unique 'pottery number', formed of the context number, preceded by 'p' and followed by a number individual to that piece, e.g. p3088-138. Those that are also included in the object catalogue (more complete pieces, not for discard) have one or more additional designations (see footnote 52). For clarity, only the pottery numbers are given in this report.

76 The families are: bowls with plain rims; bowls with shaped rims, large, hole-mouthed jars; vessel stands; trays and basins; pithoi; pithoi with pierced bases; goblets; bottles; cups; jugs; small hole-mouthed vessels; cylindrical bases; bowl bases; ambiguous rims; ambiguous bases; special types including lids and stoppers; and re-used vessels.

usual for this period, there was a high degree of intended stylistic standardisation among the commonest shapes. Statistical analysis of vessel attributes alongside scientific analyses of vessel X-rays demonstrate, however, that this standardisation is not an indicator of mass production, as is often assumed.[77] Rather, it was the result of low intensity production by individuals of variable skill levels (Fig. 18 for a selection of the commonest forms).

While the composition of the pottery was fairly uniform, its manufacturing processes involved several techniques. A particularly interesting discovery was that only a low proportion of vessels, usually small ones such as bowls, were actually completely wheel-thrown. Amongst other vessel types, sections or components, such as bases and rims, were sometimes wheel-thrown separately before being joined, scraped, and finished to varying degrees on a discontinuously turning wheel. The coiling method was employed extensively, either to make whole vessels such as pithoi, or to make components of vessels. Essentially, the majority of the pots found at Tell Khaiber were made by a composite process, which usually involved the wheel-coiling method at some point. No pottery-making areas of second-millennium date were identified on the Tell Khaiber mound: those that are extant are surrounded by wasters either of bricks or of third millennium vessels. Neither are potters mentioned in the texts recovered from the archive. There are, however, orders for large quantities of specific vessels, probably drinking cups, to be delivered to the Public Building.

Changes observed in the pottery were subtle rather than obvious over the lifetime of the Public Building, and they occurred mainly among with the smaller vessels. For example, the carinated bowl (Type 5.1) that is the main open form throughout the sequence, shows more examples with a more rounded body (Type 5.2) after the first occupation phase. At the same time bowl Types 10.1 and 10.2 drop in frequency. The wavy-sided bowl (Type 5.4), a shape that would become typical of the Kassite period,[78] begins to occur in some of the later phases at Khaiber, particularly in the mixed deposits on the surface of the mound. Cups show similar small differences: in particular they display a greater frequency of stable as opposed to unstable bases as time goes on. As with the wavy-sided bowls, very few typical Kassite cup forms are encountered, and these mostly derive from deposits near the surface belonging to deflated phases of occupation no longer extant.

There is an almost complete lack of published well-stratified comparable material from southern Babylonia itself, but there are contemporary levels at Susa, Tell Yelkhi in the Jebel Hamrin, and Failaka and Bahrain to the south. While it is clearly related to pottery of the immediately preceding Old Babylonian period, the Khaiber assemblage certainly has its own characteristics, but there is one glaring absence of an expected type: the goblet. This "is the most frequently and widely attested shape in the whole of the second-millennium Babylonian ceramic corpus, having been produced by the tens of thousands", and was "essential to every second-millennium Babylonian household".[79] Goblets consequently dominate the archaeological assemblages of both the Old Babylonian and Kassite periods. Yet they are completely absent in primary Sealand period occupation at Khaiber (Fig. 19). A possible reason might be the association of this type with some form of activity that does not take place during times of non-centralized political control. Or

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[77] E.g. Armstrong and Gasche 2014: 95.

[78] Armstrong 1993: pls.73-74.

[79] De Meyer and Gasche 1998: 26

perhaps whatever they were used for simply did not take place at Tell Khaiber, or indeed on Failaka or Bahrain, where contemporary assemblages show a similar gap.

Spatial distribution of pottery types in the Public Building has been carried out. The conclusions must be treated with caution, because they are based only on the sample of deposits that were excavated. Tentatively, however, there is a difference in use between the northern and southern parts of the building, already apparent from the plan. Beer brewing, for instance, is shown to have been restricted to the north of the building, whilst bulk and special storage was more typically carried out in the southern areas. In the northern section, processing and cooking appears to have been an informal business, conducted by individuals, while in the southern part we uncovered a large kitchen (Area 316). The levels excavated here are comparatively late in the sequence of the building, but if the use of the area had not changed, one can imagine meals being cooked for important consumers, perhaps under the oversight of a *nuhatimmu* (one is mentioned in the archive), and perhaps using more specialised equipment, such as a possible bread mould found there, having being re-used in its broken state as a door socket.[80]

Some differences in the pottery have been noted between the Public Building and the area of the Private Houses. In the latter there are far fewer bowls, more jugs and cups, and almost no cooking wares. This might suggest that whatever cooking and eating took place here was not on a large scale. Instead, it is perhaps tempting to envisage small family groups sitting around a meal placed on a central woven mat, in the traditional Iraqi manner. The greater frequency of jugs and cups, on the other hand, points to short-term storage and frequent small-scale consumption of liquids. The presence of a small bottle in House 1 also suggests the storing of some kind of more valuable liquid.[81]

Conclusion

The excavations at Tell Khaiber provide new information about provincial administration during a period that has been essentially a 'Dark Age' in Mesopotamian history: the period between the collapse of Old Babylonian rule, and political regeneration under the Kassite kings. The presence of a substantial Public Building shows us that there was order and authority. The archive found in it demonstrates a well-organised system for collecting and redistributing cereal products. Some of these products were destined for a 'palace', and while we do not know exactly where it was, or who lived there, it is highly likely that it was related to the Sealand Dynasty. It could have been at Ur or Larsa, both of which are nearby, or at one of the many sites in the area still to be investigated.[82]

Wright noted very extensive settlement for the Ur-Eridu survey during the first half of the 2nd millennium BC, when Ur covered at least 60 ha, and a widespread rural population is evidenced by 57 small to medium sized sites.[83] Then there was extensive abandonment until the Kassite period, when there was a resumption of royal monumental building at Ur. There was also regeneration in

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80 8008:05. It is similar to the many examples found at Mari: Margueron 2004: 515-516.

81 4021:01

82 Another possible candidate for a regional centre was recorded by Wright, a short-lived 45ha site (EP-34) c.16km to the west of Tell Khaiber, lying on the Eridu channel of the Euphrates and dated to late in the Old Babylonian period (Wright 1981: 330).

the countryside, although this may not have been extensive between the two main channels of the Euphrates.[84] The survey evidence is compatible with the known political events, i.e. the rebellion of the southern cities under Samsu-iluna, his suppression of it, and the widely-accepted view that the far south of Babylonia was de-urbanised, if not depopulated, for a period following that.[85] But surveys, even ones as well-conducted as Wright's, have their limitations. This is especially the case with second-millennium pottery styles, which have subtleties that are hard to identify in a survey context, making precise chrono-historical correlations hazardous. A scenario of state collapse and its consequences does not seem to match what we have found. The Public Building at Tell Khaiber is not a rebuild of an abandoned or ruined predecessor, but a new foundation, using a very ancient tell to build it on. The reference to Aya-dara-galama in the texts means that its prime use was when the secession of the area from Babylonian control was already several generations ago. The references in our archive to a palace, requiring grain to be sent, tell us that there was centralized political control of rural production. At the same time, the defensive nature of the building, and the royal auxiliary troops stationed there, suggest that this provision could not be taken entirely for granted.

It was suggested by Richardson that there were many 'military communities located out in the countryside' in the Late Babylonian period, which may then have become more autonomous and self-sufficient.[86] This fits with the evidence from Tell Khaiber so far. The picture of life in and around the settlement, as suggested by the texts, is largely corroborated by the material culture we have examined: this was a working environment, with no clear indication of displayed wealth or organised religious practice. The artefacts confirm that whatever the Public Building was for, it was not a temple. And while it may have included one or more residential suites, it was not a palace. The pottery assemblage, with its lack of elaborate vessel types, shows us every-day, routine patterns of behaviour rather than occasions of ceremony or lavish hospitality. The presence of weapons, both in the Public Building and in the Private Houses nearby, reflects the defensive appearance created by the towers. Women and children were present at some point, as confirmed by infant and female burials that post-date the remaining occupation levels. However, this was not a dwelling for priestesses or royalty, but a place of business. We have some of the details of that business, but are still searching for its place in the overall political economy of southern Babylonia at this interesting time of change and re-alignment.

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83 Wright 1981: 330.

84 Wright 1981: 331–2.

85 Stone 1977.

86 Richardson 2005: 282.

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Figures

Figure 1: Location of Tell Khaiber and Tell Khaiber 2.

Figure 2: Contour map of Tell Khaiber. Arbitrary datum +10 m, 20 cm intervals.

Figure 3: Plan of the Public Building at Tell Khaiber.

Figure 4. TBA

Figure 5. Elevation of the arched vaults in the Public Building.

Figure 6: Plan of the Private Houses at Tell Khaiber.

Figure 7. Moulded plaques of lightly baked clay:
    a.   Male worshipper. 1010:04. Ht. 9.7 cm. Under mound surface in Area 122.
    b.   Naked female. 3009:07. Ht. 12.2 cm. Under mound surface, outside Area 310.
    c.   Clothed female. 3002:1. Ext. Ht. 7.9 cm. Occupation/debris in Area 310.
    d.   Clothed female. 1079:81. Ht. 9.0 cm. Occupation in Area 101.

Figure 10: Clay cylinder seal. 3025:22. Length 2.2 cm. Occupation/debris in Area 302

Figure 11: Copper spearhead. 4003:10. Length 13.3 cm. Surface clearance in Private Houses.

Figure 12: Copper bowl. 6185:02. Diameter 11.4 cm. Surface clearance in north corner of Public Building.

Figure 13: Copper adze. 6185:01. Length 16.9 cm. Surface clearance in north corner of Public Building.

Figure 14: Copper/silver pin. 4041:10. Length 7.4 cm. Grave 5, pectoral area. Area 403

Figure 15: Stone tools. a. Rubbing tool, of close-grained green stone. Length 5.2 cm. 6059:09. Surface in Area 600. b. Rubbing/pounding tool, of close-grained brown stone. Ht. 6.6 cm. 1077:06.Mud-brick collapse in Area 101.

Figure 16: Quern. 1139:24. Length 31 cm. Occupation debris in Area 314. Stone rubbing tool 3124:02. Length 13.9 cm. Fill of vault in Area 300.

Figure 17: Clay model of human figure. 3085:23. Ht. 7.9 cm. Occupation debris in Area 304.

Figure 18: Moulded clay model of a bed. 3088:01. Length 11.3 cm. On floor of Area 304.

Figure 19: Baked clay rattle. 3087:02. Length 9.1 cm. Occupation debris in Area 304.

Figure 20. Pottery vessels. A selection of typical forms from Tell Khaiber.

Fig. 21. The most common second millennium bowl, cup, and goblet shapes through time.
1-2) Tell ed-Der (Armstrong and Gasche 2014: pl.10.9; Gasche 1989: pl.26.14);
3-5) Khaiber (p3088-138, p1139-126,
p1096-307);
6) Tell ed-Der (Armstrong and Gasche 2014: pl.10.6);
7) Deylam (Armstrong and Gasche 2014:
pl.36.11);
8) Tell ed-Der (Gasche 1989: pl.35.17);
9-10) Khaiber (p3064-226, p1085-17);
11) Nippur (Armstrong and Gasche 2014: pl.97.7);
12) Tell ed-Der (Armstrong and Gasche 2014: pl.59.2);
13) Ur (Manchester Museum #UR35580);
14) Ur (Manchester Museum #UR35579).
After Calderbank 2017 Fig. 4:11

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