

Ur 1922–2022

Papers marking the centenary of Sir Leonard Woolley's first season of excavations at Ur

Edited by J. Nicholas Postgate and David C. Thomas



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Front cover: Ziggurrat of Ur from the east. After Royal Air Force photograph, probably 19 September 1937. UE 5, pl. 41. **Back cover:** Ziggurrat of Ur in 2016. Photo J.N. Postgate

C. Leonard Woolley and Hamoudi supervising excavations at Ur in 1933/34. © The Trustees of the British Museum

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Ur 1922-2022 Centenary Colloquium

16th November 2022

Dr Laith M. Hussein Dr P. Collins Dr J. Jotheri R. Goodman

Prof. J.E. Reade Dr E. McAdam Prof. A. McMahon Dr C. Lecompte

Prof. R. Matthews & Dr. A. Richardson

Dr R. Zettler Prof. W. Sallaberger

Prof. D. Charpin

The treasures of Ur in the Iraq Museum Searching for the Sumerians at Ur The geomorphology of the Ur region

Woolley's flood mud: a high-resolution proxy for the chronological and ecological context of Ur's first inhabitants

The background and status of the Ur ziggurrat

The Ubaid period figurines from Ur Tell al-Ubaid and the Ubaid period

The archaic texts from Ur and their significance Ur and the city seals: issues and approaches

"Brought In": collections from sites in Ur's hinterlands

The fragmentary Ur III ritual tablet from Ur: new light on royal

representation

Samsu-iluna and the end of the occupation of Ur in the

Old Babylonian period

17th November 2022

Dr T. Greenfield

Dr M. Shepperson Dr B. Hafford

Prof. Dr. A. Otto & Dr. B. Einwag

Profs. E. Stone & P. Zimansky Prof. J.N. Postgate

Prof. S. Tinney

J. Jawdat

Prof. J. Tenney Prof. H.D. Baker Ms M. Sigalas Dr J.E. Curtis Were there royal herds? The cattle from the Early Dynastic Royal Cemetery of Ur

Old Babylonian household architecture

Woolley and site formation at Ur: old notes and new excavations Life and death at Ur during the 19th century BC: new insights from the house of temple intendant Sîn-nādā and his wife Nuttuptum

The Ur III to Early Old Babylonian transition at Area AH

What was the (é.)dubla? The literary texts from Ur

At the middle of the second millennium: the environment and

excavations at Ishan Al-Hazem

Kassite Ur

The history and archaeology of Ur in the 1st millennium BC

Remembering Ur: Woolley's strategy for posterity

The Late Assyrian period at Ur







Preface

On the 17th and 18th November 2022 an on-line colloquium was held to celebrate the centenary of Sir Leonard Woolley's first excavation season at Al-Muqayyar, the Babylonian city of Ur. The colloquium was sponsored by the State Board for Antiquities and Heritage, the Penn Museum at the University of Pennsylvania, and the British Institute for the Study of Iraq. The participants, listed on p. iv, came from Iraq, France, Canada, the USA, Germany, and the UK, and those papers which have been submitted for this volume are arranged in the order in which they were delivered. Some contributions revisit Woolley's own work in the light of the passage of time, others report on fresh initiatives at the site. We have sought to present both the archaeological and the historical evidence, as far as possible integrating the two.

When this volume was nearly ready to send to the printer, we learnt of the report of J.G. Taylor written in 1858. This is now included as the final paper thanks to John Curtis' expert transcription of the sometimes scarcely decipherable manuscript.

Throughout the volume we have used the UE (and UET) volume numbers as listed on p. vi, to refer to the definitive publication of the excavations, believing that this is both convenient and instantly recognizable in place of the author and year system otherwise employed. Many of the images in this volume come from these reports or from artefacts in the British Museum, and are credited as: © The Trustees of the British Museum. These are all shared under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) licence. Our thanks are also due to the Penn Museum for permissions to publish.

This is not the first time that an international event has recognized the importance of Ur: the proceedings of the 62nd Rencontre Assyriologique Internationale were published in 2021: Grant Frame, Joshua Jeffers, Holly Pittman: *Ur in the Twenty-First Century CE: Proceedings of the 62nd Rencontre Assyriologique Internationale at Philadelphia, July 11–15, 2016.* (Penn State University Press, Eisenbrauns). New research at the site and the wealth and range of Woolley's discoveries mean that the contributions to this volume complement, rather than duplicate, the Rencontre publication.

Since 2007 the Penn Museum and the British Museum have collaborated in a major project, with lead funding from the Leon Levy Foundation, to scan and put on-line the extensive archives of Woolley's field records kept in their storerooms. This information is now on-line at: http://www.ur-online.org. Over the years this has been made possible by the combined efforts of John Curtis, the late Jonathan Tubb and Paul Collins of the British Museum, and Richard Zettler and William B. Hafford for the Penn Museum.

The editors' thanks for help and advice go to Mark Altaweel, Paul Collins, Jacob Jawdat, Ali Khadr, Robert Killick, Graham Philip, Rosalind Wade Haddon, and Richard Zettler.

11 March 2024

J.N. Postgate & D.C. Thomas

¹ https://doi.org/10.5325/j.ctv1g80954

Ur Publications

Ur Excavations

- UE 1 Hall, H.R. & C.L. Woolley 1927 *Ur Excavations Volume I. Al-'Ubaid.* Oxford: Published for the Trustees of the Two Museums by the Oxford University Press.
- UE 2 Woolley, C.L. 1934. *Ur Excavations Volume II. The Royal Cemetery*. 2 vols. London / Philadelphia: Published for the Trustees of the Two Museums by the aid of a grant from the Carnegie Corporation of New York.
- UE 3 Legrain, L. 1936. *Ur Excavations Volume III. Archaic Seal Impressions*. London: British Museum and University of Pennsylvania Museum.
- UE 4 Woolley, C.L. 1955. *Ur Excavations Volume IV. The Early Periods*. Philadelphia: Published for the Trustees of the Two Museums by the aid of a grant from the Johnson Fund of the American Philosophical Society.
- UE 5 Woolley, L. 1939. *Ur Excavations Volume V. The Ziggurat and its Surroundings*. London: Published for the Trustees of the Two Museums by the aid of a grant from the Carnegie Corporation of New York.
- UE 6 Woolley, L. 1974. *Ur Excavations Volume VI. The Buildings of the Third Dynasty*. London: Published by the Trustees of the Two Museums.
- UE 7 Woolley, L. & M.E.L. Mallowan 1976. *Ur Excavations Volume VII. The Old Babylonian Period*. London: Published for the Trustees of the Two Museums by British Museum Publications Limited.
- UE 8 Woolley, L. 1965. *Ur Excavations Volume VIII. The Kassite Period and the Period of the Assyrian Kings*. London: Published for the Trustees of the Two Museums.
- UE 9 Woolley, L. & M.E.L. Mallowan 1962. *Ur Excavations Volume IX. The Neo-Babylonian and Persian Periods*. London: Published for the Trustees of the Two Museums.
- UE 10 Legrain, L. 1951. *Ur Excavations Volume X. Seal Cylinders*. London: Published for the Trustees of the Two Museums.

Ur Excavations: Texts

- UET 1 Gadd, C.J. & L. Legrain 1928. *Ur Excavations Texts I. Royal Inscriptions*. 2 Vols. London: Printed by order of the Trustees of the Two Museums.
- UET 2 Burrows, E. 1935. *Ur Excavations Texts II. Archaic Texts.* London: Printed by order of the Trustees of the Two Museums.
- UET 3 Legrain, L. 1937, 1947. *Ur Excavations Texts III. Business Documents of the Third Dynasty of Ur.* 2 Vols. London: Printed by order of the Trustees of the Two Museums.
- UET 4 Figulla, H.H. 1949. *Ur Excavations Texts IV. Business documents of the Neo-Babylonian Period.* London: Printed by order of the Trustees of the Two Museums.
- UET 5 Figulla, H.H. & W.J. Martin 1953. *Ur Excavations Texts V. Letters and documents of the Old Babylonian Period*. London: Printed by order of the Trustees of the Two Museums.
- UET 6 Gadd, C.J. & S.N. Kramer 1963. *Ur Excavations Texts VI. Literary and Religious Texts First Part.* London: Printed by order of the Trustees of the Two Museums.
 - Gadd, C.J. & S.N. Kramer 1966. *Ur Excavations Texts VI. Literary and Religious Texts Second Part.* London: Printed by order of the Trustees of the Two Museums.
 - Kramer, S.N. & A. Shaffer 2006. *Ur Excavations Texts VI. Literary and Religious Texts Third Part.* London: Printed by order of the Trustees of the Two Museums
- UET 7 Gurney, O.R. 1974. *Ur Excavations Texts VII. Middle Babylonian Legal Documents and other Texts*. London: Printed by order of the Trustees of the Two Museums.
- UET 8 Sollberger, E. 1965. *Ur Excavations Texts VIII. Royal Inscriptions Part II.* London: Printed by order of the Trustees of the Two Museums.
- UET 9 Loding, D. 1976. *Ur Excavations Texts IX. Economic Texts from the Third Dynasty*. London / Philadelphia: Published for the Trustees of the Two Museums by the Babylonian Fund.

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Foreword

Dr Laith Majid Hussain The State Board for Antiquities and Heritage

The ancient city of Ur holds a special place in the annals of humanity because of its historical time depth and its preeminent reputation in antiquity, which is reflected in the important role it plays not only in contemporary cuneiform inscriptions but also in long lasting religious traditions and later historical sources.

Last century the archaeological investigation of the ruins of al-Muqayyar, standing proud with the towering ziggurrat for the worship of the moon god Sin, only served to emphasise the importance of this Sumerian capital city. The excavated evidence revealed that its beginnings reach back to more than 5,000 years BC, and exposed the layout of one of the most important and oldest established Mesopotamian cities with its buildings, its harbours, its thoroughfares and its residential housing quarters.

Of the antiquities which were discovered here even a limited selection is now the pride of three world-class museums, distributed between the collections of the Iraq Museum, the British Museum and the Museum of the University of Pennsylvania.

The site of Ur stands very high in the priorities of the State Board for Antiquities and Heritage especially in view of its inclusion, along with the sites of Eridu and Warka and the Marshes, on the list of World Heritage sites, and the ceremonial visit of his Holiness the Pope from the Vatican in March 2021, and in the coming years we are all hoping to initiate further excavation and restoration projects at this site.

The excavations of Sir Leonard Woolley illuminated the golden age of Sumerian civilization in all its glory, both in the time of the Early Dynastic royal cemetery, and then during the reigns of Ur-Nammu and Šulgi, the greatest kings of the Third Dynasty of Ur, under whom was seen the renaissance of Sumerian language and traditions, when we witness great advances in the formation of civilized society and the flowering of artistic and literary excellence.

The city of Ur was the subject of the 62nd Rencontre Assyriologique Internationale in Philadelphia as recently as 2016, with the title "Ur in the 21st century", yet since then archaeological research has continued and many fresh discoveries about the city have been made, notably by the recent excavations of Elizabeth Stone and Paul Zimansky, from SUNY Stony Brook, and Adelheid Otto and Berthold Einwag from the Ludwig Maximilian University in Munich. These new excavations have shed fresh light on the subsequent history of the city of Ur in the first half of the 2nd millennium BC. The different branches of the research accompanying these projects involved both the study of the remains of animal bones and human remains from within the same context, and intensive survey of the area undertaken with the application of geophysical instruments. So the few years which the two above mentioned expeditions spent on the work at Ur, provided a great opportunity for the application of a range of modern excavation techniques, including remote sensing, which were not available at the time of Woolley's excavations a century earlier.

In addition to contributions to the present volume celebrating the centenary of the initiation of excavations at Ur, with the final publication of these studies we shall witness in the near future how archaeological, linguistic and geographical approaches will enhance the field of research and generate for us additional issues for investigation in the region of Ur and Eridu and their wider geographical environment.

The collections of the Iraq Museum include numerous treasures from the excavations of Woolley, but now also from the recent Iraqi excavations between 2000 and 2002, some of which took place in the Old Babylonian residential area. Some were located in the vicinity of the south-eastern side of cemetery of the Ur III kings, and the excavations at that time revealed a rectangular building, which probably served as an annex to the group of royal tombs, since it faces the south-eastern entrance to the cemetery of the kings of Ur. It is also worth mentioning that various restoration works were undertaken at that time in the Ur royal tombs and in part of the Old Babylonian residential quarter (AH).

During the recent past we have been striving to prepare one part of the catalogue of the Iraq Museum's holdings from the royal cemetery at Ur. We shall try as best we can to complete this work with descriptions of the artefacts, along with the information linking these pieces to their archaeological contexts. This will be of great benefit to researchers and those interested in material culture, especially by way of comparison with the previous discoveries at Ur or the other cities of Mesopotamia.

We offer our sincere gratitude and appreciation to the British Institute for the Study of Iraq and especially to Prof. Paul Collins and the Council of the trustees of the Institute for their participation in this colloquium and for their ongoing collaboration with the State Board carrying forward our successful decades long partnership. Likewise I offer thanks to Prof. Nicholas Postgate for his efforts in organizing the colloquium and editing this volume.

Context matters. Reflections on the added value of new excavations for the knowledge of early Old Babylonian Ur, 100 years after Woolley

Adelheid Otto¹ & Berthold Einwag² Ludwig-Maximilians-Universität (LMU) Munich

We dedicate this article to the memory of his excellency Dr Abdulamir al-Hamdani, who was the soul and driving force behind the new Ur project 2015–22. He is sorely missed.

Abstract

Recent excavations in Area 5 on the South Mound of Ur led to the completed excavation of a single house from the early Old Babylonian period, which provides detailed insights into daily life of the inhabitants through the combined analysis of archaeological, textual, scientific and IT methods

Introduction

This Ur centenary colloquium must be started with the statement that Sir Leonard Woolley was a genius. Whoever has been working about Ur or at the site Ur since then, has been standing on the shoulders of this giant. One of his greatest merits is that he showed deep interest in a subject that does not look too rewarding at first glance: the domestic quarters of Ur, which promised neither golden or other eye-catching finds—unlike the 'Royal Cemetery'—but everyday remains and dwellings from sheer mud. The Isin-Larsa and Old Babylonian house quarters which he excavated on a large scale in areas AH and EM have been the model of densely built living areas within a Mesopotamian city until recently. It was the first large-scale attempt to systematically investigate residential areas after Robert Koldewey's fundamental urban research in Babylon, which, however, mainly covered the city of the first millennium. Woolley and his team prepared the ground for the research of everyday life in the Old Babylonian period based on material remains.

Why then should there be renewed excavations at Ur a hundred years later?

The answers are manifold. First of all, the methods have changed. Remote sensing, geophysical prospection, and advanced scientific examinations of fauna, flora and human remains were neither desirable nor possible in those days.

Additionally, the questions have changed and consequently the process of digging. Fine-grained, detailed and slow excavations replace today the large-scale, swift archaeological fieldwork with hundreds of workmen of the last century. The result is a deeper understanding of context, the whereabouts, when and why of the material remains. By analyzing the archaeological remains in their find places, it is possible to reconstruct the diet and the health status of the inhabitants, and

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their activities, as well as the social composition and the diachronic development of households and neighbourhoods.

The great and largely unique contribution of the Old Babylonian houses in Ur is that, in addition to the archaeological relics that allow us to infer the people and their activities, even the people themselves are tangible, whose skeletal remains can be found in the graves beneath the houses. And as if that were not enough, the text finds of this extraordinarily literate society, which can be encountered in almost every house, allow us to get so close to the individual people that often even their names, professions and family relationships are known, with letters allowing insights into even the most intimate interpersonal relationships.

And last, but not least: many questions have remained open at Ur despite the 12 years of excavations 1922–34. For example, while the North Mound with the official quarters was intensely investigated, much less effort had been spent on the South Mound. Although Woolley excavated sixty-eight Old Babylonian houses, there is still little reliable information about who was living and working in the city center and who at the periphery, if there existed social or economic differences between the inhabitants of EM, AH and elsewhere, or about how healthy the inhabitants of specific houses were. It is even not clear whether the social and personal status or the state of health of the family members was mirrored by the size and furnishings of the respective house. This and many other issues that have come into focus in recent decades as interest in household archaeology has intensified and become easier to answer thanks to improved methods, make it desirable to address some unanswered questions.

Concerning the analysis of the houses, Woolley himself deeply regretted that the information from the tablets found in the houses could not be linked to the findings in the houses in the desired way. He apologized (UE 7:xviii) that he could not adequately fulfil the promise he had made in 1931 with the words

"...we seem to have material enough to identify the owners of most of the houses of the Larsa period and to learn something at least of their activities. These documents, not always of any great interest in themselves, gain immensely in value from their association with individual houses and should furnish a remarkably detailed account of this quarter of the city of Ur" (UE 7:372).

Similarly, one might ask why it is necessary to excavate more artefacts in Old Babylonian houses of Ur when at the same time the museums of Baghdad, London and Philadelphia already house so many finds from the previous excavations. However, even in this Centennial Colloquium, the lecture by Prof. Laith Hussein and that by Prof. Richard Zettler have shown that the context of many Ur artefacts is still poorly known, even that of terracotta figurines, which have received much more attention over the years than ceramics, for example. We will give an example of this below under §1.

We are therefore deeply grateful that, thanks to the initiative of Dr Abdulamir al-Hamdani, who passed away much too early, we were able to excavate a single Old Babylonian house in detail and in its entirety during three short campaigns.³ In the following, three examples will show new insights

Our sincere thanks go to Prof. Elizabeth Stone, who had invited us to participate in her new Ur project in 2017 and 2019, and made this great opportunity possible. Our thanks are due to Dr. Brad Hafford who invited us to participate in October–November 2022 in the new Ur project run by the Penn Museum. Furthermore we thank the Iraqi State Board of Antiquities and Heritage, its general director Prof. Laith Hussein, the antiquities director at Nasiriyah Ali Qadm, the SBAH representatives from Nasiriyah, the workmen, all the team members, and the Gerda Henkel Stiftung for funding. Co-Director of the LMU Munich team was Berthold Einwag, other members in 2017, 2019 and 2022 were, in alphabetical order: Pierre Borsdorf, Jasmin Braun, Denis Busch, Cyrill Dankwardt, Albert Dietz, Johannes Einwag, Jörg Faßbinder, Andrea Göhring, Martin Gruber, Johannes Hechtl, Michael Herles, Kai Kaniuth, Moritz Kellerer, Manfred Lerchl, Anne Löhnert, Sandra Ostner, Mandana Parsi, Elisa Roßberger, Walther Sallaberger, Marion Scheiblecker and Laurin Stöckert. We thank also Dominique Charpin (Paris), Melina Seabrook (Harvard) and Marco Wolf for excellent cooperation. Last, but not least, we thank the organizers of the centennial colloquium and the editors of this volume for their initiative and patience.



Fig. 1 Area 5 on the South Mound of Ur, view from south (drone photo: B. Einwag)

into urban life at Ur in the 19th century BC, which complement the results of the excavations a hundred years ago.

The new results were achieved through the detailed excavation of a single house in Area 5 (Fig. 1). Area 5 is situated at the southernmost part of the south mound close to the city wall—an area which had never before been investigated archaeologically. Our main research questions concerned the nature, use and function of Old Babylonian buildings in this area. In addition, our aim was to excavate and publish for the first time an Ur III period residential building in Ur, because so far only public buildings of this period are known from the capital of the Ur III empire (UE 6). We hoped that Ur III period buildings were relatively close to the surface in an area where erosion had largely removed the 1st millennium layers. Both aims were achieved at the end of the 2022 season, after three seasons of research.

The location of Area 5 about 70 m from the city wall and 250 m from the AH house quarter promised new insights into the inhabitants on the edge of the main mound in the early 2nd millennium. The area lies several meters lower than AH and EM, with Old Babylonian houses immediately below the surface and hardly disturbed in later times, apart from graves mainly of the first millennium.

The excavation of this house started in spring 2017 and continued in February–April 2019.⁴ Because we had not reached the lowest floor in all rooms during the two short campaigns, we were delighted to have the opportunity to excavate the first phase of the house in all rooms in 2022. Indeed, the first phase of the house is the one best attested by finds, and the owner, personally known from cuneiform texts and seal impressions, gave the house its nickname "Sîn-nādā's House". Sîn-nādā was the principal of the Ningal temple—so he certainly belonged to the elite of Ur—and lived in the house together with his wife Nuttuptum.

The house turned out to be an absolute stroke of luck: it was hardly built over or disturbed by later layers, still contained a sufficient number of remains of the original inventory, and additionally written documents, so that the dating is reasonably certain and the inhabitants of the house can

⁴ Preliminary reports in Stone et al. 2021, Otto 2022, Otto 2023.



Fig. 2 Area 5, state of excavations November 2022 (photo: B. Einwag)

be reconstructed along with their tasks.

Work began in 2017 by scraping the outer walls and by excavating a few rooms. In 2019, the entire structure, dimensions and floor plan of the house could be recorded, albeit partially only in the two uppermost phases of occupation. Clearly, this was a standard Old Babylonian courtyard house, but extraordinary large and very regularly built—quite different from what had been known from most houses in AH. This can now be interpreted to imply that spacious plots for building were available here near the edge of the south mound, and that the area was not built on again until the middle of the 19th century. Until then it had obviously lain deserted and had at most been used as a burial ground after falling victim to the devastating destruction at the end of the Ur III period around 2000 BC.5

In the last campaign, which ended just two weeks before the centennial conference, we were even able to excavate parts of the neighbour's house, which adjoined the large open outdoor area, a courtyard or garden, on the other side (Fig. 2). Thus the dimensions and number of rooms of Sîn-nādā's house are clear: it measures about 236 m² and has 16 rooms and an open courtyard. It was accessible from the main road to the west via the room in the north-west corner of the house, through a carefully locked door, as evidenced by an exceptionally large pivot stone (a baked brick) in entrance room 14b. However, it is now also indisputable that the house did not border directly on a neighbouring house in the direction of the south, but that there was an open area of at least 14 by 10 m here, which was accessible from Room 5. This open area may have been a kind of garden or multifunctionally used courtyard. The large north-eastern quarter at Larsa also shows spacious villas separated from each other by dozens of meters, and the excavators suggest that these large open spaces around the houses could have been gardens (Calvet 2003:183–4, 201, Fig. 4). Before we address the three issues, a brief outline of the history of the house should be given.

⁵ For a detailed argumentation as to why the residential areas of Ur did not extend into the southern part of the South Mound until the middle of the 19th century, see Otto 2023.

Brief history of "Sîn-nādā's House"

Three main use phases of the building can be identified, which fortunately can be historically assessed through written finds—cuneiform tablets and seal impressions—and at the same time contain many details about the inhabitants. The house was built around 1860 BC and used for about 25 years (Phase 1 = c. 1860–1835 BC). It then apparently changed hands and was remodelled, which also meant that all floors were raised 20–80 cm (Phase 2 = late 19th/early 18th century). Finally, it was rebuilt once more (Phase 3 = first half of 18th century) until the temporary abandonment of the city of Ur at the time of king Samsu-iluna.

The first inhabitants of the house that we know by name were Sîn-nādā and his wife Nuṭṭuptum. Sîn-nādā is entitled the priest (šabra) of the Ningal temple and a servant of Larsa king Sîn-erībam on his first seal with which he sealed some letters that he sent to his wife Nuṭṭuptum while he was absent from home. The seal impressions even allow to follow the carrier of Sîn-nādā, since a few years later he was the principal (ugula.é) of the Ningal temple. But this is the last sign of life of our couple. When king Ṣilli-Adad of Larsa was eliminated by Warad-Sîn in 1835 after only 9 months of reign, the glory days of this elite family came to an abrupt end, perhaps because they were too closely attached to the former regime.

The letters sent from Sîn-nādā to his wife Nuṭṭuptum, further economic documents and sealed labels provide detailed insights into the couple's activities. Most of the inscribed objects were found discarded in a rubbish heap in Room 5, where they had obviously been dropped when the house was abandoned, but scattered textual evidence was found in nearly every room. The reading of the cuneiform texts and seal inscriptions of 2017, 2019 and 2022 is due to Dominique Charpin, Walther Sallaberger completed the team in 2019. From the letters of Sîn-nādā to Nuṭṭuptum we learn that the Lord of the house was often abroad and that the mistress of the house managed the household during his absence. Several sealed labels and tablet labels provide an excellent insight into the activities of Nuṭṭuptum, who, like her husband, was economically active. From the labels we learn that she received large amounts of wet draff from another woman named Eburitum, who—following Sallaberger's interpretation—possibly was active in brewing. This is very concrete evidence of two women who were economically active and were furthermore literate.

Probably Nuttuptum was actively involved in the fattening of sheep and was also providing the Ningal temple with goods. In our reconstruction (Fig. 10) we illustrate our hypothesis that some sheep were kept for fattening (perhaps for the last days before slaughter?) in the large yard or garden, since similar ones are rarely attested in the crowded quarters of AH and EM.

This couple had their extraordinarily spacious house built here near the outskirts of the city, where apparently no buildings had stood since the city-wide destruction at the end of the Ur III period. Recently, a clay barrel from the art market (Volk 2011) revealed that a new building area had been designated under Sîn-iddinam after the city wall of Ur had finally been restored (Otto 2023). However, this new development, which suddenly multiplied the potential building areas for houses in Ur, probably dates not to the years when Sîn-iddinam was king of Larsa (1849–1843 BC), but to the reign of his father Nûr-Adad (1865–1850 BC), when Sîn-iddinam in his function as crown prince was already in charge of Ur (Charpin 2004:101–8). In fact, on the last day of excavations in the 2022 campaign, several small clay tablets were found on the lowest floor of Room 11, which are related in content and all date to Nûr-Adad's regency (oral information from D. Charpin). They are the earliest dated documents from Sîn-nādā's house. These accounts were obviously no longer needed a few years later and, because they are small, solid tablets and make good filling material, were used to raise the floor by 5 cm, for which purpose they were simply covered with clay. This floor was in turn covered with reed mats (see below §2 and Fig. 7).

Obviously, not only Sîn-nādā and Nuṭṭuptum, but also many other members of the wealthier social groups of Ur seem to have seized the opportunity for less crowded living in spacious villas—at any rate, the magnetometer prospection by Jörg Faßbinder and Marion Scheiblecker shows other large houses in the immediate vicinity of Sîn-nādā's house (Scheiblecker & Faßbinder 2022:372,

Fig. 6). They are larger than the average of the contemporaneous houses in EM and AH, where the continuously settled Old Town had its center since the 3rd millennium.⁶

However, the couple had to leave their house after only about 25 years, quite probably in 1835 BC, when the ancient regime at Larsa and Ur was overthrown, king Ṣilli-Adad removed and king Warad-Sîn installed on the throne in Larsa (Charpin 2004:107, 116–18). It seems that they had to leave so suddenly that many objects were left behind, even intact terracotta figurines, utensils and tools, jewellery, weight stones, as well as written documents, letters and school tablets.⁷

If our reconstruction is correct, the Phase 1 house was abandoned in 1835 BC. In the following years, some walls collapsed until the house was inhabited again, presumably by new owners whose names we do not know. The house was restored, some changes were made to doors and installations, and all floors were raised about 20–80 cm, on average about half a meter.

Unfortunately, we could not reach the lowest floor of all rooms in the 2019 season, and this was one of the main goals of the 2022 campaign. This goal was achieved, so that now also the house in the first phase under the first inhabitants Sîn-nādā and Nuttuptum is completely excavated and all rooms documented until the earliest level. Both this house and its Larsa-period neighbour, which lay to the south of the open courtyard, were built directly on top of the levelled walls of an amazing Ur III building—but that is another story.

New answers based on Sîn-nādā's house

As spatially manageable as the excavation area of this one house is, not to say infinitesimally small in relation to Woolley's earth movements, many questions of the AH and EM house quarters can be answered by it. We will not go into the fundamental question of the health and nutrition of the inhabitants, even though the anthropological, zoological and botanical findings provide many new insights. Only this much: The anthropological analyses by Andrea Göhring (LMU Munich) revealed an overall quite healthy population with only few diseases and few (morphological) symptoms of nutritional deficiency. Individuals could reach a relatively high age without osteological signs of hard labor. The high life expectancy and low disease rate was also due to the excellent hygiene, which was supported, for example, by the paved bathroom with a drainage shaft over 8 m deep in Room 18 in the north-east part of the house. The diet also seems to have been quite balanced and included a considerable amount of fish in addition to sheep, goat, pork and beef. Shortly before the Phase 1 house was abandoned, fish had been barbecued in the courtyard (1), the remains of which lay on the beaten clay floor next to the grill.

In the following, we would like to present new insights into the following three questions: Contextualization of objects, relevance of decayed reed artefacts, and challenge and potential of three-dimensional reconstruction.

§1. The context of terracotta plaques

Moulded terracotta plaques, together with cylinder seals, are the most important source for understanding better the fears, pleas for protection, beliefs and rituals but also the commonplace amusement of ordinary people. P.R.S. Moorey wrote already in 1975:

...it has to be admitted that the beliefs and customs of the majority of men and women in the great Babylonian cities eludes us... If we are to seek a crossing in this barrier ever more meticulous attention will have to be paid to the exact circumstances in which these plaques are found, to their association one with another and to the range of motifs used at specific places (Moorey 1975:98).

⁶ About the shape, size and number of rooms of the houses excavated by Woolley, see Miglus 1999.

⁷ For an analysis of the new balance weights from Ur see Hafford, Einwag & Otto 2023.

The analysis of the animal bones by Kathy Twiss and Melina Seabrook is underway. For a brief preliminary report see Seabrook & Twiss 2018.

Although it seems to have been clear for a long time that most terracotta reliefs were found in residential areas of southern Mesopotamia, there are still regrettably few precisely known places of their discovery within houses (Opificius 1961:3–24; Barrelet 1968). Asher-Greve and Westenholz (2013:238–9) concluded from the fact that terracotta plaques were often found thrown away in rubbish fills: "Rather than being images of worship or ex-voto objects (generally inscribed), they were used in magic rites or rituals presumably performed in the domestic sphere and neighborhood shrines". To them, the primary function of terracotta reliefs was "prevention and warding off adverse elements, including diseases" (Asher-Greve & Westenholz 2013:241). However, this does not explain why many plaques were equipped on the back with small devices so that they could stand upright.

Thousands of terracotta figurines and plaques have been reported from the Ur excavations. Unfortunately, most of them are said to come from Diqdiqqah, the large area about 1500 m north-east of the main mound, which "yielded several times as many terracottas as the whole of the rest of Ur produced in the course of twelve years' work", from which the excavators concluded that workshops for the production of terracottas and other artefacts were located there (UE 7:85–6). In contrast, relatively few plaques are known to have been found in specific buildings at Ur itself, and only a dozen have been reportedly found in specific houses. Onsequently, their function and purpose are still a matter of debate, and even the precise dating of many is questionable.

Also at most other sites where Old Babylonian terracotta plaques have been found, their location is hardly ever known in such detail that the ancient use of the images and thus their significance for the people of that time could be deduced. Therefore, the more than 20 plaque fragments from the area inside and outside of Sîn-nādā's house are of great value, since they come from secure contexts.

The 2017–19 excavations in Ur brought to light, among other figurines, three fragments of terracotta plaques which are model-identical to plaques previously found "in Ur", but in fact all of them were brought to the excavators from Diqdiqqah (Fig. 3d–e, f–g). The clay plaques, which were equipped on the back with small devices for making the image stand upright, depict a seated goddess *en face*, dressed in a long, flounced garment, a three-row necklace and a huge, prominently projecting horned crown surmounted by a crescent moon and flanked by four star-like discs. Next to the shoulders of the goddess, two waterfowl, probably geese, are depicted. On either side of the throne are standing two small anthropomorphic beings, most likely identified as standard-holding *lahmu*. The goddess depicted is very probably the supreme goddess of Ur, Ningal. 12

We will not discuss here the plaque fragment of the lower body found in Area 4 in the AH housing district in 2019 (it will be published by E. Stone as part of her excavation in the near future); but the two other pieces which were found inside the house of Sîn-nādā and on the courtyard or garden south of it are marked as white dots in Fig. 2.

Plaque 0353 (Fig. 3a–b) was found in Main Room 6 near the floor of Phase 1 (season 2017). The last use of the floor can be dated to 1835 BC, which provides a precious *terminus ad quem* or *ante quem* for the figurines. The fragment shows the upper part of the 4.5 cm wide figurine which is broken below the breast. Since nearly all the plaques found in Area 5 (for the exception see below and Fig. 4) were found broken, its fragmentary state is not surprising. However, the fracture and parts of the back were smeared with bitumen (Fig. 3b). For lack of a better explanation, we claim that the

⁹ L. Legrain, whose volume on all terracotta figurines and plaques from Ur was unfortunately not published, gave the total number of terracottas as over 2,600, UE 7:171–83, Pl. 66–91; see also the Ur-online and BM-online databases.

¹⁰ About 60 out of 240 Old Babylonian terracotta plaques, published in UE 7, are said to have been found in Ur. The location in or outside a specific house or chapel is indicated for 12 of them, from which only two can be attributed to a specific room in a house: UE 7, no. 76 (Pl. 72) is from No. 15 Church Lane, Room 6, and UE 7, no. 182 (Pl. 84) is from No. 8–10 Paternoster Row, Room 2.

All from Diqdiqqah: UE 7, Pl. 79, 135: U.1014; BM 117121; BM 119162; the published lists and online databases hold more examples of this type, now stored in the British Museum (BM 1927.0005.27) Penn Museum, and Iraq Museum (U. 18036.); L. Hussain in his centennial lecture showed two especially good examples from the Iraq Museum in his presentation.

¹² Not only the crescent moon, but many other features such as the geese and the abundance of other types of a similarly depicted enthroned goddess make this identification most probable for artefacts found at Ur, see the discussion in Otto & Chambon 2023:45–57. For this goddess see also Battini 2006.



Fig. 3a–b Plaque 0353 from Room 6, obverse and reverse (photos: P. Zimansky)







Fig. 3d—e Model-identical plaque from Diqdiqqah, BM119162, obverse and side-view https://www.britishmuseum.org/collection/image/1612980562, https://www.britishmuseum.org/collection/image/1612980564, © Trustees of the British Museum)





Fig. 3f–g Model-identical plaque from Diqdiqqah, BM 117121, obverse and reverse (https://www.britishmuseum.org/collection/image/1612978659, https://www.britishmuseum.org/collection/image/1612978660; © Trustees of the British Museum)

Fig. 3c Plaque 4212 from the garden (photo: P. Zimansky)





Fig. 4a-b Plaque 2291 from Room 13 (photos: P. Zimansky)

figurine continued to be used and was glued to an object that has now vanished, perhaps of organic material. As the piece was found together with some pottery near the front of the room, where a small niche had been cut into the wall, one might consider whether the figurine was placed here in a repaired state, perhaps attached to a wooden stand.

Plaque 4212, a fragment of the lower body (Fig. 3c), was found discarded outside the house in the open courtyard (season 2019). As the pieces were found in different years and then delivered to the Iraq Museum, it is impossible to determine whether both were parts of the same plaque. Only a few pieces from Diqdiqqah were found complete. While most figurines were used, broken and discarded in domestic contexts as part of special rituals, this fragment from Main Room 6 obviously continued to be used at a meaningful place in the house. Interestingly, the fragmentary lower part of a seated male god in a flounced garment was also found near the floor of Room 6.¹³

Whether it is significant that the owner of the house was principal of the Ningal temple, and therefore had a special relationship with Ningal, is possible, but cannot be proven. In any case, the evidence for the use of this terracotta in the house provides detailed new evidence for domestic use.

In Phase 1 alone more than 10 broken plaques were lying around in this house, where they had probably been used in domestic rituals, before they had been discarded. Indeed, the number of broken female figurines was particularly high in the open yard or garden south of the house.

However, one complete terracotta plaque was kept in the house. The rectangular plaque (2291) depicts the bearded king in his royal cap with upturned brim, enthroned on a padded stool and holding a beaker in his left hand (Fig. 4a–b). Comparable terracotta plaques are rare, and this is the only example from Ur so far, but roughly comparable ones are reported from Larsa, Sippar or Tell Ibrahim, and Uhaimir/Kiš, none of them with precise find spot (Opificius 1961, nos. 369, 370; Barrelet 1968, nos. 568, 569, 637). The most interesting issue about this terracotta, however, is again its context: it was located in the north-western corner of the house in the relatively large Room 13, which can be interpreted as a particularly elaborate kitchen on the basis of two domed ovens and three drainage shafts (see Fig. 2). Where the staircase to the upper floor led up diagonally across the corner of Room 13, a small niche-like area was created in which many unusual objects had been kept: two bull's horns, two bowls, a letter from Sîn-nādā to his wife in which he told her not to worry about him but that he was fine, the bitumened small basket (Fig. 6), and this one image of the king. Based

Weowethe information about comparable pieces from Urto Elisa Roßberger, who is preparing the publication of all terracottas from Area 5. See e.g. Ur BM 1931.1010.414 or https://www.britishmuseum.org/collection/object/ W 1928-1010-403.

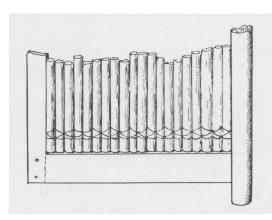




Fig. 5 Reed door from the Nin-šubur Chapel (UE 7:143, Fig. 39)

Fig. 6 Small basket on the floor of Room 13 (photo: A. Otto)

on the letter and the context of the large kitchen, we assume that it was Nuttuptum who had placed some objects here, in this kind of alcove, that were of special importance to her.

§2. Artefacts made from reed

The importance of reed and cane in the relatively wood-poor southern Mesopotamia was notoriously enormous and reflected abundantly in textual evidence (Sallaberger 1989; Streck 2009–12): Houses, boats, mats, baskets, furniture, the stylus for cuneiform writing and countless other objects of daily life were made of this material. Unfortunately, they are much less attested in archaeological evidence, because organic material is usually not preserved in these zones. Woolley reports numerous objects made of reed, without illustrating a single one (see the index in UE 7:259). The only exception is the sketch of a door leaf which was made of reeds tied together and integrated in a wooden frame; it closed the entrance to Nin-šubur Chapel (Fig. 5), see below 3.¹⁴ The reason for their rare archaeological attestation is evident: they are clearly visible at the very moment of excavation and stand out as whitish or blackish discolorations, but cannot be preserved. It is very time-consuming and needs painstaking work (best by blowing only) to carefully excavate reed impressions—only for having it recorded in a photo.

Four examples from the new excavations will be discussed here:

- 1. The floor of Main Room 6 was completely covered with reeds. However, due to the fact that they were not woven mats, but reed stalks laid side by side, one must assume that this was only the underlay for the actual floor covering, because reeds and reed leaves can easily inflict injuries. This would indicate woven mats, woven or felted textiles, kilims or animal skins¹⁵ as floor coverings, as a substitute for seating furniture. In the reconstruction (Fig. 9) we have shown the covering as a woven mat, although we rather assume a more comfortable covering in the main room which certainly served for reception and residency.
- 2. A small basket woven from rushes (*Juncus*), rather than extremely fine reed (*Phragmites*) (Fig. 6) lay in the above-mentioned niche in Room 13, near the terracotta plaque of the king. It had a flat, square base (6–6.5 cm by 6.5 cm) and was then woven further upwards to form a small basket 6.5 cm high. The paper-thin substance had been preserved over the millennia due to the fact that the basket was coated with bitumen.

¹⁴ E. Stone and P. Zimansky found remains of a similar door made of reed in their AH excavation area (pers. comm.).

¹⁵ Sheep and deer skins, which covered the floor and / or the mud benches along the sides of main rooms, were identified by small ankle bones in the Late Bronze Age houses of Tall Bazi (Otto 2006:147).





Fig. 7a-b Woven reed mat covering the second floor of Room 11, Phase 1 (photos: A. Otto)

- 3. When the floor in Room 11 of Sîn-nādā's house was raised a few centimeters in the course of its approximately 25-year existence (presumably because the first clay floor of Phase 1 was too worn), remains that were considered worthless were left behind and covered with a layer of mud about 5–10 cm thick. Among other things, a group of several small clay tablets from the reign of Nûr-Adad of Larsa were found in this clay packing. They were obviously no longer needed as economic documents (Otto 2023:11–12). A beautifully woven reed mat, even showing the selvedge, was laid over this mud floor which covered the tablets (Fig. 7a–b).
- 4. A child's burial in a reed basket was excavated in the 2022 season. Since it was found in the open area near the neighbouring house, outside of the house in consideration, it is not illustrated here. So far, no comparable basket burial seems to have been reported from Ur, but it is possible that a completely decayed basket would not have been noticed.

Many more insights into the activities of the inhabitants are revealed by the material remains. They will be presented in the final publication, which is currently in preparation. Toys such as baby rattles and knuckle bones speak for children in the house, a game board was used to enjoy leisure. Several low-quality cylinder seals were also left in the house when it was abandoned. Why the original seals are of much lower quality than those found impressed on labels, dockets, clay tablets, door and container closures is a phenomenon that still needs explanation.

Twelve small weight stones of haematite and goethite attest to financial transactions of the inhabitants in phases 1 and 2 of the house (Hafford, Einwag & Otto 2023:184–91). This number also gives a new picture of the frequency of weight stones in domestic contexts. Even though Woolley reported more than 400 weights from Ur, only 33 were assigned to the largest housing quarter in AH, most of which came from graves (Hafford, Einwag & Otto 2023:196–7). As a result, there had been hardly any information on the frequency of weight stones in domestic contexts from Ur so far.

§3. Three-dimensional reconstruction of the House of Sîn-nādā and Nuṭṭuptum

A 3D reconstruction of a building not only makes the excavated relics more vivid and comprehensible, but the availability of light and air or questions about accessibility and a second storey need to be carefully considered, which in turn leads to a deeper understanding of the excavated remains. Together with the Virtual Reality Branch of the Leibnitz Computing Centre of the Bavarian Academy Munich, we started the project of a 3D reconstruction of the house. All the details of the reconstruction were discussed in frequent meetings, and both sides—archaeologists and IT experts specialized in 3D modelling and reconstruction—benefited from the perspective of the others.

Simple modelling of the ground plan is quite easy (Fig. 8). Also the building technique is clearly visible and can be illustrated with ease: mud brick walls were laid on baked brick footings,



Fig. 8 3D model of the groundplan (Center of virtual reality and visualization, LRZ Munich)



Fig. 9 Interior view of Room 6 (B. Einwag and Center of virtual reality and visualization, LRZ Munich)

which, however, vary greatly in height (Fig. 9). Thus, the outer walls were built with up to 20 courses of baked bricks, whereas inner walls sometimes had only 4 courses of baked bricks. The size of the rectangular bricks was also always more or less the same (usually about 28–30 by 18–20 by 8–9 cm). But as we moved to the modelling of the interior and the details, more questions arose and led to more or less hypothetical answers.

In several rooms we found remains of reed mats, and in these cases, we were able to design the floor. But how high were the rooms? What did the doors and windows look like? We tried to stay as close as possible to the results of our excavations. We combined this with the findings of Woolley and other researchers. We accepted Woolley's idea that the doors were capped with arches, because he had

found a fallen arch (UE 7:28), but did not follow in every detail his reconstruction of the ideal typical house No. 3 Gay Street in Area EM (UE 7: Pl. 22). The doors were reconstructed according to the remains of a door made from reed-work which Woolley had found in the Nin-šubur Chapel (UE 7:143, Fig. 39), see Fig. 9.

The question of the second storey is more delicate. L. Woolley was convinced that most houses were two-storied (UE 7:26), while E. Stone (1981:30) and others were more in favour of single-storied houses—a question that has not been solved yet. However, several arguments in Sîn-nādā's house speak in favour of two stories. A solid staircase, built from baked brick in the lower courses, is situated in the south-west corner of the house, accessible from the central court. Above Room 13,

¹⁶ For this discussion see Battini-Villard 1999:371–84, Miglus 1999:75.



Fig. 10 3D reconstruction of Sîn-nādā's house, view from south (B. Einwag and Center of virtual reality and visualization, LRZ Munich)

the kitchen, the wooden staircase must have led around the corner to reach the roof or the rooms of the second storey approximately above Room 12, from where every room of the upper storey can be easily accessed.

But the sheer need for sleeping space also calls for a second storey. For even though the house is very spacious at over 230 m², there is not a single room that would have enough space without fixed installations or mobile inventory that at least two adult people could sleep. Exceptions are the courtyard and Room 6, but both can be excluded. The courtyard would not have been a good sleeping place in the rainy season, and the main room very likely served representative purposes, which are poorly compatible with a sleeping room for several people, not to mention babies or children.

Therefore, in this 3D study, we assume a row of rooms above all but Room 6 (Fig. 10). First, its southern wall is the only one that was built carelessly; additionally, the floor in the southern quarter of the room was paved with baked terracotta slabs, which in turn were covered with bitumen. This unusual device must be explained in such a way that the southern quarter of the room received a waterproof floor, which confirms Woolley's assumption that above the main room (he calls it the "domestic chapel") there was no second storey, but only a terrace that allowed partial light and air into the basement (UE 7:29–30). Therefore, we reconstruct the area above the main room as a roof terrace.

In the design of the interiors, we followed the artefacts and architectural features. Apart from door sockets from baked brick, no evidence of the doors has remained. The material remains give a hint for a possible use of most rooms, including areas of cooking, handling water, storage rooms, reception areas, a pantry, and others. Room 4 must have been related to school education in some way. Since along its walls numerous school texts lay scattered on the floor, we assume shelves along the walls on which the lenticular and rectangular school tablets lay or stood lined up.

A first suggestion of how the house might have looked like from outside is depicted in Fig. 10. In the garden, some native plants—tamarisk and date palm—have been reconstructed, even if there is no archaeological evidence for it, just our experience during excavation that every single shade tree is invaluable. A second argument is the text quoted above, which mentions a tomb in the garden of a house belonging to the chief lamentation singer of Lagaš in the Ur III period (Molina 2019:694–5).

The two sheep, which admittedly seem rather naive, were added on the basis of the texts found in Room 5. In this room, which had a door to the garden, there were dozens of sealed labels and tablet labels proving the delivery of draff—frequently used for the fattening of sheep—to Nuttuptum. We



Fig. 11 Experiencing Sîn-nādā's house 3D in the CAVE (photo: B. Einwag)

know most of the neighbouring houses from the geophysical prospection, while only the neighbouring house to the south could be partially excavated. However, the magnetometer prospection shows that the house lay not isolated, but bordering a wide street in the west, beyond which there were similar houses. Many more houses are visible to the north and east, many of them separated by alleys and far less cramped than in Area AH.

This is just a quick summary of the current status of our 3D modelling project of the house of Sîn-nādā and his wife Nuṭṭuptum. More information, pictures and a camera tour are visible on our project homepage.¹⁷ Further applications are in preparation, such as for head-mounted displays. The 3D-model is in preparation to be presented in the brand-new CAVE in LED technology at Garching near Munich (CAVE Audio Visual Environment)¹⁸ (Fig. 11).

To sum up, even a small-scale, but careful excavation, documentation and reconstruction of a single house with modern methods can add substantial value for better understanding the details of daily life in the extensive urban quarters of early Old Babylonian Ur, a hundred years after Woolley's groundbreaking excavations and building on his fundamental insights.

¹⁷ https://www.vorderas-archaeologie.uni-muenchen.de/forschung/ur-3D/index.html

¹⁸ https://www.lrz.de/presse/ereignisse/2023-10-26-V2c-CAVEneu/

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Bibliographical Abbreviations

BAH Bibliothèque Archéologique et Historique

BAR British Archaeological Reports

CUSAS Cornell University studies in Assyriology and Sumerology

GMS Grazer Morgenländische Studien

MAAO Münchener Abhandlungen zum Alten Orient

OBO Orbis Biblicus et Orientalis

PIPOAC Publications de l'Institut du Proche-Orient ancien du Collège de France UAVA Untersuchungen zur Assyriologie und Vorderasiatischen Archäologie

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An on-line colloquium was held in late 2022 to celebrate the centenary of Sir Leonard Woolley's first season of excavations at Al-Muqayyar, the Babylonian city of Ur. This book publishes 18 papers from the colloquium by international scholars, together with a foreword from Dr Laith Majid Hussain, as President of the State Board for Antiquities and Heritage, and a recently unearthed report of J.G. Taylor's work at the site, written in 1858.

The papers re-evaluate Woolley's work, re-visit his archives with fresh eyes and apply 21st-century techniques to enrich our knowledge of the 7,000 year old city. They also include results from renewed work at Ur, undertaken by joint Iraqi and international teams of archaeologists. The papers highlight the value of well-documented old excavations and the exciting potential of collaborations to explore new research questions, under the leadership of the Iraqi State Board for Antiquities and Heritage.



