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Nineveh, City of Libraries

New Archaeological and Epigraphic Discoveries in Iraq

Ante Quem

edited by
Gianni Marchesi and Nicolò Marchetti

Alma Mater Studiorum - Università di Bologna
Dipartimento di Storia Culture Civiltà

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New Archaeological and Epigraphic Discoveries in Iraq

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edited by
Gianni Marchesi and Nicolò Marchetti
with the collaboration of Claudia D'Orazio

Ante Quem

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Table of contents

Forewords 7

The Iraqi-Italian Archaeological Expedition at Nineveh, the NEAP initiative, and the history of the exploration of ancient Nineveh
Nicolò Marchetti, Timothy P. Harrison, and Ali Abdulamir Abbas Al-Musawi 12

The Library of Ashurbanipal: Formation, rediscovery, and legacy
Jon Taylor and Sophie Cohen-Olberding 18

The lower town and the fortifications of Nineveh in light of the new archaeological discoveries
Nicolò Marchetti 22

The residence in area C and its *scriptorium*
Eleonora Mariani 30

Library texts from area C
Enrique Jiménez and Jon Taylor 36

The residence in area E
Claudia D'Orazio, Jacopo Monastero, and Daniele Redamante 40

Library texts and archival documents from area E
Enrique Jiménez, Gianni Marchesi, and Jon Taylor 46

The houses in areas A, B, F, H, S, and V
Francesca Cavaliere, Claudia D'Orazio, and Gabriele Giacosa 50

Royal inscriptions and texts of other genres from private houses
Gianni Marchesi 58

The "bankers" of Nineveh: Financial activities in 7th-century BCE Mesopotamia
Palmiro Notizia 60

Babylonians and Assyrians in Nineveh
Enrique Jiménez 64

The bioarchaeology of Neo-Assyrian Nineveh
Alexandra Bojinca, Müge Ergun, Elena Maini, Eleonora Serrone, Rula Shafiq, and Alexander Weide 70

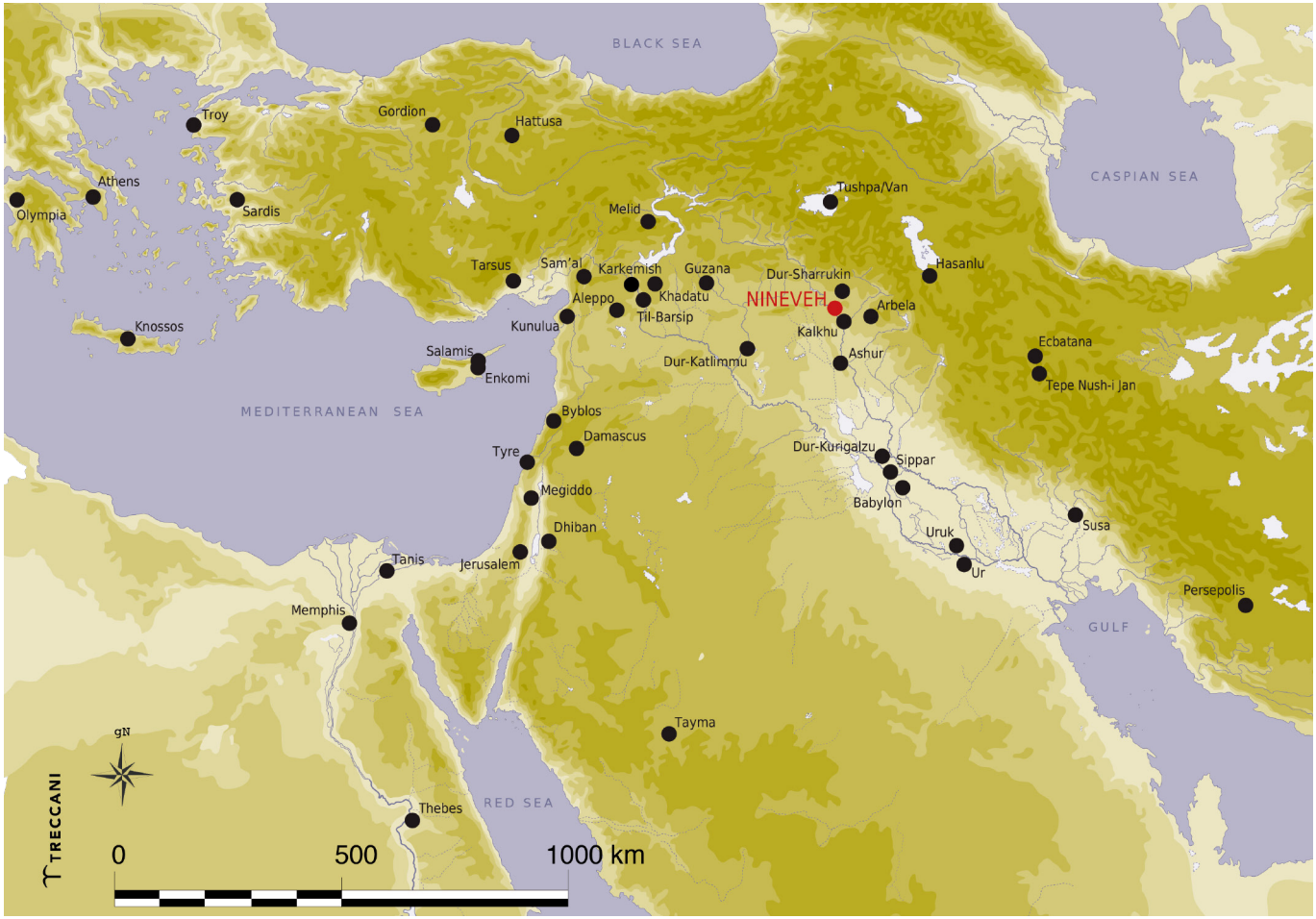
Conservation of the cuneiform tablets from the lower town of Nineveh
Nadia Barbi and Carmen Gütschow 76

From archaeological context to physical replica: 3D photogrammetric documentation, digital processing, and resin-based 3D printing of artefacts from the excavations at Nineveh
Jacopo Monastero 80

Catalogue
Nos. 1-45 90

Bibliography 198




BLACK SEA
CASPIAN SEA
MEDITERRANEAN SEA
RED SEA
GULF
Troy
Gordion
Hattusa
Athens
Olympia
Sardis
Melid
Tushpa/Van
Tarsus
Sam'al
Karkemish
Guzana
Dur-Sharrukin
Hasanlu
Aleppo
Khadatu
NINEVEH
Arbela
Til-Barsip
Kalkhu
Knossos
Kunulua
Salamis
Enkomi
Dur-Katlimmu
Ashur
Ecbatana
Tepe Nush-i Jan
Byblos
Damascus
Tyre
Dur-Kurigalzu
Sippar
Megiddo
Babylon
Dhiban
Uruk
Susa
Tanis
Jerusalem
Ur
Persepolis
Memphis
Tayma
Thebes
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Forewords

It is a pleasure to introduce this exhibition in Bologna, dedicated to the cuneiform tablets discovered at Nineveh by the Iraqi-Italian Archaeological Expedition at the site, directed by Nicolò Marchetti between 2019 and 2023. On behalf of the State Board of Antiquities and Heritage of Iraq, I welcome this opportunity to share an important chapter of our country's heritage with the Italian public.

By presenting these discoveries through faithful physical and digital replicas, this exhibition creates a valuable connection between research and public engagement. It invites visitors to consider both the achievements of ancient Mesopotamia and the responsibility we share for safeguarding the evidence of its past.

Nineveh holds a special place in the history of Iraq and of world civilization. The recovery of its written records brings us closer to the people who inhabited this great city, preserving traces of their knowledge, activities and ways of understanding the world. These tablets remind us that archaeology recovers not only monuments and objects, but also human voices across the centuries.

The collaboration between the State Board of Antiquities and Heritage and the University of Bologna reflects a shared commitment to the investigation, protection and appreciation of Iraq's archaeological heritage. Through patient work in the field and the study of each discovery, Iraqi and Italian colleagues contribute together to a fuller understanding of Nineveh and to the transmission of its legacy to future generations. The archaeological park opened by the expedition at Nineveh in 2023 marked an important step toward strengthening the site's protection while promoting sustainable development through cultural tourism.

I extend my sincere thanks to all the members of the joint expedition, and all those who have contributed to this exhibition. May it deepen the friendship between Iraq and Italy and inspire renewed interest in the extraordinary cultural heritage of Iraq.

Ali Obeid Shalgham
Chairman
State Board of Antiquities and Heritage of Iraq

The rediscovery of Assyria since the mid-19th century is one of archaeology's great epics, and Nineveh has been its most potent symbol, both for its biblical connections and for the monumentality of its architecture and artworks. Nineveh's fall in August 612 BCE to a coalition of Medes and Babylonians reverberated throughout the ancient world and became firmly embedded in the collective memory of both East and West. Its prominence and fame, however, have drawn scholarly attention primarily to its royal palaces, while the structure of the imperial city as a whole has remained largely neglected. Meanwhile, the expansion of the village of Nebi Yunus into what is now East Mosul has caused the loss of more than a third of this vast site. Against a backdrop of mounting threats associated with the reconstruction and development of Mosul following Daesh's devastating occupation in 2014–2017 and the war to liberate the city, the Iraqi-Italian Archaeological Expedition carried out excavations and conservation work in Nineveh's lower town between 2019 and 2023. Among the many archaeological discoveries, the newly recovered libraries allow the famous 19th-century discovery of Ashurbanipal's Library to be placed within a much more complex framework: that of a city where scholarly libraries seem to have been almost commonplace. These discoveries offer new insights into Nineveh's role as the center that managed the extraction of resources across a vast, multiethnic empire—an empire in which knowledge was itself a highly valued commodity. Nineveh thus emerges as a "city of libraries."

Together with Gianni Marchesi, the Expedition's epigraphist, we have refined our understanding of Nineveh's ancient history and developed the concept for this exhibition. The contributors to this catalogue not only served on the exhibition's Scientific Committee but, above all, made invaluable contributions both in the field and in the subsequent processing and analysis of the data. Nadia Barbi has been the driving force behind the particularly demanding task of conserving the cuneiform tablets, while the interpretation of the texts has depended on the brilliant and patient work of Gianni Marchesi, Jon Taylor of the British Museum, and Enrique Jiménez of the Ludwig-Maximilians-Universität München. Their decipherment reveals an intricate web of cultural and financial relations, providing an unprecedented level of detail about non-state transactions in an imperial capital of Assyria. At the same time, the conservation and public presentation of the excavated remains, goals we have pursued since the first campaign, offer visitors a unique opportunity to walk through the built spaces that once accommodated these activities.

Nineveh is both an ancient site and a modern community, and both have become woven into the fabric of our lives. To the people of Kuyunjiq, Rahmaniye, and Nebi Yunus, to the local Authorities, and to our many friends in Mosul, who have always backed us, we owe a debt that can only be honored through our enduring commitment to helping them shape a sustainable future for the site while contributing to the development of cultural tourism in that area. The opening of an archaeological park at the site in October 2023 marked a major step in this direction. Furthermore, as scholars committed to open science, we publish our research in open access and share the underlying data. We create scientifically accurate 3D models and make them publicly available. We have also worked to open the site to visitors and foster a multidisciplinary research environment in which specialists contribute their perspectives and approaches to the shared goal of developing explanatory models of the past.

The Iraqi-Italian Archaeological Expedition to Nineveh East, conducted jointly by the University of Bologna and the SBAH in 2019–2023 and 2025, was funded by the University of Bo-

logna (Alma Scavi program), the Italian Ministry of Foreign Affairs and International Cooperation (DGCE, 13th Office, led by Paolo Andrea Lombardo di Cumia, assisted by Gianluca Biscardi, among others), the Volkswagen Foundation through the KALAM project (www.kalam.unibo.it), and the J. M. Kaplan Fund. We gratefully acknowledge our close cooperation with the Iraqi Ministry of Tourism and Antiquities and the SBAH, under its successive chairmen Qais Hussein Rasheed, the late Abdulamir Al-Hamdani, Laith Majeed Hussein, and the current chairman, Ali Obeid Shalgham, as well as the assistance of countless SBAH officers in Baghdad. We are equally grateful to the SBAH Inspectorate of Ninawa Province, led successively by the late Ali Hazim Thanoon, Khairuldeen Ahmed Al-Juhaishi, Rwaed Muwafaq Mohammed, and its current head, Ali Abdulamir Abbas Al-Musawi, and to our SBAH inspectors and friends in Mosul: 'Alaa Amer Assi, Mohammed Mahmood Rasheed, Raad Sha'oud Ahmed, Omar Salim Hamdon, Hisham Thanoon Abrahim, Taysir Mahmood, Ali Abdulamir, Sermedh Walid, Amina Salem Yunus, Nur Rafed Rasim, and Suheib Subkhi Abdallah. Our colleagues at the University of Mosul's College of Archaeology, foremost among them Khalid Salim Ismael, have cooperated with us on many occasions, regularly bringing students to the site to learn about our latest results. Tim Harrison of the University of Chicago's Institute for the Study of Ancient Cultures holds a special place in our gratitude, first for answering our call for help with the Shamash Gate and then for assuming responsibility for the whole project since 2024, ensuring its continuation within a cooperative framework. The Governorate of Mosul and the Municipality of Mosul have consistently helped us in every way. The Italian ambassadors to Iraq, first Maurizio Greganti and now Niccolò Fontana, have followed our work with keen interest, and their support has been invaluable. Saywan Barzani, formerly Iraq's ambassador to Italy and now its Permanent Representative to the United Nations in Geneva, has demonstrated his friendship and commitment to our project on more occasions than can be recounted here. The students and administrative staff of the Department of History and Cultures, foremost among them Maria Carmela Cucurachi and Emmanuel Di Tommaso, have been essential to our operational success. Without their enthusiasm, flexibility, and patience in helping us overcome numerous obstacles, none of this could have been achieved.

This exhibition and catalogue would not have been possible without the help of close friends, colleagues, and collaborators. Claudia D'Orazio has been invaluable throughout the preparation and installation of the exhibition and has contributed enthusiastically to the editing of the catalogue. Vittoria Cardini did an outstanding job typesetting the catalogue with her usual care. Francesca Cavaliere and Eleonora Mariani checked and formatted the bibliography. Francesco Prezioso skillfully photographed the objects, while Francesca Cavaliere and Jacopo Monastero documented some of the tablets. Jacopo, the driving force behind our CRP approach which we share with ISAC, created the digital models of the 47 objects of significant historical importance included in the exhibition and made publicly available at https://www.orientlab.net/digital_museum/. He also coordinated the production of their physical replicas. Marco Valeri produced the maps, and Serafino Rosso edited the exhibition video, available on our OrientLab YouTube channel. Ahmed Salah Sahib Alawsi translated the exhibition texts. Through the kind assistance of Chiara Squarcina and Marianna Bressan, the Museo Archeologico Nazionale di Venezia allowed us to display a reproduction of an object in its collection. Our publisher, Marco Destro of Ante Quem, together with Enrico Gallì, devoted considerable time and effort to ensuring the highest quality of publication. The di-

rector of the Archiginnasio Library of the Municipality of Bologna, Elisa Rebellato, and staff members Anna Maria Cava, Elisa Maria Cerra, and Rosa Spina agreed to host the exhibition in their uniquely beautiful and inspiring setting. Federica Proni brought great creativity to the exhibition design and graphics, for which she is to be given full credit. Finally, two sponsors generously contributed to the costs of the exhibition: the Fondazione del Monte di Bologna e Ravenna, with its president Pierluigi Stefanini, and Risviel S.r.l., with its CEO Ulderico Sicilia. To all of them, I wish to express my deepest gratitude and admiration.

Nicolò Marchetti

The Iraqi-Italian Archaeological Expedition at Nineveh, the NEAP initiative, and the history of the exploration of ancient Nineveh

Nicolò Marchetti, Timothy P. Harrison, and Ali Abdulamir Abbas Al-Musawi

The ancient site of Nineveh includes three main sectors (Fig. 1): north of the Khosr River the area is called Kuyunjiq and includes the acropolis mound (Tell Kuyunjiq), while south of the Khosr River the central part of the site is called Nebi Yunus (i.e. Prophet Jonah, since a church and then a mosque dedicated to him lay on Tell Nebi Yunus, the other mound of the ancient city) and the southern tip is called Jounoub Ninawah or South Nineveh. A fourth sector may be called the Outer Eastern Area, i.e. the vast space east of the city walls which includes clear traces of three Assyrian moats and canals, bridges, and other buildings.

After the first topographical mapping of the site by Claudius James Rich in 1820 (his surveyor was a Greek captain called Kefala), perhaps somewhat conventionally it is at Nineveh itself that near eastern archaeology was born, when in December 1842 the then French Consul in Mosul, the Franco-Italian Paul-Émile (Paolo Emilio) Botta, started a short-lived and unfruitful sounding at Tell Kuyunjiq, before decamping to Khorsabad in March 1843 where he was to find fame. It was actually the British Austen Henry Layard who started the extensive and famous digs at the site on behalf of the British Museum in May 1847 and then again in 1849-1851 (Fig. 2), when he was succeeded there by his Mosulite assistant Hormuzd Rassam in 1852-1854 and by William Kenneth Loftus in 1854-1855 (see in general Reade 2000), the year when the

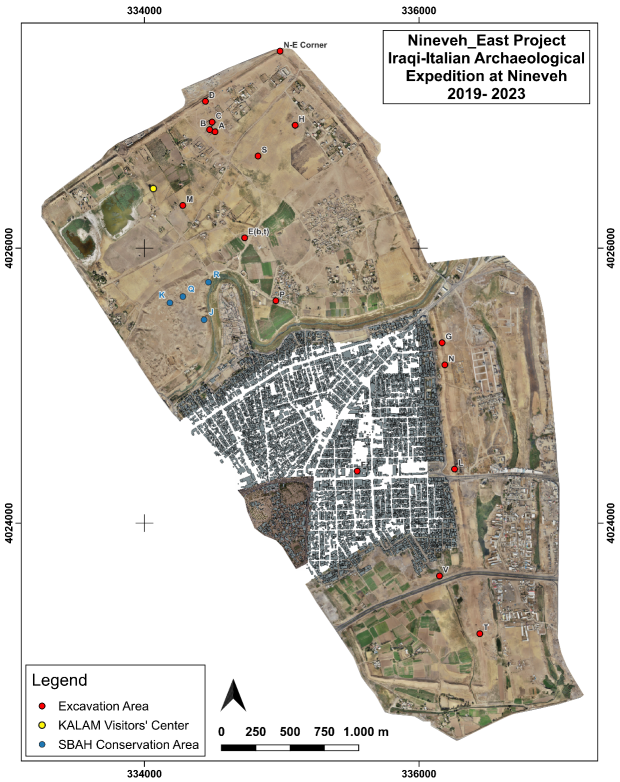


Fig. 1. Orthophoto of Nineveh and of the outer canal areas to the east (by G. Luglio and M. Valeri).

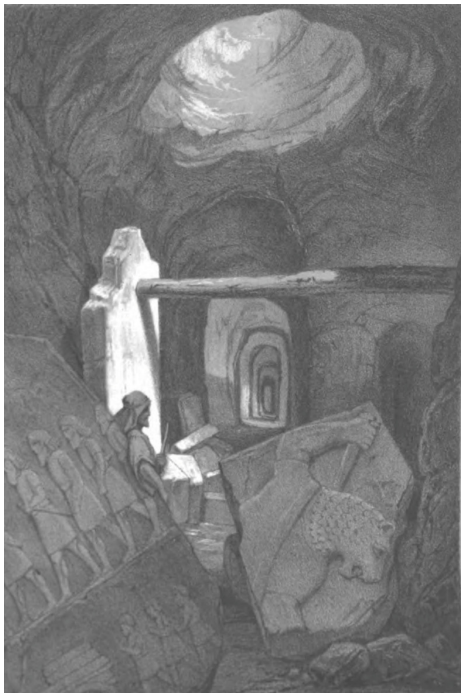


Fig. 2. The excavations by means of tunneling by A. H. Layard in the Southwest Palace of Sennacherib at Tell Kuyunjiq (from Layard 1853: 144).

Qurna disaster brought to a halt fieldwork in Mesopotamia. The discovery of the Library of Ashurbanipal (on which see Taylor and Cohen-Olberding in this volume) and of the marvelous orthostats — carved under the 7th century BCE kings Sennacherib (705-681 BCE) and his grandson Ashurbanipal (669-631 BCE) for their palaces — made a sensation among Victorian society and beyond. When the digs resumed at Nineveh — by George Smith in 1873-1874, again by Rassam between 1878 and 1882, by Ernest Alfred Wallis Budge briefly in 1889, and then by Nimroud Rassam (Hormuzd's nephew) in 1889-1890 — they were somehow less systematic in archaeological terms, if rich in finds, than the earlier digs.

A more scientific approach was brought by the last expeditions by the British Museum at the site (Fig. 3), first with Leonard William King between 1903 and 1905 (later assisted by the Assyriologist Reginald Campbell Thompson) and then again with Thompson between 1927 and 1932 (very professionally assisted by the archaeologists Richard Hutchinson, Robert W. Hamilton, and finally Max Edgar Lucien Mallowan with his wife Agatha Christie). It fell to the Directorate General of Antiquities — the predecessor of the current Iraqi State Board of Antiquities and Heritage — the task of exploring the site beyond the acropolis of Tell Kuyunjiq, at different locations during the 1940s and 1950s, notably at the Nergal Gate (first with Bashir Francis in 1941 and then with Mahmud Ainachi in 1956 with his innovative restoration concept) and with Mohammed Ali Mustafa in 1954 at Tell Nebi Yunus, where the Neo-Assyrian *ekal masharti* or Palace-Arsenal was located. It was, however, Tariq Madhloom (Madhloom and Mahdi 1976) who started systematic and extensive excavations at the site between 1965 and 1967 (during those same years the University of Mosul dug the Adad Gate with 'Amr Suleiman), followed by Manhal Jabur Ismail until 1987, who also supervised extensive restoration and conservation projects at the site (although some, like the roofing of Sennacherib's throne room, were already started under Madhloom).

Although Iraqi archaeologists continued to work along the city walls even after that date, with Donny George trenching along the eastern walls, it was in 1987 that David Stronach of the University of California, Berkeley started a large international archaeological project which was interrupted by the Second Gulf War in 1990. The crisis and standoff which followed saw a progressive damaging of the conserved structures, especially of Sennacherib's throne room complex (Russell 1998), which was then documented and protected again in 2000-2003 before and after the Third Gulf War by a team of the Italian Ministry of Cultural Heritage and the CRAST (Lippolis 2011). Between 2011 and 2013 the College of Archaeology of the University of Mosul dug at the site



Fig. 3. Aerial view of Nineveh from south in 1918, with the line of the city walls perfectly visible: only Tell Nebi Yunus was urbanized at that time (courtesy of the R.A.F. and the UCL Institute of Archaeology).



Fig. 4. The lengthy and delicate work undertaken in 2019 to remove the debris of the protective roof over the Adad Gate, destroyed by Daesh in 2016.



Fig. 5. Public archaeology at Nineveh in 2022: N. Marchetti giving a live tour of the Adad Gate to the Governor of Ninawa, Najim Abdullah al-Jubouri, and the SBAH Inspector of Mosul, Heireddin Ahmed Naser, while the new protective shelter is being built in the background.

of the North Palace of Ashurbanipal on Tell Kuyunjiq (Aljuboori 2016), before Mosul fell to the occupation of Daesh in 2014.

When the city was liberated in 2017, at the cost of enormous suffering for the local population, the priority for SBAH was to take back control of the site and start repairing the great damages inflicted on heritage by Daesh: they thus accepted in 2018 the proposal by Peter Miglus of Heidelberg University to start a project at Tell Nebi Yunus (where the mosque had been destroyed by Daesh to allow the systematic looting of the underlying palace remains) and at the palace of Sennacherib on Tell Kuyunjiq and they then asked the Iraqi-Italian Archaeological Expedition by the University of Bologna and the SBAH (which since 2016 had been carrying out the surface survey in the eastern province of Qadisiyah) to investigate and safeguard the vast site of Nineveh, increasingly endangered by the urban expansion of Eastern Mosul. After a preliminary visit in January 2019, a 5-year excavation permit was issued for the eastern half of the site covering an area of 720 hectares. The Iraqi-Italian Archaeological Expedition at Nineveh East carried out under the direction of Nicolò Marchetti the first campaign in the autumn of that same year (Fig. 4) and another four yearly campaigns until 2023, digging in 15 excavation areas across the lower town and briefly in 4 on the acropolis for emergency reasons.

The main scientific focus of this project was to investigate the urban design of this imperial capital, extending over 780 hectares. At the same time the conservation and public presentation of excavated remains within an archaeological park was our other main goal since the start and in fact the excavation strategy itself was also planned with this other objective in sight (Fig. 5). The first part of the Nineveh archaeological park was finally opened to the public in October 2023 (Fig. 6): it included the Adad Gate and the open area north of it, the monuments in areas A, B, C, and a newly-built mudbrick visitor center in the middle of Kuyunjiq (Fig. 7), in addition to major coordination with the Municipality of Mosul for the implementation of a public park outside the eastern city walls.

In 2020, Timothy Harrison, then at the University of Toronto, accepted an invitation to investigate the Shamash



Fig. 6. The seventh-century BCE Adad Gate after the completion of excavation and conservation work around and through it. The photograph was taken in October 2023 during the opening ceremony for the archaeological park. Michelangelo Pistoletto's land art installation "Third Garden" is visible in the middle ground.

Gate (area L), which had been heavily damaged by the extensive tunneling of Daesh, with the aim to develop a plan to stabilize and restore the monumental remains of this gate, the principal approach to Nineveh from the East, and thus often referred to alternatively as the Erbil, or Arbil, Gate. This effort included a thorough assessment and documentation of the subterranean network of tunnels, a joint project with the UNDP to stabilize the tunnels, and preliminary targeted soundings within the central passageway of the gate to assess the potential for archaeological exploration and the restoration of the gate superstructure.

In 2024, following the completion of the first 5-year cycle of investigations, Nicolò Marchetti started a new project at the Kassite capital city of Aqar Quf/Dur-Kurigalzu and the Nineveh East Archaeological Project (NEAP) was initiated under the direction of Timothy Harrison, now at the Institute for the Study of Ancient Cultures (ISAC; formerly the Oriental Institute) of the University of Chicago, with the broader aim of continuing the field research and cultural heritage preservation program in East Nineveh launched by the University of Bologna. The Bologna team continues to participate in this effort, both excavating and conserving in its previous excavation areas, and carrying out together a cutting-edge program of digitalization and web-sharing of archaeological artifacts (on which, incidentally, the present exhibition is based). To date, the NEAP investigations have continued to focus on the Shamash Gate (area L) and areas C, E Top, V, with important new epigraphic finds in E Top, while the development of the Archaeological Park has continued at an energetic pace, with large open areas along the exterior face of the eastern city wall landscaped and transformed into a vast green space, providing both a protective buffer to the archaeological site and much needed public park space.



Fig. 7. The building constructed in 2022-2023 south of the Nergal Gate using traditional techniques (mudbricks and mud plaster) to serve as a tourist information center as part of the KALAM project, funded by the Volkswagen Foundation (www.kalam.unibo.it).

The Library of Ashurbanipal: Formation, rediscovery, and legacy

Jon Taylor and Sophie Cohen-Olberding

Overview of contents

The Library of Ashurbanipal, king of Assyria 669-631 BCE, has proven central to Assyriology for more than a century, because it contains a huge number of tablets containing an incredible range of scholarly compositions, often in multiple copies. They typically provide the majority of, and the best preserved, sources for our reconstruction of texts. These royal tablets were written on well-made tablets, in very clear handwriting. The fires that destroyed Nineveh's palaces burned the clay tablets hard. Even after more than 2500 years, many are as legible as the day they were written.

The major branches of scholarship were divination, astrology, magic, medicine, and lamentation. Their professional manuals compiled knowledge generated over centuries of practice. The Medical Encyclopaedia gathered remedies into fifty chapters arranged from head to foot, extending to 13,000 lines of text (Simkó and Panayotov 2020-2023). The omen series dedicated to meanings found in daily life covered at least eighty tablets, or in one edition more than a hundred. The Library served to protect the king's health and provide him with the best information available to make decisions of state. Alongside them are texts of a more literary character, such as the famous Epic of Gilgamesh (Fig. 1). These could also have a long history behind them, but usually extended over no more than a dozen tablets.

Colophons

Ashurbanipal's scribes marked the tablets in his collection with one of many colophons — scribal notes at the end of a tablet. These colophons were first studied in 1916 (Streck 1916: 345-355), and labelled from a to w; further colophons were subsequently identified, including several during a recent research project between the British Museum and the Ludwig Maximilian University



Fig. 1. The famous Flood Story from the Gilgamesh Epic, pieced together from fragments (K.2552) (© The Trustees of the British Museum).

of Munich (Taylor et al. 2023). Only a few colophons occur with significant frequency. They state his name and royal titles. What comes next differs greatly. Tablets marked with colophon a were not originally written for Ashurbanipal, but brought into his collection, at least temporarily. Colophon b mentions copying from many originals, as well as quality control in an assembly of scholars. Colophon c/d instead stresses Ashurbanipal's scribal abilities and his close connection to the god of writing (Fig. 2). It marks a wide range of texts within his library. Colophon l is focused on tablets containing texts about extispicy. Meanwhile colophon q is dedicated to medical texts, as newly edited in the Library. A group of colophons indicate that they were produced at Ashurbanipal's command for inclusion in the Library of the temple of the god of writing; many of these are lamentations. The royal collection also contains hundreds of tablets bearing colophons naming individual scribes. In most cases, each scribe is found only once or very few times. The exception is a former royal scribe called Nabu-zuqup-kenu. While these tablets were acquired by the king, they were not made part of his official library collection. Likewise, there are some tablets bearing no colophon that belonged to him, but were not officially acquired.

Sources/acquisition

Although many tablets in Ashurbanipal's Library were written in Nineveh during Ashurbanipal's reign, the collection was diverse. Some tablets date to earlier periods and were produced during the reigns of his predecessors Sennacherib (705-681 BCE) and Sargon II (720-705 BCE). These tablets were produced not only in Nineveh, but also in Assyrian cities such as Kalhu (modern Nimrud) and Assur (modern Qal'at Sherqat). Some tablets found at Nineveh are even older. For instance, a few belong to a Middle Assyrian archive, most of which was discovered at Assur. This archive was sometimes mistakenly called the



Fig. 2. Ashurbanipal, the royal librarian, depicted with a stylus in his belt while he fights a lion (1856,0909.48) (© The Trustees of the British Museum).

"Library of Tiglathpileser."
Most tablets from Nineveh were written in Assyrian script. Some display a Babylonian ductus, however, and mention individuals who were probably of Babylonian background. Their origin has therefore been the subject of ongoing debate. Copies of letters, found in Babylonia and dating to as late as the 1st century BCE, describe how Ashurbanipal ordered tablets for his palace from Babylonian archives. Earlier documents, including records of texts and their owners, have likewise been interpreted as acquisition lists of texts intended for the royal collection (Parpola 1983). These documents date to 647 BCE, one year after Ashurbanipal's victory over Babylonia, which had been ruled by his brother Shamash-shumu-ukin (668-648 BCE). Among the preserved Babylonian tablets from Nineveh, however, some can be assigned to Assyrian contexts. Moreover, Babylonian scholars had worked at the Assyrian royal court for generations. If Babylonian archives had been plundered on a large scale, the tablets excavated at Nineveh do not appear to preserve most of that material.

Discovery, locations, collections
The sheer number of tablets and fragments, together with nineteenth-century excavation methods, resulted in a substantial loss of archaeological context. Nevertheless, later research, especially by the archaeologist Julian Reade, has reconstructed many subcollections and aspects of their registration history (Reade 1986).
Most of the tablets that make up the Library of Ashurbanipal were discovered in 1850 during Austen Henry Layard's excavations in the Southwest Palace, and in 1854 during Hormuzd Rassam's excavations in the North Palace. A few earlier finds had been made — some were acquired by Claudius Rich as early as 1820 — but their significance was not recognised. According to Layard, two adjoining chambers were filled with tablets "to the height of a foot or more from the floor." These major discoveries were later supplemented by thousands of additional fragments, recovered mainly during expeditions by Hormuzd Rassam, George Smith, E. A. Wallis Budge, Leonard William King, Reginald Campbell Thompson, Richard Wyatt Hutchinson, and Max Mallowan up to 1932. Between 1960 and 1980, Iraqi archaeologists excavated further tablets from the Library. Alongside the big finds in the Southwest Palace and the North Palace (Fig. 3), others came from the adjoining Nabu Temple area. Tablets from the Nabu Temple were marked with their own colophons. Additional tablets came from the Ishtar Temple. When it is possible to determine where specific tablets were found, we see that they do not always appear where their colophon would suggest they should. Today, the bulk of the tablets from Ashurbanipal's Library are curated in the British Museum, while about 100 are distributed among collections in Austria, France, Germany, Iraq, the Netherlands, Russia, Switzerland, Türkiye, the United States, and the Vatican (Taylor and Jiménez 2026).

Significance
Ashurbanipal's Library will probably always loom large in Assyriology. It must have been the largest collection of cuneiform ever assembled. The 32,000 fragments recovered so far represent maybe 5,000 original tablets. And that seems to be at most half of the collection. Already on discovery there were high hopes for the Library, and those expectations have been exceeded. It contains a remarkable breadth and depth of material. Inevitably, subsequent finds of tablets were given the moniker "library" and comparisons were made to Ashurbanipal's. But his collection appears to have been unique. Scholarly discussion has questioned whether it was really one library or several, or even a library at all. His colophons make clear that this was a library, and strongly suggest that it was envisaged as a single entity. Recent research demonstrates that it was heavily disturbed in antiquity; what was found was not the result of collapsing bookshelves, but something far more complicated. Even after almost two centuries of intensive effort, Ashurbanipal's Library still holds many secrets. And new excavations in his palaces would doubtless recover more of his collection, as well as clarifying the circumstances around its violent end in 612 BCE.



Fig. 3. Aerial view from the north of the acropolis at Tell Kuyunjiq (2019). The area of Ashurbanipal's North Palace is in the center foreground; the vast, now urbanized portion of the site known as Nebi Yunus is visible in the background.

The lower town and the fortifications of Nineveh in light of the new archaeological discoveries

Nicolò Marchetti

Notwithstanding the very long history of excavations at the site, when the Iraqi-Italian project started in 2019, surprisingly little information was available on how this immense capital city was organized, beyond its two main mounds and city walls (Matthiae 1998). Besides some chance surface finds by the early excavators, it was only in 1932 that Thompson and Mallowan (1933: 75-79, pl. CVI left) excavated a 7th century BCE building in the north west lower town, inside the Mashki Gate, from which they also recovered some Luwian hieroglyphic inscriptions (ibid., pl. CV), a most interesting hint of the vast cultural relations woven into the imperial core. During the 1970s and 1980s, the SBAH investigated two areas in Nebi Yunus where some non royal monumental residences were brought to light in the Bit Khilani/ Lower Town Palace area (Ismail 1997-1998) and in the nearby "Area 59" (Postgate and Ismail 1993: 6-11). In the late 1980s, the Berkeley Expedition excavated an artisanal quarter with kilns in the north western corner of the city (Stronach and Lumsden 1992: 228) and a house behind the Mashki Gate (Barbanes Wilkinson and Lumsden 2022), near the 1932 building. As far as the fortification system is concerned (see in general Scott and MacGinnis 1990; Reade 2000), five gates (usually called Mashki, Nergal, Adad, Shamash, Halzi) had been explored, though partially, while two others were only located and published to a very limited extent (Sin, Ashur). Long stretches of the walls of Nineveh had undergone since the 1970s an anastylosis, which — even if not entirely convincing from an archaeological viewpoint — actually helped in containing the expansion of East Mosul toward Kuyunjiq.

When in 2019 we started the archaeological investigation of eastern Nineveh, initiating a project the main goal of which was tracing its urban structure, we also had to face several emergencies on the ground, the latest one being the substantial damage suffered during the occupation by Daesh (2014–2017). At that time, in fact, eleven large and deep trenches were cut in the Kuyunjiq area (Campana et al. 2022) and a new four-lane road to the south of Nebi Yunus (now called Shara al-Asady) was built bulldozing through the city walls, not to speak of the intentional destruction of ancient monuments by Daesh carried out in 2016. Furthermore, the village of Rahmaniye encroaches on Kuyunjiq (where severe threats come from agricultural activities and illegal dumping as well), while the large neighborhood of Nebi Yunus has completely obliterated the central part of the site. It is in this degraded context that we planned a research framework tackling scientific objectives as well as issues of conservation, public presentation, raising community awareness while tackling sustainable development through the establishment of an archaeological park at the site.

Nineveh was one of the most ancient sites in Assyria and already in the Bronze age it developed a lower town

around the main mound, along an arc which includes on its eastern margins our areas E, M, P (see Fig. 1). In the lower town, the oldest evidence we observed so far consists of a sequence of kilns from the early 2nd millennium BCE in area P, which is an important clue to the date of the lower town's earliest occupation, a Middle Assyrian stone-paved road at the foot of the acropolis (area R), and in area E Bottom a dense sequence of domestic buildings extending from the late Middle Assyrian (but older levels will certainly be reached as the investigation continues) to the end of Neo-Assyrian I (see D'Orazio, Monastero, and Redamante in this volume, fig. 1). An especially interesting feature is that in area E we have an uninterrupted sequence from the late 2nd millennium to 612 BCE (in area E Top) of elite buildings having the same orientation, attesting to the functional and urban continuity in this sector even after Sennacherib's refoundation of the city.

In fact, when Sennacherib decided to move here his new capital, abandoning Khorsabad/Dur-Sharrukin after the tragic killing of his father Sargon II in a war in Cilicia in 705 BCE, he planned a new circuit of city walls extending for 12.5 km and bringing into the urban perimeter the hills to the north east, which reach almost the same elevation as Tell Kuyunjiq (Figs. 1-2). Our strategy for exploring the structure of this newly founded metropolis revolved around three methods: surface survey, geophysical investigations, and excavations. The systematic surface survey of the eastern half of the city showed a largely continuous pattern of occupation during the (later) Neo-Assyrian period. Magnetometry revealed a series of relatively large buildings separated by roads, especially in the north eastern quarter of the city: there, the road pattern is slightly radial and larger buildings alternate with more densely built sectors. Two excavation areas, H and S, in this quarter indicate that subsurface structures belong to the late Neo-Assyrian and to the subsequent Post-Imperial periods, i.e. the reconstruction following the conquest of the city in August 612 BCE by a coalition of Medes and Babylonians. In areas A, B, H, and S a significant sequence of post-imperial occupation was documented too, which was missing in the other areas (thus giving us hints as to where the settlement continued, though contracted).

In total, the Iraqi-Italian Archaeological Expedition opened nineteen areas during five campaigns in the lower city of Nineveh, obtaining much new data about the urban topography of this capital city (Marchetti 2023; 2025a; 2025b; Marchetti and Marchesi 2022; Fig. 1). Most of the excavated structures in the lower city date in fact to the great refoundation of the early 7th

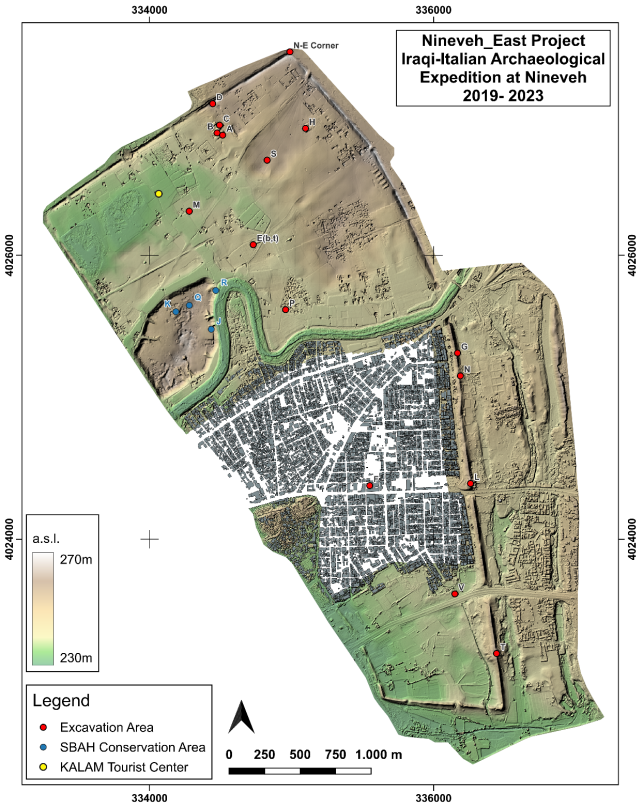


Fig. 1. Digital Elevation Model of the site of Nineveh with the excavation areas of the Iraqi-Italian Archaeological Expedition (by G. Luglio and M. Valeri).



Fig. 2. Aerial view of the northern lower town of Nineveh looking south west toward Tell Kuyunjiq, with excavation area M in the foreground.

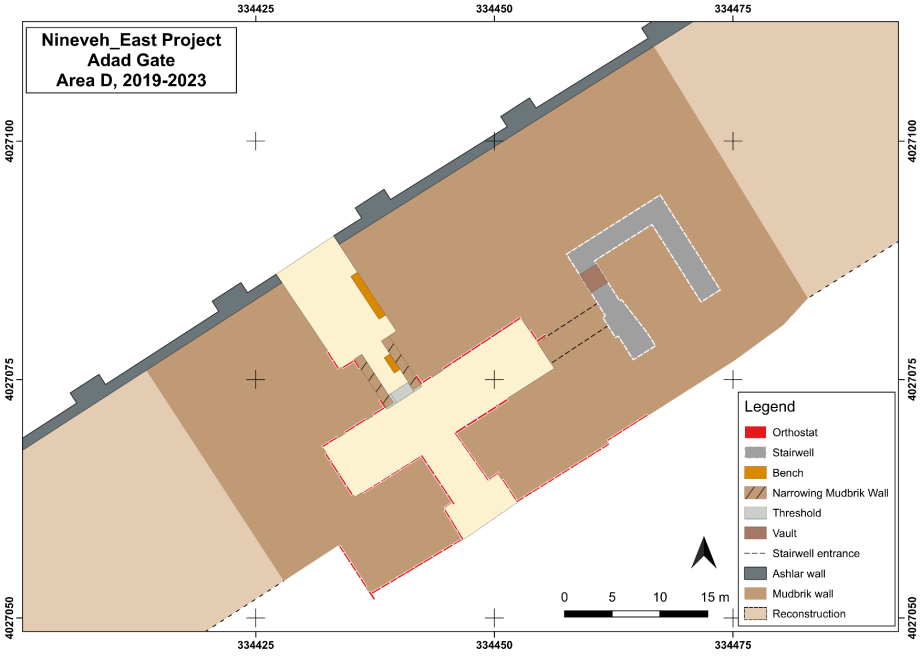


Fig. 3. Schematic plan of the Adad Gate in area D, 7th century BCE (by M. Valeri and S. Rosso).

century BCE with buildings built on the virgin soil and with some refurbishments before the destruction of 612 BCE. The latter event is the one especially represented in our excavations and is preceded by some material signs of crisis: the latest buildings are technically less well maintained than those of Sennacherib's time, pottery production is less sophisticated than even a few decades earlier, all the city gates were narrowed and partially blocked in view of the final siege. The overall picture is one of a capital that was still splendid but in relative decline.

Regarding the fortifications, we excavated at four city gates, of which one was so far completely unknown and the other three only partially explored previously. The Adad Gate (area D) was one of our major excavation areas (Fig. 3). First excavated in the late 1960s and early 1970s by the University of Mosul, the monument still retains intact the original mudbrick arch of the passageway to a height of 10 m, while the elevations of the mudbrick walls are everywhere more than 6 m. In order to protect it, a concrete canopy had been built by the Iraqis anchoring it to deep pillars cutting into the ancient masonry: this invasive technique at least had the merit of ensuring its preservation until today. When in 2016 Daesh destroyed the walls of Nineveh at various points, it also bulldozed this canopy, which fortunately did not, however, fall directly over the arch. In 2019 our first operation was the careful removal of that rubble to unearth again the monument (see Marchetti, Harrison, and Al-Musawi in this volume, fig. 4), which we then gradually roofed with a new metal canopy now 750 m² large. The new excavations also revealed a series of towers along the inner façade of the gate and a stairwell to the east featuring a vault of baked bricks bearing the name of Sennacherib (Fig. 4). The king is also attested in a standard inscription commemorating the construction of the fortifications carved on the backs of all the orthostats of the inner court and the southern façades of the gate.



Fig. 4. The upper vault W.2168, which includes baked bricks bearing Sennacherib's name, in the stairwell of the Adad Gate in area D, with the collapsed vault W.4204 in the background: view from the north; seventh century BCE.



Fig. 5. The northern city wall destroyed by Daesh in 2016 and brought again to light in 2021, after the rubble was removed thanks to the support of the J.M. Kaplan Fund: view from the south with the shelter above area D in the middle background.

A complex vertical excavation operation, conducted at the same time as the consolidation through iron girders of the passageway, made it possible to cross the main gateway, thus connecting the outside of the city (where for a 330 m stretch the stone walls destroyed by Daesh were uncovered again; Fig. 5) via the original entrance to the northern quarters of the site. Since this has now become the entrance to the archaeological park, visitors have the chance of reading ancient urbanism on the ground through a unique original monument. Actually, the Adad Gate is one of two known monumental gates with a rectangular inner court projecting beyond the wall line on the inside (the other one is the Mashki Gate in the western wall).

South of the Khosr River we had noticed a constructive peculiarity along the stone walls mechanically exposed in 1989 by the SBAH, which gave us an essential clue as to where to begin a large scale operation (area N; Fig. 6). There, between 2021 and 2023, a long passageway flanked by orthostats — a type of city gate that had not been observed in Nineveh so far — was uncovered, leading to a small inner court in which hundreds of baked bricks had collapsed, evidently from the top of the wall elevations (Fig. 7; Viggiano 2025). Along the outside of the gate, a ramp of gravel and bricks was exposed, an element found at all the gates of the site, which were higher than the outside ground level.

Of the three largest gate complexes with an outer foregate and a large court (Nergal, Shamash, Halzi), the second has been explored by T. Harrison since 2020, while in 2022 and 2023 we reinvestigated the inner main passageway of the Halzi gate (area T; Reade 2016 identifies it instead as Enlil's; Figs. 8-9), of which the outer foregate had been explored by the Berkeley Expedition in 1990 (Pickworth 2005). As they had found too, we documented there in the main passageway many corpses of adults, children, and infants, likely attesting to the executions of the fleeing populace during the fall of Nineveh (see the essay by R. Shafiq and others in this volume).

A particularly interesting discovery was made in area

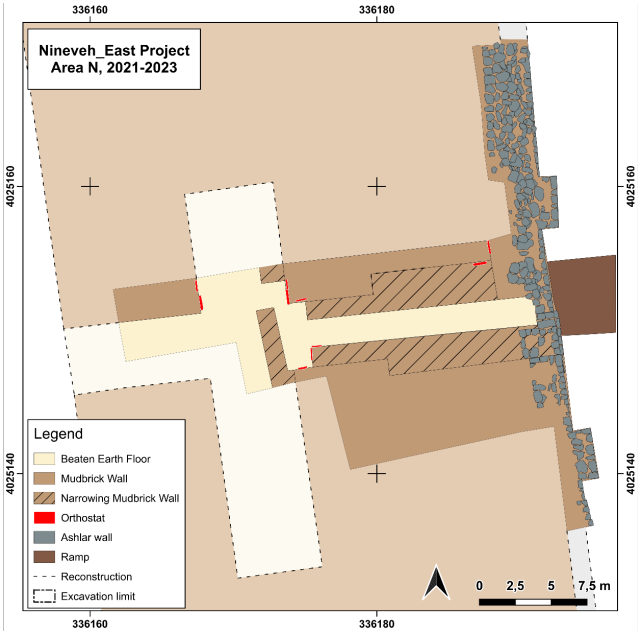


Fig. 6. Schematic plan of the gate in area N, 7th century BCE (by M. Valeri and J. Monastero).



Fig. 7. The inner court of the gate in area N, with the collapse of baked bricks F.4512: view from the east, 7th century BCE. In the background, one can note the two alabaster orthostats marking the corner of the inner passageway.

G, along the eastern wall south of the Khosr, in a spot where part of the limestone ashlar face that constituted the outer wall had already been exposed in 1989 showing a feature which had widely been interpreted until then as a postern: its elevation seemed to us, however, too low and upon excavation it turned out to be a canal crossing diagonally under the double fortification wall (which we now know was 31 m thick and at least 15 m high, but probably significantly more originally). An open air canal brought water from the Khosr into the city through this 42-m-long tunnel built by Sennacherib's engineers with perfectly jointed stone blocks, including on its floor (Fig. 10). The outer entrance was originally protected by a thick iron grating (Fig. 12). The higher initial, outer part (equipped on its top with discarded stone merlons) is reduced in height by a step on the ceiling, and the tunnel then continues to a final lintel without a grating along the inner part of the city (Fig. 11). As far as residential buildings are concerned (for which see the other essays in this volume), we excavated both regular houses in the north eastern quarter (in areas B, H, and S), wealthier residences (in areas A, E Top, and V), which can even show a particularly distinctive layout as in the case of the terraced residence in area C, which features a single building phase on virgin soil, sealed by the destruction of 612 BCE, and another massive building of this type in area F (the exploration of which, however, had to be abruptly halted after the 2019 campaign; Cavaliere and Giacosa 2026). Large troves of epigraphic finds both of economic and, especially, of literary content have been made at the residences of areas C (Jean et al. 2026) and E Top, substantiating our definition of Nineveh as a "city of libraries:" during the 7th century BCE it was not

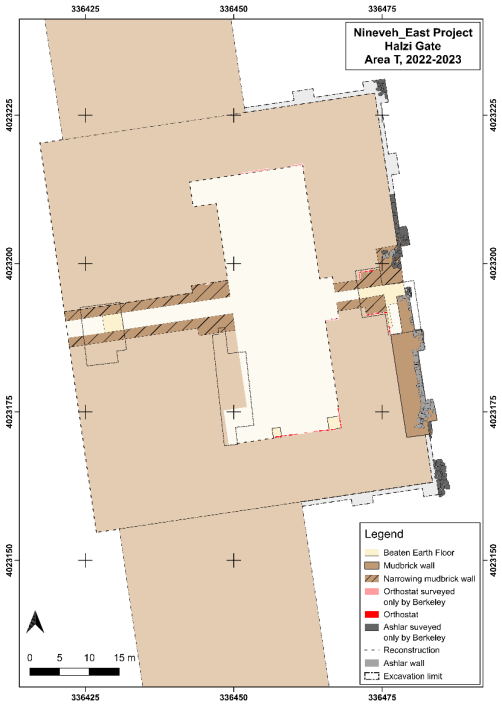


Fig. 8. Schematic plan of the Halzi Gate in area T, 7th century BCE (by M. Valeri, F. Cavaliere, and D. Redamante).



Fig. 9. Aerial view from the west (taken in 2022) of the Halzi Gate in area T, 7th century BCE. In the background are the southern tower of the main gate and the sounding between the narrowing walls of its inner passageway. The orthostats visible to the left in the middle ground mark the inner courtyard.

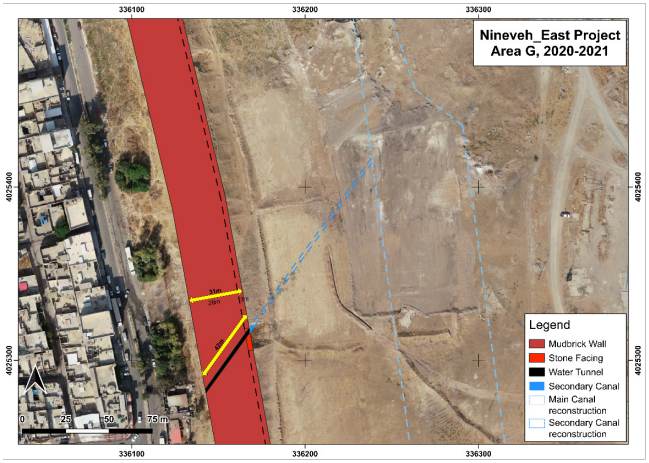


Fig. 10. Schematic plan of the city wall and the underlying water canal in area G with the 2021 orthophoto in the background, 7th century BCE (by M. Valeri). The area has now been landscaped by the Municipality of Mosul.



Fig. 11. Elevation orthophoto of the city wall and the underlying water canal in area G, 7th century BCE (by M. Valeri).



Fig. 12. The outer entrance to the canal under the city walls in area G, 7th century BCE: view from the outside. Note the holes in the stone paved floor and the side guides for a lost closing iron grate. The ceiling of the outer part of the tunnel is made of reused stone merlons.

only king Ashurbanipal the one collecting the cultural memory of Mesopotamia, but obviously a plethora of high officials as well. The capital city of a "world" empire hosted both financial and intellectual networks with far-reaching geographical as well as cultural connections. The findings collected in the lower city of Neo-Assyrian Nineveh thus have helped us paint an organic as well as novel picture of the functioning and history of one of the largest urban foundations in Mesopotamian history, an extraordinary paradigm of the extractive and management strategies of an imperial administration through phases of expansion, consolidation, and decline. At the same time, research and conservation strategies have been put in place with a view also to the gradual opening of the archaeological site to the national and international public, with the inauguration of the first sector of it having taken place in October 2023 thanks to the KALAM project (www.kalam.unibo.it; see Marchetti, Harrison, and Al-Musawi in this volume, fig. 6). Visitors can appreciate the ancient urbanism of the settlement through the variety of excavated contexts, benefiting from both information panels placed by the various monuments and an information center that is contemporary in design but built exclusively according to local building traditions and materials (see Marchetti, Harrison, and Al-Musawi in this volume, fig. 7). The Governorate and the Municipality of Mosul are collaborating in the landscaping of green areas outside the eastern city walls, creating a city park integrated with the extraordinary local archaeological heritage (Fig. 13). On the other hand, the tumultuous if not miraculous renaissance of Mosul after the civil war constantly risks being unsustainable and continuous checks are thus needed for the foreseeable future (see Marchetti et al. 2023 for a reflection on the modern heritage of the city as well).



Fig. 13. The park area made by the Municipality of Mosul in 2022 along the north eastern city walls of Nineveh: view from the north west.

The residence in area C and its *scriptorium*

Eleonora Mariani

The Iraqi-Italian Archaeological Expedition's resumption of archaeological investigations in the lower town of Nineveh has yielded new data on the urban topography of the last Neo-Assyrian capital. Our fieldwork in the north eastern residential sector has underlined the urban significance of the eastern terrace within the over 780 hectare urban enclosure (notwithstanding the opinion by Lumsden 2004: 189-190), which was extensively redesigned and reorganized under the reign of Sennacherib to project imperial authority and power.
Located in front of one of the city's primary monumental entrances, the Adad Gate (area D), area C has revealed a large elite residential complex. Constructed on virgin soil, the terraced structure represents a single, coherent architectural phase dating to the 7th century BCE. Excavated evidence points to the complex's definitive abandonment in the immediate aftermath of the city's fall in 612 BCE, which sealed a significant assemblage of material culture and epigraphic materials *in situ*.

Architecture and spatial layout
Extensively investigated between 2019 and 2023 — with an additional short season conducted in the spring of 2025 by the University of Bologna under the auspices of the Nineveh East Archaeological Project (NEAP; Harrison and Abu Jayyab 2025: 71) — area C was opened along the northern limit of one of the eleven trenches excavated by Daesh in 2015-2016 across the lower town of Nineveh (Fig. 1).
Architecturally, the large residential complex in area C exhibits some of the characteristic principles of Neo-Assyrian elite residential design (Heinrich 1984; Kertai 2014; 2015a), adapting them to the specific topography of Nineveh's eastern terrace sloping terrain. Built on stepped terraces cut directly into the virgin soil (Fig. 2),



Fig. 1. 2023 aerial view from the south of area C, with the Adad Gate (area D) in the background.

the structure — not yet fully brought to light — covers an extensive surface area (1005 sq. m) and features a carefully planned architectural layout. The plan consists of a series of rooms of varying dimensions and functions arranged around three courtyards, all paved with baked bricks, which served as central nodes for circulation, light, and hydraulic drainage (Fig. 3), while the north-northwest sector was occupied by a large pit.

The largest courtyard (L.215) lay in the southeastern part of the complex (Fig. 4). Visible in the section of Daesh's trench 2, this spot was selected for excavation in order to get information on what had been lost. Under its baked-brick pavement, a complex water management system was identified: it comprises a cistern and an interconnected network of pottery pipe drains for rainwater collection, featuring a perforated baked brick serving as a drain inlet. Two rooms and a stairwell abutted directly on this courtyard. Access to both the rooms and the stairwell is marked by rectangular gypsum alabaster thresholds; in the northernmost room, the door socket was preserved *in situ*. In most cases, the floors were cut directly into virgin soil and covered with a thin layer of beaten earth, while some walls exhibit a protective bitumen plaster coating.



Fig. 2. The terraced residence in area C, built directly above virgin soil and cut by Daesh's trench 2: view from southeast.

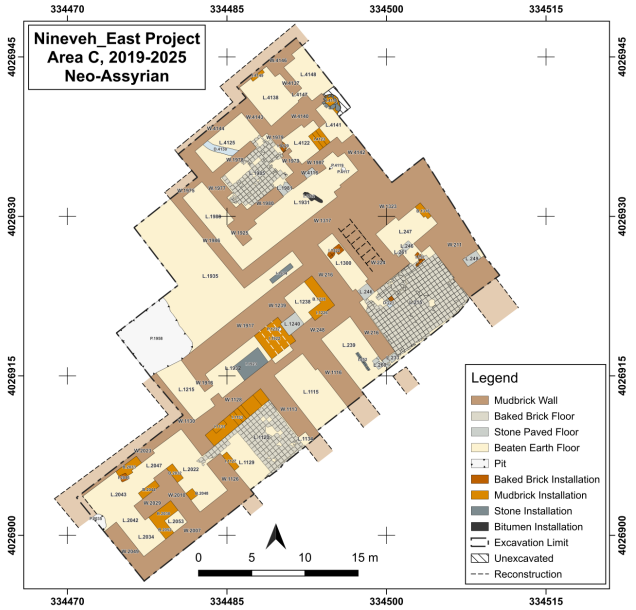


Fig. 3. Schematic plan of the late Neo-Assyrian elite residential complex in area C (by M. Valeri).



Fig. 4. View from the south of room L.239 with its alabaster threshold L.233, cut by Daesh's trench 2. In the background is the southeastern courtyard (L.215), with the baked brick stairway L.257 at its far end.

Another courtyard (L.1120) was identified to the west of the first one, although situated at a lower elevation due to the complex's artificial terracing (Fig. 5). A mudbrick staircase along the courtyard's northern wall linked this open space to an upper floor, while a passageway paved with baked bricks connected it to a series of rooms farther west (Viggiano 2025).

The third courtyard (L.1985) in the northwesternmost sector is the smallest of the three (Fig. 6). It provided access to three rooms of varying dimensions and functions. One room features a hydraulic system with a baked-brick drain covered with stone slabs, designed to empty wastewater directly into the neighboring courtyard. A secondary room — entered through a mudbrick flight of steps — was closed off in antiquity by a large stone slab placed across the doorway (Fig. 7), rendering it inaccessible during the residence's final occupational phase before the site's abandonment. All the floors of the courtyards and their associated rooms show a high concentration of smashed, if weathered, pottery vessels and many small finds, such as cylinder and stamp seals (Cat. 36, 39, 40, 41).

The "suite of knowledge:" the library and its *scriptorium*

Undoubtedly, the most extraordinary discovery in area C comprises a suite of rooms dedicated to the production, study, and archival storage of a considerable corpus of scholarly texts. Located north of the northwestern courtyard and accessible via an open space from the west, this suite offers crucial insights into high-status intellectual life in Neo-Assyrian Nineveh.

The easternmost room — tentatively designated as a *scriptorium* — features a series of built-in clay benches set against the walls and coated with a thin layer of bitumen (Fig. 8), characterized by circular sockets on top. This room was connected through a large alabaster threshold and a mudbrick staircase to a smaller adjoining space, which contained a large epigraphic trove of tablets dating to the reign of the last Neo-Assyrian king, Sin-sharru-ishkun (628-612 BCE). This corpus directly links

the residence to the highest ranks of the Neo-Assyrian intellectual elite, including the chief diviner of Sin-sharru-ishkun, Kanunaiu (see Cat. 5; cf. Marchetti and Marchesi 2022: 188-189). The cuneiform assemblage, comprising at least 270 fragmentary tablets, was retrieved from beneath a collapse layer consisting of mudbrick debris and fragments of black-and-white wall plaster; the tablets were severely compromised by their poor state of preservation, having been crushed and even squeezed together, while severely damaged also by humidity and burrows (Fig. 9). The epigraphic assemblage encompasses a diverse range of literary and scholarly compositions, including incantations, lexical lists, and literary texts (see Jiménez and Taylor in this volume; Cat. 5-12, 26a, 26b, and 33). The presence nearby of a large lump of unworked clay, serving as a supply for the production of tablets (Jean et al. 2026: 9-10), alongside an associated likely bronze stylus, supports the hypothesis that the suite functioned as a tablet-making facility (Marchetti and Marchesi 2022: 186-187). Within this space, the tablets were presumably shaped over the bitumen-coated benches, and texts were copied in the adjoining archival room.



Fig. 5. View from the north of the western courtyard (L.1120), with smashed pottery on the baked brick floor. In the background, separated by Daesh's Trench 2, is area B.

The urban context

The Iraqi-Italian Archaeological Expedition's excavations in area C provide vital new insights into the spatial organization and the intellectual life of Nineveh's lower town during the final decades of the Neo-Assyrian Empire. The building complex shows how imperial urban planning seamlessly integrated elite residential architecture into the monumental topography adjacent to key public routes like the Adad Gate.

Architecturally, the complex exemplifies the highest standards of 7th-century BCE elite residential design. The tripartite spatial division around three distinct baked brick courtyards reveals a rigorous adherence to access control, functional compartmentalization, and sophisticated hydraulic engineering that fits into the architectural layout of Neo-Assyrian elite residences, closely paralleling the so-called Rotes Haus in Dur-Katlimmu (Kreppner 2008; 2016). The combination of subterranean cisterns, bitumen-waterproofed masonry, and drainage networks underscores a capital investment in long-term domestic infrastructure, reflecting the elevated status of the residence's occupants.

The discovery of the "suite of knowledge" elevates area C beyond a standard elite residence, framing it as an active node of scholarly production. The spatial connection between the bitumen-bench room — equipped with clay-processing features and writing implements — and the adjoining library confirms the integrated nature of textual production (*scriptorium*) and preservation (library).

Finally, the stratigraphic record offers a clear narrative of the city's fall in 612 BCE. The absence of a burnt destruction layer, combined with blocked doorways, *in situ* pottery assemblages, and abandoned luxury items across the courtyard floors, points to a rapid, organized abandonment in the face of the imminent siege rather than sudden catastrophic destruction. By sealing this rich archaeological and epigraphic horizon *in situ*, the sudden evacuation of area C has preserved an excellent glimpse of Neo-Assyrian scholarship, domestic engineering, and urban life of the ruling elite.



Fig. 6. View from the southeast of the northwestern courtyard (L.1985), the smallest courtyard in the complex.



Fig. 7. View from the southwest of the doorway to secondary room L.4122, intentionally sealed in antiquity with a large stone slab.



Fig. 8. View from the southwest of library L.1932 with clay lump I.1923 on the right. The mudbrick staircase and alabaster threshold in the middle background lead to the scriptorium *L.1238, whose bitumen-coated clay benches are visible in the far background.*



Fig. 9. Removing shattered cuneiform tablets from the library room L.1932. The vacuum cleaner rests on clay lump I.1923.

Library texts from area C

Enrique Jiménez and Jon Taylor

The area C residence yielded the remains of at least 270 tablets. That number rivals many of the most significant scholarly library collections from the cuneiform world, even though the great royal Library of Ashurbanipal dwarfs it. Being written on tablets of clay, cuneiform texts can survive thousands of years in legible condition. They are vulnerable to moisture, however. If left out in the rain, they would have been easily damaged. Something like that seems to have happened to this group of tablets, presumably at the hands of the Median and Babylonian forces who stormed Nineveh in 612 BCE. Not only are the surfaces damaged, but some of the tablets have become stuck to others. Careful conservation work can improve the legibility of the texts, separate the fragments, and stabilise them for future study (Fig. 1). While it is frustrating that these tablets suffered so badly in antiquity that now they are difficult to read, much valuable information can still be gained from them.

The tablet group is difficult to characterise. Since Nineveh was the capital of the Assyrian empire, we might expect tablets found there to be written in Assyrian handwriting. But many of this group are instead written in the style of handwriting practised by their southern neighbours, the Babylonians. While Assyrians are known occasionally to have written in Babylonian script, and some Babylonian scribes were active in Assyria, it seems likely that many of these tablets were imported into Assyria. The circumstances of their acquisition and importation remain a matter for speculation. The topic of the texts is also mixed. The majority of identifiable texts belong to the genre of omens. The interpretation of omens was one of the respected fields of scholarship of the time. There were many different types of omens used in Assyria. The most popular type seems to have been extispicy, examining the entrails of a sacrificial sheep. Other types looked at animal births, astrological phenomena, occurrences in daily life, the content of dreams, oil on water, or the flight of birds. We know that such omens were reported to the king or sought out on his behalf, to guide him in his leadership of the Empire. Before any significant decision was taken, omen experts would be consulted. Omen lore had developed over many centuries. By the 7th century, specialists had systematised knowledge into a series of handbooks, each comprising multiple chapters, sometimes grouped into several mini-series. These handbooks could extend to thousands of lines, occupying dozens of tablets.

A second major cluster of tablets is the medical tablets. Before surgery and antibiotics, medicine took the form of poultices, suppositories, or oral concoctions (usually mixed in beer), accompanied by magic spells and rituals. Of course, medicine was particularly important for protecting Assyria's king, since he was the link between heaven and earth. But it was also a concern for everyone

else in the Empire. The richer citizens could consult experts with handbooks containing countless recipes treating disorders from head to foot, drawing on ingredients from far and wide. Some treatments presumably had long histories in folk medicine, with plants thought to have healing properties. Other ingredients functioned through a kind of associative magic, drawing on colour or some other characteristic, or even through how words happened to be written in cuneiform script. Related to medical texts are magical texts. These helped people deal with various problems they might face in life.

Alongside the omens and medical texts are found texts with less directly practical application. An important cluster here are the literary texts. *Enuma elish*, the great Babylonian Poem of Creation, tells how the young god Marduk defeated the primeval sea Tiamat and from her body fashioned the ordered world, winning kingship over the gods. The text is represented in area C by copies



Fig. 1. The tablets from area C while being consolidated and removed by the conservator Nadia Barbi.

of its first (NE.21.O.573) and last (NE.21.O.384; Fig. 2) tablets. So central was this most Babylonian of poems even in the north that Assyrian scholars produced their own recension, boldly writing their state god Ashur into the starring role that properly belonged to Marduk. A second literary tablet from this area is more mysterious still. Its two fragments (NE.21.O.591[+]617; Fig. 3) contain an as-yet unidentified narrative peopled by little-known gods, among them a goddess named Nin-amakalla, so rarely attested that her appearance is itself a clue. On that slender thread the text may belong with a short, violent myth of divine succession known today as the Murder of Anshar, until now attested only in manuscripts copied many centuries after Nineveh fell. Should the identification hold, this tablet would catch the poem already circulating in 7th century Assyria: a reminder of how a text could travel quietly down the generations, all but invisible in the record. The third find is a substantial fragment of the Dynastic Chronicle (Cat. 26a and 26b), written in a three-column tablet in an Assyrian hand. A descendant of the venerable Sumerian King List, this Babylonian composition tracks Mesopotamian kingship dynasty by dynasty, from the rulers who reigned before the Flood down to the early 1st millennium. What makes the Nineveh copy remarkable is that it preserves, for the first time in any known manuscript, the bilingual Sumerian-Akkadian prologue with which the text originally opened.



Fig. 2. NE.21.O.384. Manuscript of the Poem of Creation (Enuma elish), written in a Babylonian hand.

Another important cluster are the so-called "lexical texts," which are rather like dictionaries. When scribes learned cuneiform, they drilled the "signs" (cuneiform writing is not alphabetic; scribes needed to learn hundreds of characters), as well as long lists of vocabulary covering everything from types of tree, through sheep and other animals, to professions. These lists too were the product of centuries of development. Here were found a list of leather objects, an advanced sign list, several lists of synonyms (by the last days of the Empire, many of the words in the old lists had become old fashioned, and new words were borrowed from the increasingly popular Aramaic language), as well as a previously unknown list (Cat. 11).

We learn more about these tablets from the "colophons" added at the end of some of them. Colophons are scribal remarks describing the circumstances in which the tablet had been copied from its original. They give the title of the text, the name and role of the scribe, and information about the original. We would expect the colophons of any tablet group like this to bear the name of the owner of the house in which they were found. But this group

strikingly names several people. The best-preserved tablet, a commentary on magical and ritual texts (Cat. 5), belonged to Kanunaiu, chief diviner of Sin-sharru-ishkun, the last king of Assyria. Another tablet, however, was a medical text belonging to Nabu-nadin-shumi, chief exorcist of the then crown-prince Ashurbanipal; it is a couple of generations older. A third tablet belonged to Tab-shar-ishtar, while other tablets name yet further people.

All of this poses a big question for our understanding of the group as a whole: was it a library? Did it belong together at all? The fact that the tablets were not all written by the same scribe does not mean that they didn't belong to a single owner. The different dates of composition are not necessarily a problem either. Nor is the variety of content. This is typical of cuneiform tablet groups. One noticeable feature is the high proportion of Babylonian tablets, a proportion that is even more striking in the tablets of area E: the elite nature of the residence would have given the owner unusually easy access to such material. On the other hand, it is difficult to rule out the possibility that these tablets were brought together here in the immediate aftermath of the fall of Nineveh. This would have been a natural place for the invading forces to set up a headquarters, where they could sort through tablet collections and destroy whatever was left (for an alternative interpretation of this space as a tablet-making *scriptorium*, see Mariani in this volume). However we interpret this find, the mention of Sin-sharru-ishkun demonstrates that cuneiform scholarship was still active at the highest level when Assyria suddenly succumbed to its enemies. These new texts promise to reveal fascinating insights into cuneiform culture in the 7th century BCE, putting Ashurbanipal's famous library into context.



Fig. 3. NE.21.O.591 (left) and NE.21.O.617 (right). Manuscript of an obscure mythical narrative that mentions little-known gods.

The residence in area E

Claudia D'Orazio, Jacopo Monastero, and Daniele Redamante

In area E, the Iraqi-Italian Archaeological Expedition at Nineveh East between 2019 and 2023 investigated part of a large elite residence, dating to the late imperial period (Marchetti 2023: 112, fig. 2; 2025a: 274; 2025b: 270; Marchetti and Marchesi 2022), a research that has continued since 2025 within the framework of the collaboration with the NEAP project of the Institute for the Study of Ancient Cultures of the University of Chicago (Fig. 1). Area E is located in proximity of a deep and wide trench (numbered as 11 by us), cut during the Daesh occupation of the city of Mosul and used for the storage of grains (the trench numbered as "K" in Campana et al. 2022: 448-450, fig. 4): we actually opened it in order to assess the damage that had occurred. In fact, Daesh's trench, with an east-west orientation, cut through a large amount of archaeological deposits as made visible by its sections. These show distinct architectural features, such as mudbrick walls, baked brick floors, alabaster thresholds, and pebble mosaic floors. Since 2019, various operations, named E Top1-2, E Top Sounding, and E Bottom (where a late Middle Assyrian to early Neo-Assyrian architectural sequence was exposed), have been undertaken in the area in order to investigate this evidence.

The area falls within the limits of the old mound of Tell Kuyunjiq, before Sennacherib's expansion of the city (Ur 2017: 60-61, figs. 8.3-4). Archaeological investigations confirmed there a dense and continuous occupation throughout the Neo-Assyrian and the late Middle-Assyrian periods with a thick sequence of buildings. Just 20-50 cm below the topsoil, the remains of a large private residence extending both to the north and south of the trench (E Top) were identified. The residence belongs to an elite residential district in the central quarter of the lower town of Nineveh, placed on a slightly elevated mound. The building overall occupies an area of more than 2000 m² (of which c. 600 m² were lost due to Daesh's bulldozing) and revolves around a large courtyard paved with baked bricks, connecting smaller rooms to the north of the trench, and another sector formed by a series of rooms to the south (phase 1) (Fig. 2). A total of 66 cuneiform tablets were recovered from the fill layers of the rooms in the southern sector of the building, suggesting that a library was kept in the residence (see the following chapter). In addition, the presence of legal documents in the northern sector, dated to the last Assyrian king Sin-sharru-ishkun, testifies that financial activities were conducted by its owner. The residence was abandoned following the fall of Nineveh in 612 BCE, without evidence of reoccupation during the subsequent post-Assyrian period.

The northern sector

The northern sector of the excavation consists of six rooms paved with earthen floors, opening around a large



Fig. 1. Aerial view of area E from the east, taken in 2021, with Tell Kuyunjiq in the background. The excavations in area E Top lie on both sides of Daesh's trench 11, at the bottom of which area E Bottom is visible.



Fig. 2. Schematic plan of the Neo-Assyrian residence, phase 1 (by M. Valeri).

courtyard paved with baked bricks (L.413). From the main courtyard a large variety of objects were retrieved: a multitude of pottery shapes, metal household items, and necklace beads. Significant is the discovery of three cuneiform tablets recording economic transactions (Cat. 18-19; see also Notizia in this volume).

A doorway located at the western corner of the courtyard leads through a small aisle (L.426) into a large room characterized by earthen floors (L.422), within which two square mudbrick installations (I.705 and I.706) were identified (Fig. 3). A substantial concentration of kitchenware fragments was documented near the entrance to the room, with several complete vessels; together with the significant quantity of ash distributed across the room, this assemblage may suggest that the space was used for activities related to food preparation or processing, although the precise nature of these activities cannot be established with certainty since the room has not yet been excavated in its entirety. The spaces immediately to the northeast are considerably more difficult to interpret, as their earthen floors have been severely damaged by later intrusive pits and weathering, while the scarcity of diagnostic artefacts does not currently provide sufficient evidence to formulate reliable hypotheses concerning their original function.

This sector also includes an entrance characterized by a large stone threshold (L.424), and one engraved door socket, perhaps this being the main doorway giving access to the building (Fig. 4), although it is currently difficult to establish whether this opening connected the building with an external public area or instead functioned as a formal passage between different suites.

The section shows that the Neo-Assyrian building was constructed over a similar but earlier architectural phase, demonstrating that the E Top complex represents part of a longer sequence of occupation of elite buildings.

The southern sector

Another sector of the building, formed by several small rooms, likely part of the same large residence, was brought to light, to the south of Daesh's trench (Fig. 5). A thick mudbrick wall northeast-southwest oriented, founded directly above the floor of the earlier construction phase (which is present here too), divides this sector in two. To the northwest of the wall, there is a sequence of three rooms with earthen floors (L.4070, L.5016, L.4653), mudbrick installations, and traces of bitumen on the socles. The doors between these rooms are marked by thick alabaster thresholds, one of them intentionally broken in half perhaps during the final stages of abandonment of the building. A total of 25 fragmentary cuneiform tablets were found spread above the floor with traces of a fire event, alongside beads, metal items, tools, a cylinder seal, and part of human bones, not in connection, sealed under a thick collapse layer (see Cat. 20-23, 28, 32, 34) (Fig. 6). A passageway (L.4603) leads to another room to the east (L.4612), which yielded 10 more fragmentary tablets (Cat. 24a, 24b, 31), together with several identical beads made of faience, likely part of a single necklace or bracelet. Two other unconnected rooms with earthen floors were exposed to the northeast of the building, but they have been mostly bulldozed by Daesh.

In the southeastern part of the area, on the other side of



Fig. 3. Room L.422 with its mudbrick installations used for food preparation and processing activities: view from the west.



Fig. 4. View of the doorway with alabaster threshold (L.424) and door socket located in the north eastern sector of the Neo-Assyrian residence, with courtyard L.413 in the background.



Fig. 5. View from the west of the southern sector of the Neo-Assyrian residence, phase 1.



Fig. 6. View from the east of room L.4653, with tablet NE.23.O.714 placed in a box after recovery. Its negative impression in the soil is visible to the left.

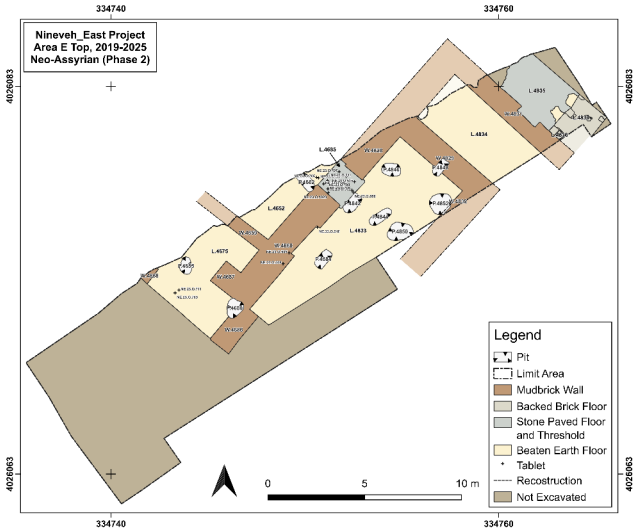


Fig. 7. Schematic plan of the phase 2 building in the southern sector of area E Top (by M. Valeri).

the thick mudbrick wall, three other rooms were partially exposed, albeit their preservation appears affected eastwards by the natural erosion of the slope. No access between these rooms could be identified so far. In the easternmost room, two deposits of tablets were found directly above the earthen floor (L.4816). The tablets of these deposits were mostly unfired and broken into pieces, perhaps dumped as waste material of a scribal office or discarded at the very end of the life of the residence. Despite being pressed together, 31 readable or partially readable tablets could be restored (Cat. 25) (for the restoration process and techniques, see Barbi and Gütschow in this volume).

Beneath the upper and last occupational phase, our investigations revealed part of another earlier monumental architectural layout, characterized by a fine pebble-mosaic courtyard (another mosaic floor was brought to light in area A, see Cavaliere, D'Orazio, and Giacosa in this volume) (Fig. 7). This building was intentionally filled and leveled for the construction of the new building without evidence of destruction and abandonment. To the northwest, it comprises two rooms with walls finished in white-painted plaster above a bitumen socle (L.4676 and L.4675) (Fig. 8). Adjacent to these, another room to the west displays the same pattern in red-painted plaster (L.4652). In this latter room, additional plaster fragments painted white with black bands were also recovered from within the building's demolition and levelling debris. Both rooms were cut by Daesh's trench. The red-plastered room is connected by means of a large alabaster threshold (L.4685) to a wide space to the south with a well-preserved earthen floor (L.4833). In total, sixteen cuneiform tablets of varying state of preservation were recovered from this earlier phase. Eleven fragmentary cuneiform tablets were found directly above the alabaster threshold (Cat. 27, 30), scattered during levelling activities, while the remaining fragments were mixed within the filling layers between phases 1 and 2.

In the eastern sector, a wide room with earthen floor (L.4834) delimited by mudbrick walls to the east, north and west was brought to light together with a courtyard



Fig. 8. View from the north of rooms L.4676, L.4675, and L.4652, cut by Daesh's trench.



Fig. 9. View from the south east of the pebble mosaic courtyard (L.4835) and room L.4834.

paved with a mosaic floor to the east (L.4835). The mosaic floor is composed of small pebbles arranged in a checkerboard pattern predominantly characterized by circular or linear motifs according to the orientation of the stones, with some squares featuring rosette motifs (mosaic floors with similar decorative patterns are known from Tell Ahmar [Bunnens 2016: 60-61, figs. 6.1-2] and from Assur [Preusser 1954: 59, pls. 30-31; Miglus 1996: 96-97]; Fig. 9). The mosaic is framed by a baked brick floor to the south.

Evidence of an even earlier phase (phase 3) of the building, likewise dating to the Neo-Assyrian period, was brought to light within a sounding in the southwestern sector of the investigated area, excavated in the room adjacent to the courtyard with the mosaic. Part of a room with earthen floor (L.4839) and a water installation (I.4839), formed by a rectangular alabaster slab with stepped frame and a shallow socket in the middle, was exposed (Fig. 10). The flagstone is placed within a niche covered with smaller alabaster slabs coated with bitumen, perhaps part of a toilet installation or a vat for ritual ablutions (on installations of this kind see, among others, Manuelli 2009: 121-122; Bunnens 2022: fig. 225; Portuese 2024: 169-170).

Overall, the ongoing excavation in area E Top significantly contributes to our understanding of the urban planning of the lower town of Nineveh, as well as the organization of an elite residential district between the Middle and Neo-Assyrian periods. The three building phases in area E Top, despite the changes in the architectural layout and function, reveal an intense building activity in the lower town during the Neo-Assyrian period as well as a carefully organized urban planning as the walls maintain similar orientations, with the partial reuse of the earlier structures. The large elite residence and its library of the late Neo-Assyrian period further testify to the prosperity of the city at the very end of the Empire. The literary texts and legal documents contribute to our understanding of the high degree of literacy of the elite population of the great city during the late imperial period.



Fig. 10. View from the south of the installation (I.4839) of phase 3, formed by alabaster slabs placed along and within a niche in the end mudbrick wall.

Library texts and archival documents from area E

Enrique Jiménez, Gianni Marchesi, and Jon Taylor

Area E is one of the residential quarters of Nineveh's lower town investigated by the Iraqi-Italian Expedition; its architecture and stratigraphy are described elsewhere in this volume (D'Orazio, Monastero, and Redamante). Over the 2023 and 2025 seasons, excavation yielded, alongside the building remains, a substantial body of inscribed clay: some eighty registered tablets and fragments, recovered in two clusters toward the west and the east of the southern sector of the excavated area. Like the tablets from the palace in area C, they had suffered badly from the collapse and burning of the room that held them: many are warped, cracked, and reduced to small fragments by the destruction of 612 BCE, when Nineveh fell to the Medes and Babylonians and the quarter was sealed beneath its debris.

Damaged as it is, the assemblage is coherent and revealing. The greater part of it consists of library texts: incantations and rituals, medicine, divination, lexical lists, and *belles-lettres* proper. A smaller group is that of documents of practical life: a letter and legal instruments, among them a sale of land. What we have, in short, is the library and documents of a learned household of the late 7th century, of the kind we should expect to belong to a scholar and his family. The archival documents recovered from the area E residence are dated to the last Assyrian king, Sin-sharru-ishkun (see below), which sets the whole in the closing years of the Empire.

One feature sets the area E material sharply apart from the great collection on the acropolis: the hand in which much of it is written. Whereas the Library of Ashurbanipal is, overwhelmingly, written in Assyrian script, a striking proportion of the area E tablets, and very nearly all of its literary manuscripts, are written in Neo-Babylonian script. To find so much southern writing in a documented context at Nineveh is unusual. Here we can watch Babylonian learning and Babylonian scribal practice not in the royal library but in a private house of the lower town, down to the last decades of the city's life. The sections that follow treat, in turn, the non-literary library genres, the literary and mythological compositions, and finally the archival documents.

Library texts

There are several copies in Babylonian handwriting of a particular series of magical incantations with a healing function; according to its colophon, one copy (Cat. 32) had belonged to an exorcist named Taqish-Gula. A small tablet contains a few lines from a lamentation called "The defiled *apsu*," referring to a shrine in Eridu sacred to the god Enki (NE.23.O.655). Two tablets (Cat. 24a and 24b) preserve portions of *Lugale*, the great bilingual poem (Sumerian, with an interlinear Akkadian translation) that recounts the deeds of the warrior-god Ninurta: his victory over the demon Asakku and his

ordering of the world's stones. Pride of place belongs, however, to two fragments (Cat. 25 and NE.23.O.1024) of Tablet III of *Enuma elish* ("When on high"), also referred to as the Babylonian Epic of Creation. That the great cosmogony celebrating the elevation of Marduk to the kingship of the gods should surface at Nineveh is not surprising, as the Epic is well attested in the royal library. It is, however, rare to have a manuscript from a private house in the Assyrian capital, and rarer still to have one in a Babylonian hand: it is, in fact, the first manuscript of the poem in Neo-Babylonian script to have been recovered at Nineveh.

Beside these stands a copy of the bilingual composition known as the Founding of Eridu (Fig. 1). Embedded in a ritual for the repair of a temple, it begins when all was sea and lists what did not yet exist (temple, reed, brick, city) before describing how Babylon and its great sanctuary were created first, how Marduk heaped earth upon a raft to make a foundation, and how he then created mankind, animals, the Tigris and Euphrates, and the plants of the field. It is, in its way, a companion piece to *Enuma elish*, and again here in a southern hand.



Fig. 1. NE.23.O.511. A manuscript of the Founding of Eridu.

Not everything in area E, though, speaks with a Babylonian accent. Two of the more substantial literary tablets are written in Assyrian script, and both belong to the tradition of wisdom. The first (Cat. 27) is a copy of the instruction poem *Shima milka* ("Hear the counsel"), the dialogue in which a father presses worldly advice upon a son. Its colophon records a length of 250 lines. The second (Cat. 28) is a collection of proverbs whose colophon, unusually, mentions its original owner: a certain […]-shumu-usur, styled a diviner, though not as yet identifiable among the known men of that office.

One further tablet deserves mention for the light it throws on the intellectual life of the house. A school tablet (Cat. 23) contains a lexical excerpt on its obverse and apparently an incantation on its reverse. While most of its text is in Assyrian script, one part is in Babylonian script. The tablet constitutes a telling hybrid, most probably the work of an Assyrian scribe in the process of learning to form signs in the Babylonian style.

Taken together, the literary tablets of area E give us something not previously available: a documented cluster of Babylonian-script manuscripts of the great works recovered not from the royal collection but from a private house of the lower town, in the last decades of the city's life. If the Library of Ashurbanipal was, as argued elsewhere (Jiménez in this volume), in the main the harvest of an Assyrian tradition, the house in area E is a reminder that Babylonian learning was present at Nineveh to the very end: studied, copied, and, as the school tablet shows, actively taught to Assyrian scribes in the shadow of the acropolis when the city fell in 612 BCE.

EJ, JT

Legal and archival documents

Texts of other genres were also found in the same building. These include a letter in Babylonian script, of which only the reverse survives (Figs. 2-3); a land sale document in Assyrian script (NE.25.O.88); and, most importantly, three debt notes recording interest-bearing loans of silver (Cat. 18-19 and NE.19.O.43; Fig. 4).

The three debt notes, found in 2019 in the northern sector of area E (see D'Orazio, Monastero, and Redamante in this volume), are particularly significant because they identify the owner of the house and, presumably, the collector of the library tablets found in his residence. The individual in question is Ninurta-ahu-iddin, son of La-qipu. He appears as the lender in two of the debt notes and as the scribe in the third (Cat. 18), in which the lender is a woman, presumably his wife. Judging from the handwriting, he also wrote one of the other two debt notes (Cat. 19), which does not name its scribe.

These loan documents are written in Babylonian script and dated according to the Babylonian system by reference to the king's regnal years (for the different dating system used in Assyria, see Marchesi in this volume). They date to the 6th and 7th years of Sin-sharru-ishkun's reign as king of Assyria (622-621 BCE) and record loan transactions in two Babylonian cities: Uruk in southern Mesopotamia and Zabban in the Diyala region. Besides



Fig. 2. Tablet NE.25.O.87 in situ *during the excavation in area E Top.*



Fig. 3. Neo-Babylonian letter NE.25.O.87 after conservation.

providing information on Ninurta-ahu-iddin's business dealings (cf. Notizia in this volume) and the geographical extent of his financial activities, these tablets attest to Sin-sharru-ishkun's control over southern and eastern Babylonia during the early years of his reign — a period of political turbulence and uncertainty in Mesopotamian history (see, most recently, Wang 2026).

GM



Fig. 4. The three debt notes from the courtyard of the residence in area E Top (Cat. 18-19 and NE.19.O.43).

The houses in areas A, B, F, H, S, and V

Francesca Cavaliere, Claudia D'Orazio, and Gabriele Giacosa

The lower town of Nineveh had been investigated to a very limited degree before the Iraqi-Italian Archaeological Expedition started there (Scott and MacGinnis 1990; Stronach and Lumsden 1992). As a consequence, until then there had been a limited understanding of the urban layout of Nineveh and the residential sectors of the Neo-Assyrian city. Excavations in the area behind the Adad Gate (areas A, B), on the northeastern plateau (areas H, S), and in the central (area F) and southern lower town (area V) were intended to fill this gap in documentation and frame Nineveh beyond its citadels and monumental gates (Marchetti 2025a: 274; 2025b: 270).

Area A

Areas A and B (see below) are located in the Neo-Assyrian northern residential district behind one of the monumental entrances to the lower town, the Adad Gate. Together with area C (see Mariani in this volume), these areas were opened next to three large and deep trenches dug during Daesh's occupation of the site and brought to light residential architecture from the late Neo-Assyrian period.

The excavations in area A (measuring 12 × 7.5 m) revealed a dense stratigraphic sequence documenting occupation from the late Neo-Assyrian period through later periods (Campeggi 2021; La Cara 2023). The earliest occupation phase (phase 7) is represented by a residential unit that rises directly above the alluvial plateau and was built during the early 7th century BCE, under Sennacherib's rule (Fig. 1). This possible residence comprises a pebble-paved courtyard, partially cut by Daesh's trench 1 (Fig. 2). From the courtyard, a baked brick threshold leads to small inner rooms to the west (Fig. 3). The renovation of the earthen floors of these rooms indicates at least two periods of use. The northernmost room during the later phase was used as a kitchen with a *tannur* and other cooking installations and tools. A cylinder seal was found in the filling layer above the room (Cat. 37). A second building phase, dating to a later Neo-Assyrian phase (phase 6), presents two additional rooms with beaten earth floors and built-in *tannur*, right above the mosaic floor.

In the following post-Assyrian levels (phases 5-4), the earlier mudbrick walls were leveled and reused shortly after the fall of Nineveh as a foundation for a domestic building featuring a *tannur* and fire installations (La Cara 2023). Above these phases were poorly preserved mudbrick structures possibly dating to the Hellenistic and Parthian periods (phases 3-2). Scant pottery evidence from the uppermost layers underneath the topsoil indicates sporadic occupation of the area during the early Islamic period (phase 1) (Campeggi 2021).

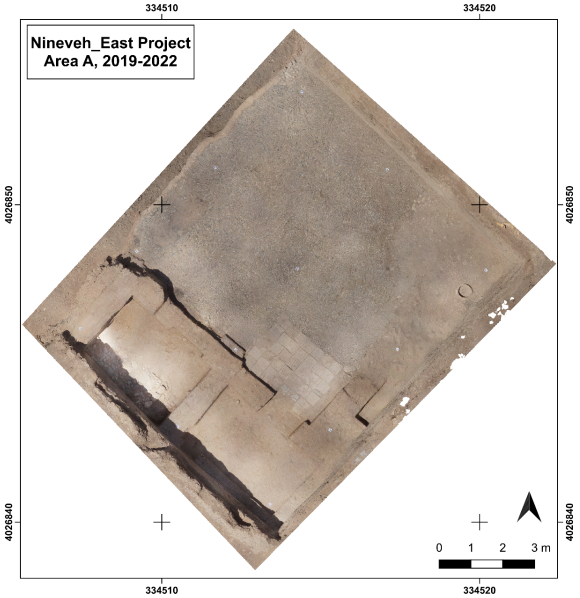


Fig. 1. Orthophoto of the earliest Neo-Assyrian occupation phase (7) in area A, 7th century BCE (by M. Valeri).



Fig. 2. View from the northeast of the Neo-Assyrian pebble-paved courtyard in area A, 7th century BCE, cut by Daesh's trench 1.



Fig. 3. The Neo-Assyrian building in area A, seen from the north-east.

Area B

Another Neo-Assyrian house, also part of the northern residential district, was excavated in area B. This operation (measuring 17.50 × 9 m) is adjacent to another Daesh's trench (Fig. 4). The stratigraphic sequence of area B spans the Neo-Assyrian and post-Assyrian periods, with a later squatter-like occupation of the area, a similar sequence to the one documented in nearby area A.

The first occupation phase 7 is represented by a house with reddish mudbrick walls and installations, dating to the late Neo-Assyrian period, built above the alluvial plateau (Fig. 5). Most probably, the construction of this building is contemporary to the dwelling with the pebble courtyard in area A. The building underwent a second period of use characterized by the renovation of the earthen floor without major architectural changes (phase 6). The northwestern room, which featured a basin integrated into the earthen floor in phase 7, was enlarged, and a *tannur* was built in place of the basin during phase 6. A thick layer of ashes seals this latest Neo-Assyrian phase, due to a fire event that caused the sudden abandonment of the building, perhaps during the fall of Nineveh in 612 BCE, leaving behind much pottery, including a figurative glazed jar and small finds. Among them, there are a cylinder seal (Cat. 17), a head of Pazuzu made of bronze (Cat. 29), numerous beads, a bronze fibula, elements of horse harness made of iron and bronze, and two remarkable Egyptian-style objects: a bead painted with a Horus eye and a faience pendant depicting a baboon under a sun-disk. These materials hint at the social status of the family living in this house. Inscribed materials were discovered in the disturbed topsoil layer deriving from the nearby Daesh's trench 2, most likely originating from the Neo-Assyrian levels which it cut (see also Marchesi in this volume): fragments of a tablet (see Marchesi in this volume, fig. 1), a prism of Sennacherib (Cat. 15), and a cylinder of Sin-sharru-ishkun (Cat. 16).

Above the debris of the Neo-Assyrian house, building remains, made of whitish mudbrick walls, have been documented (phase 5). The pottery assemblage from these layers dates the building to the post-Assyrian period.



Fig. 4. View of area B from the northwest at the end of 2022 season: Daesh's trench 2 is in the foreground, while area A can be seen in the background.

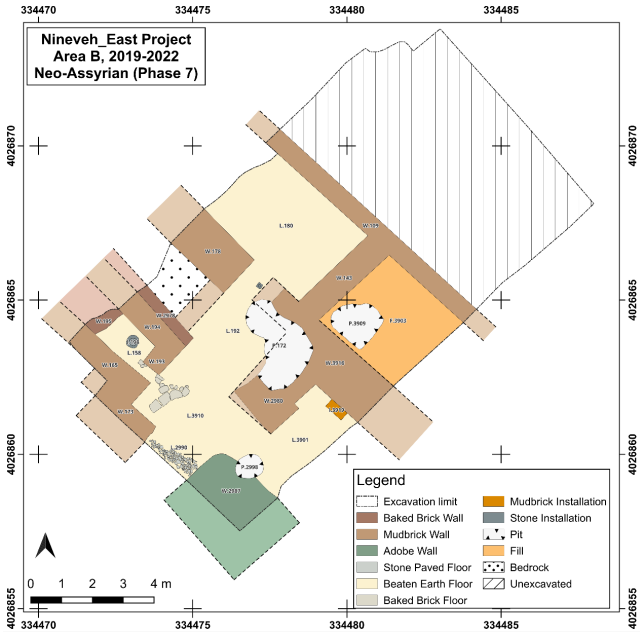


Fig. 5. Schematic plan of the first Neo-Assyrian house in area B, built above the alluvial plateau, phase 7 (by M. Valeri).

While the western sector appears heavily disturbed by later pits, the eastern sector comprises a baked brick pavement, mostly cut by Daesh's trench, and a small corridor leading to a small room to the south. The scarcity of associated finds prevents any interpretation of the building's function. In a subsequent post-Assyrian phase (4), a series of installations for food-processing activity and water management, partially reemploying baked bricks, has been documented, though heavily damaged by later intrusions and pits, including a square water well along the northern section (phases 3-1).

CDO

Area F

A 10 × 10 m sounding was opened in 2019 in an unbuilt sector in the central lower town, deeply affected by modern encroachment. This led to the uncovering of an archaeological sequence above the natural soil spanning from the late Iron age to the Ottoman period (Cavaliere and Giacosa 2026). While the lowermost deposits indicate the occurrence of agricultural activities in the area (phases 12-11), the earliest architectural evidence (phase 10) features an over-5-m-thick mudbrick wall belonging to a Neo-Assyrian elite residential complex (Fig. 6), likely connected to "Palatial Building" partially exposed during construction works in area 59 and investigated by the Iraqi Antiquities Department (Salman 1971: e; Scott and MacGinnis 1990: 69).



Fig. 6. Massive boundary mudbrick wall in area F, likely belonging to a Neo-Assyrian palatial building (phase 9).

FC, GG

Area H

Both areas H and S (see below) are located in the northeastern sector of the lower town, where previous interpretations suggested a more sporadic occupation compared to the rest of the settlement, with occasional residences among gardens and orchards (Lumsden 2004).
Area H, extensively investigated between 2020 and 2023, was opened in the narrow space between trenches 4 and 5 dug by Daesh, reaching an extension of 280 m² (Figs. 7-8). Three occupation phases were identified above the natural soil, encompassing the later Iron age (7th and 6th centuries BCE).
The earliest occupation phase was documented only in a small sounding (3.60 × 1.80 m) in the northwestern corner of the area: part of a mudbrick building (phase 3) that was built directly above the natural soil and can probably be dated to the initial settlement of this sector during Sennacherib's times. This building was later obliterated by a residential complex built following the same orientation, including two distinct buildings separated by a narrow alley (phase 2).
Building H1 extends across most of the area and, although Daesh's trenches removed much of the original plan, it probably extended toward the north east. The preserved layout features several adjoining rooms, including a large rectangular room parallel to the external alley, communicating with a transverse room, paved with a pebbled floor gently sloping southwards. Here, the recovery of a stone threshold and a door socket found displaced at the northern edge of the room indicated the presence of an organized passageway in this sector (Fig. 9). Another access to the building was possible from the south through a secondary entrance on the alley, leading to a corridor in communication with the large rectangular



Fig. 7. Aerial view from the south of area H on the eastern plateau, cut on both sides by Daesh's trenches 4 and 5. In the background are the city walls.

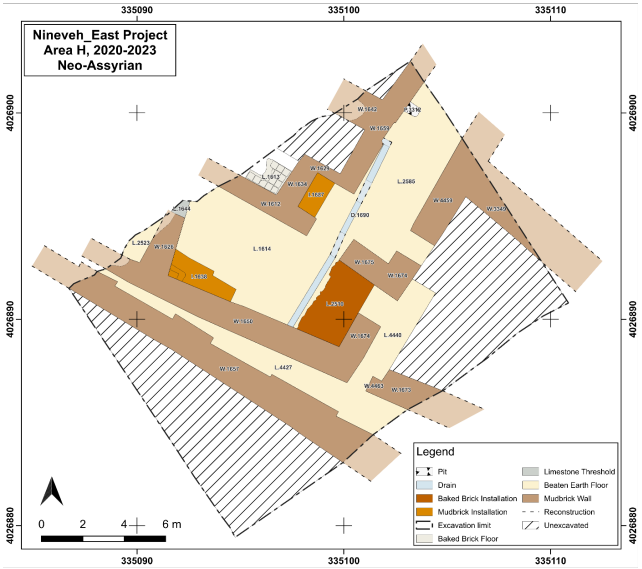


Fig. 8. Schematic plan of the late Neo-Assyrian buildings in area H, phase 2 (by M. Valeri).



Fig. 9. The northeasternmost room of Building H1 where most of the administrative material was recovered. The thresholds and door socket are shown as found.



Fig. 10. Fragment of an inscribed terracotta cylinder, shown in situ*. Fragments of the cylinder were found scattered throughout the eastern part of Building H1.*

room. The northern corner between the two larger rooms was occupied by a courtyard paved with fired square bricks, mostly removed by Daesh trench 4.
A water drain built with carved stone ducts extended across the building northwards, as the recovery of some dislodged ducts at the bottom of trench 4 confirmed. A water installation built with fired bricks covered with a double layer of bitumen and whitish plaster for a waterproofing purpose was uncovered in the southern corner of the building. Based on the volume of the excavated spaces and the presence of the stone-built installations, Building H1 can be considered an example of a wealthy house from the late Neo-Assyrian period. This assumption is based on a consistent material assemblage recovered in the spaces of the building, including several ceramic vessels such as a White Painted jar from Cyprus, and a distinctive administrative assemblage. This features a tablet fragment (see Marchesi in this volume, fig. 2), a cylinder seal (Cat. 14), several clay sealings (Cat. 38, 42, 43) and tokens of different materials (mainly clay — fired and unfired — but also lead, limestone, and quartz) and shapes (round, tetrahedral, conical, rectangular, and square), found also at other Assyrian provincial centers, such as Ziyaret Tepe (Tushan) on the Upper Tigris (MacGinnis et al. 2014; MacGinnis 2023: 124-127) and Karkemish on the Middle Euphrates (Cavriani 2025). This evidence indicates that the latest occupants of Building H1 were involved in bureaucratic and/or commercial practices. Another significant and yet unexpected finding was a fragmentary terracotta cylinder (Cat. 13) with an inscription by Sennacherib, which was scattered in several pieces across two nearby rooms (see Marchesi in this volume; Fig. 10).
The end of phase 2 in Building H1 was marked by a rapid abandonment, hence the impressive quantity of small finds and ceramic vessels recovered in the rooms. No evidence of general fire or destruction was observed, but the house was reoccupied after a short temporal gap (phase 1): the larger rooms of the complex, certainly not in a state of complete ruin, were divided into smaller units, and new earthen floors were raised above levelled deposits of collapsed mudbricks or thick layers of intentionally-dumped ceramic fragments. Although the character of this occupation was modest, the presence of Assyrian residents is confirmed by the persistence of earlier administrative practices (Cat. 35, 44, 45).
To the southwest, separated by the narrow alley, Building H2 extends beyond the excavation limit. Some rooms along its eastern perimetral wall were nonetheless excavated; they display a sequence similar to that of Building H1, with a late Neo-Assyrian first construction phase, followed by the later reuse and repaving of the spaces.

Area S

Area S, a small sounding (6 × 6 m) located ca. 340 m south west of area H, was opened in 2023 to confirm the results of the magnetometry on the plateau, which revealed an area of particularly clear and dense urban layout (Marchetti et al. in press) (Fig. 11). Excavations uncovered a mudbrick building with two occupation phases and featuring at least three adjoining rooms and a wider space, possibly a courtyard or a street. The building was built and



Fig. 11. Aerial view from the northeast of area S on the northeastern plateau. Tell Kuyunjiq is visible in the left background.

remained in use during the 7th century BCE (phase 2), until it was suddenly abandoned with no trace of violent destruction (although some complete ceramic vessels were present). The building appears to have been reoccupied after a short gap with no significant architectural changes in the early 6th century BCE (phase 1a-b) until its final abandonment. This sequence mirrors the evidence from area H, indicating that this sector of the lower town was reoccupied, after the fall of Nineveh, for a relatively short time span.

GG

Area V

After a trench dug by SBAH in 2021 to lay down electrical cables revealed the presence of baked bricks, area V was started there in 2023 and continued in 2025 with the purpose of gathering data on South Nineveh. Area V is adjacent to the north of Shara al Asady and immediately west of a drainage channel, both made by Daesh during its occupation of Mosul (Fig. 12). The exploration of area V, south of Nebi Yunus, revealed a vast building with two courtyards (paved with baked bricks and alabaster flagstones, respectively), the second of which was surrounded by rooms used for food processing (Fig. 13).

Excavations brought to light a stone-paved courtyard measuring 15.5 × 10.3 m, featuring a drain running in a southwest-northeast direction that passes beneath the northern courtyard wall. The courtyard is surrounded on all four sides by rooms. To the south, an entrance paved with baked bricks indicates the presence of a room, although that space is largely lost due to the construction of the road. Along the east side, three rooms devoted to food production and transformation were identified. This hypothesis is supported by the presence of three *tannur* (bread ovens) across two of the rooms, alongside functional tools such as a stone mortar and grinders embedded in the beaten earth floors (Fig. 14). On the west side, only one room in the northwest portion of the courtyard has been investigated, though it is possible that two additional rooms mirrored those on the east side. This room yielded no distinctive features other than a partially preserved beaten earth floor covered by collapsed baked bricks.



Fig. 12. Aerial view from the north of area V at the end of 2023 season. In the left background, part of the city walls and the Halzi Gate (area T) are visible.

The north side of the courtyard featured three entrances, leading to rooms not yet investigated: the western entrance is paved with baked bricks; the middle one is narrow, perhaps hinting at the presence of a staircase; and the eastern one features a beaten earth floor.

At the western edge of the area, a 1 × 1 m sounding was opened in order to verify magnetometry results, confirming the presence of a second courtyard paved with baked bricks. A trench measuring 11.5 × 4 m was excavated to connect both courtyards, but the two rooms opening on each courtyard were not communicating with one another in this spot.

Excavation data indicate that the complex represents a single occupation phase dating to the 7th century BCE. This was followed by widespread traces of destruction across the entire area, marked by a thick layer of burnt soil containing large quantities of Neo-Assyrian pottery, resulting from a violent destruction event of a thriving production context, likely part of a wealthy residence.

FC

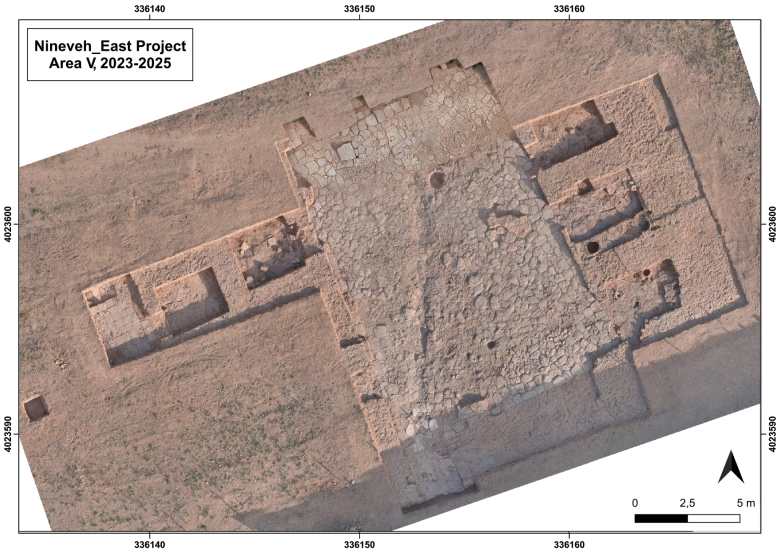


Fig. 13. Orthophoto of area V at the end of the 2025 season (by F. Cavaliere and M. Valeri).



Fig. 14. View from the southwest of the central room along the east side of the alabaster-paved courtyard, with two bread ovens on its south side, area V.

Royal inscriptions and texts of other genres from private houses

Gianni Marchesi

Besides the residence in area E (D'Orazio, Monastero, and Redamante; Jiménez, Marchesi, and Taylor in this volume), other residential areas have yielded cuneiform texts.

A cuneiform tablet (Fig. 1a-b) and two inscribed terracotta artifacts — a prism of Sennacherib (Cat. 15) and a cylinder of Sin-sharru-ishkun (Cat. 16) — were found in the topsoil in area B, near the deep trench dug by Daesh (see Cavaliere, D'Orazio, and Giacosa in this volume). These objects may originally have come from either one or more rooms in the wealthy family's residence in area B that were destroyed by Daesh's bulldozers or from one or more dwellings in the same residential quarter.

All three objects are fragmentary. The two royal artifacts are widely separated in date, with Sin-sharru-ishkun's reign beginning fifty-three years after the end of Sennacherib's. The tablet, an administrative text whose content is not entirely clear, is dated according to the eponym system used in Assyria, whereby each year was named after a high-ranking state official holding the office of eponym (Assyrian *limmu*) for that year. However, the eponym named here — Kanunaiu (^{iti}AB-A.A) — cannot be identified with certainty, since three individuals of that name held the eponymy in different years under different sovereigns: a chief judge (671 BCE, reign of Esarhaddon and Ashurbanipal), a governor of the New Palace (666 BCE, reign of Ashurbanipal), and a governor of the city of Dur-Sharruken (early in the reign of Sin-sharru-ishkun) (see Baker 2000: 602 and 604). If all three texts originally came from the same building (perhaps the excavated house in area B), the Kanunaiu mentioned on the tablet might be the last of these three eponyms.



Fig. 1. a. NE.19.O.41, obverse; b. reverse. Archival text dated according to the Assyrian eponym system. Unusually, the date appears at the beginning of the document (dates are generally placed at or near the end). On the reverse, only the final sign — MI — is preserved.

Another fragmentary terracotta cylinder, this time bearing an inscription of Sennacherib (Cat. 13), was found in what appears to have been an upper-class residential building in area H, designated as Building H1 (see Cavaliere, D'Orazio, and Giacosa in this volume). It was associated with a tablet fragment (Fig. 2) inscribed with a text of a type — an apotropaic ritual — that is typically found in libraries. This suggests the presence of a private library in Building H1, as in the building in area E Top, and raises the possibility that the Sennacherib cylinder also belonged to this library. In this case, however, nothing is known about the owner of the house. He may have been a scribe, like the owner of the building in area E Top, or some other member of the local elite.

From Sargon II onward, Assyrian kings often used terracotta cylinders and prisms as media for inscriptions commemorating their architectural accomplishments, such as the construction of palaces and temples (Studevent-Hickman 2006: 5; Taylor 2017: 355; 2018: 34-40). These foundation inscriptions could also include lengthy accounts of the rulers' military campaigns, victories, and conquests. The objects themselves, made specifically to bear these inscriptions, were intended to serve as time capsules, preserving the memory of the kings' deeds and building works for posterity. Firing the clay ensured their long-term durability, while their shape allowed them to accommodate long and detailed narratives.

Finding artifacts of this kind in private houses is somewhat unusual. They were generally buried within the walls or, more rarely, beneath the floors of public buildings (Ellis 1968: 110-112). Some, however, seem to have been copies intended to serve as records or objects for display, or to be consulted and studied (Ellis 1968: 112-113; Nevling Porter 1993: 110-112; Da Riva 2008: 39). It is even conceivable that they also served as prestige objects, as may have been the case here: objects that court dignitaries and other high-ranking state officials, and perhaps even private citizens with connections at court, could display to demonstrate their closeness to royal power.

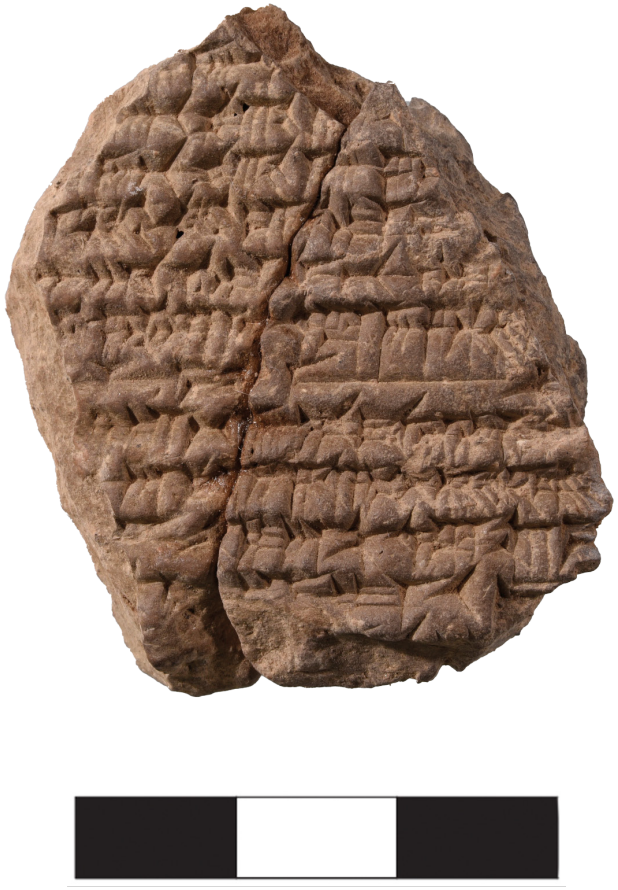


Fig. 2. NE.20.O.260. Apotropaic text against bad signs, evil machinations, diseases, etc.

The "bankers" of Nineveh: financial activities in 7th-century BCE Mesopotamia

Palmiro Notizia

At the end of the 8th century BCE, soon after his accession, Sennacherib (705-681 BCE) transferred the royal capital from Dur-Sharrukin, newly founded by his father, to the far older city of Nineveh. Nineveh occupied an exceptionally favourable position, controlling the principal ford across the Tigris in northern Assyria and lying at the eastern end of an important overland route leading toward the Mediterranean and Anatolia. Sennacherib transformed the city on a correspondingly imperial scale. New fortifications more than twelve kilometres long enclosed approximately 750 hectares; major palaces were built or enlarged on the citadels of Kuyunjiq and Nebi Yunus, while canals, reservoirs, and an aqueduct supplied the expanded capital and its hinterland with water. Nineveh consequently became the political and administrative center of an empire extending from western Iran to the Mediterranean and, for a time, into Egypt. Under Esarhaddon (681-669 BCE) and Ashurbanipal (669-631 BCE), it remained the seat of royal power and the heart of the Empire, where the presence of the court and central administration brought together members of the royal family, officials, attendants, scholars, craftsmen, and resettled groups from many different regions. This concentration of urban population, institutions, and specialized personnel would, in turn, have generated particularly strong demand for goods, services, and credit.

The private legal records recovered at Nineveh belong to this court-centered environment and range in date from before Sennacherib's reign to the final decades of the Empire (for the debt notes from the area E residence, dating to the 6th and 7th regnal years of Sin-sharru-ishkun, see Jiménez, Marchesi, and Taylor in this volume). Within this material, groups of documents can be associated with particular individuals or households, including royal women, military officers, palace personnel, and officials attached to the crown prince. These records provide exceptionally detailed evidence for the property and financial dealings of court-connected circles, although their focus on this particular social environment necessarily limits the extent to which they can be regarded as representative of Nineveh's population as a whole or of the city's entire economic life. Documentary survival introduces a further distortion: obligation documents were normally destroyed once the obligation had been fulfilled, so the surviving corpus disproportionately preserves claims that were still outstanding when the archives came to an end (Radner 1997: 75-76; Arbøll and Radner 2023: 104). The recurrent creditors considered below emerge from this socially selective documentation. The designation "bankers" does not correspond to any native Neo-Assyrian professional category but is used here as a convenient, and necessarily anachronistic, shorthand for individuals who repeatedly extended credit

and held enforceable claims in silver, grain, and other commodities.

Not every obligation recorded in Neo-Assyrian private legal documents can be identified as a loan. The standard formula states that a quantity of silver or goods "belonging to" one party is "at the disposal of" another, without normally indicating how the liability arose. Although this wording may record an actual advance, it could also refer to an agreement to deliver or manufacture goods, the performance of work, an unpaid fiscal or other liability, or the reformulation of an earlier debt. The technical expression *ina pūḫi našû*, "to take (something) in exchange" (i.e., as a loan), is generally taken to indicate that the obligation arose from a genuine loan, although it is not consistently employed and does not provide an entirely secure criterion (Postgate 1976: 33–37; Radner 2003: 901–903). Silver occupies a central place in the surviving credit documentation: it could itself be advanced or owed, while also serving to express the value of obligations arising from other transactions. Silver was weighed according to different standards, of which the mina of Karkemish was the most widely used in the Nineveh documentation. Although the private legal records from Nineveh chiefly concern higher-value transactions, evidence from elsewhere in Assyria shows that silver was also used for smaller purchases and payments involving everyday goods and services (Gaspa 2016). Obligations could nevertheless concern barley, wine, livestock, and other commodities. The terse and formulaic wording of the documents calls for caution, however: the recording of a quantity of grain, even when the date on which the obligation fell due was tied to the agricultural calendar, does not in itself establish that the grain had been advanced as a loan, since some texts may instead concern its future delivery within commercial or administrative arrangements (Ponchia 1990: 54–58). Contractual terms likewise varied. Some obligations carried interest from the outset: the most frequently attested rate on silver was 25% per year, whereas rates on grain were more variable, although a one-time increase of 50% at repayment occurs frequently (Postgate 1976: 39–43; Ponchia 1990: 40–44). In other cases, the obligation was initially interest-free, and an increase — often of one quarter — was imposed only if payment was not made by the stipulated deadline. Repayment could be secured by a personal surety or through the pledge of people, land, animals, movable property, or another legal document. Some obligations undertaken by several debtors also included the clause *ša karimūni* ("he who is present"), which required whichever co-debtor was present to satisfy the obligation in full (Arbøll and Radner 2023: 104–105). In explicitly antichretic arrangements, the creditor's use of a pledged person or property, or enjoyment of its produce, replaced interest; the absence of an interest clause alone, however, does not demonstrate that an agreement was antichretic (Radner 1997: 357–390). Claims could also pass through inheritance, be transferred or pledged, or be used in payment. In this sense, the document constituted more than a simple memorandum, since it provided the creditor with evidence of an enforceable claim (Radner 1997: 72–76). Such agreements were authenticated through sealing, dating, and the naming of witnesses. The recording of their names could help establish the validity of a transaction and provide evidence in the event of a later dispute, while their patronymics, professions, and places of origin also illuminate the social networks within which the agreement was made (Radner 1997: 20; Ponchia 2009: 131–132, 139–142, 156–158).

The range of economic activities documented in the private legal records from Nineveh may be illustrated through a selection of transactions involving three recurrent creditors: Silim-Ashur, Kisir-Ashur, and Ninurta-sharru-usur. They did not constitute a recognised professional group, and the surviving documents do not identify lending as the occupation of any of them. Their individual positions within the court-centered society of the imperial capital can nevertheless be defined to different degrees. Silim-Ashur was a high-ranking court official who later held the office of grand vizier (*sukkallu dannu*), although the transactions considered below do not attach a title to his name. Kisir-Ashur held a military command: a document of approximately 636 BCE styles him cohort

commander of the crown prince's *qurbūtu* bodyguards, while a later record identifies him more simply as a cohort commander (SAA 14 nos. 29 and 32). Ninurta-sharru-usur is described as a *mār ekalli*, conventionally translated "courtier," and, in one document, more fully as a courtier of the New Palace (SAA 14 nos. 426 and 435). This title places him within the palatial milieu, but does not establish either his precise duties or an economic profession. The following selection of records naming these individuals is intended to provide concrete examples of the credit practices and related economic activities represented among the private legal documentation from Nineveh. In one record naming Silim-Ashur as creditor, ten minas of silver and 120 homers of barley, together with interest, are said to be at the disposal of Hantasanu and Marduk-shumu-usur. Payment was due in the month of Ululu (approximately August-September); if the deadline was not met, the silver would increase by 50%, while Bel-eresh acted as surety (SAA 6 no. 221; Fig. 1). The text does not state how the obligation originated. Another record states that three and a half minas of silver according to the Karkemish standard were at the disposal of Marduk-eriba, with an increase of one half if payment was not made by the beginning of the month of Abu (approximately July-August); here too the underlying transaction remains unstated (SAA 6 no. 234). The transactions involving Kisir-Ashur are similarly varied. One document explicitly uses *ina pūḫi* for sixteen shekels of silver repayable by Abdi-Samsi at the beginning of the month of Du'uzu (approximately June-July), with an increase of one quarter after default (SAA 14 no. 30). In another, however, an obligation of one mina and thirty shekels was to be discharged through the provision of a raft sixteen cubits long; a surety was named, and failure to perform would again increase the silver by one quarter (SAA 14 no. 33). This transaction may reflect deferred delivery or payment in kind rather than a simple cash loan. The documents naming Ninurta-sharru-usur reveal an equally diverse pattern. One places half a mina of his silver at the disposal of Mannu-ki-Nabu, a courtier of the Succession Palace, and specifies an increase of one quarter, without explicitly identifying the transaction as a loan (SAA 14 no. 426). By contrast, six shekels repayable in the month of Abu (approximately July-August) are expressly described with *ina pūḫi* and made subject to the same increase after default (SAA 14 no. 429). Obligations involving barley and other commodities are also associated with Ninurta-sharru-usur, alongside leases and purchases (SAA 14 nos. 432, 434, 435, and 436). Taken together, these selected transactions combine lending with agreements for delivery, property dealings, and other economic activities. Although the three men recur as creditors, the surviving evidence does not allow us to describe any of them as a professional moneylender, still less to regard moneylending as their exclusive occupation.

Private agreements did not, however, lie wholly beyond the reach of royal power: as the final authority on legal matters, the Assyrian king could be petitioned even in disputes over unpaid debts (Radner 2003: 887). Royal intervention could also assume a more general form, through measures affecting obligations between private parties. The term (*an*)*durāru* is used for a remission or release involving debts, but should not be applied indiscriminately to fiscal privileges, general amnesties, or every royal act of release. A small group of 7th-century contracts from Nineveh, Assur, and Kalhu records that the transaction took place "after the remission of debts." Their chronological distribution suggests that such measures could accompany a royal accession, including those of Esarhaddon and Ashurbanipal, while the broader evidence points to proclamations directed at particular cities rather than to an automatic empire-wide cancellation. Other contracts anticipated the possibility of remission through clauses intended to preserve the creditor's claim, indicating that its consequences were neither mechanically uniform nor beyond contractual contestation (Radner 2003: 904). The available evidence does not allow us to establish that every private debt was cancelled, to determine precisely which groups benefited in each instance, or to reconstruct the wider economic effects of these measures.

The documentation considered here thus presents credit in 7th-century Nineveh as a flexible field of enforceable obligations. Silver predominates, although grain and other goods were likewise advanced, promised, or owed, and the resulting claims remained embedded in the property relations and social networks of people connected with the royal court. The recurrent mobilization of wealth and legal claims accounts for the prominence of these so-called "bankers" within the surviving documentation; their activities nevertheless formed part of the broader court-centered economy of the last capital of the Assyrian Empire.

Abbreviations:
SAA 6 = Kwasman and Parpola 1991
SAA 14 = Mattila 2002



Fig. 1. The legal document SAA 6 no. 221 (1883,0118.201), © The Trustees of the British Museum.

Babylonians and Assyrians in Nineveh

Enrique Jiménez

In the 1st millennium BCE, two great powers faced one another across the plains of Mesopotamia: Assyria in the north and Babylonia in the south. To their contemporaries, and to us, the two came to stand for very different things. The Babylonians were celebrated, not least in their own eyes, for their learning and their piety. When we picture a Babylonian, we are apt to think of a figure such as king Hammurabi, carved in stone standing in reverence before the sun-god who hands him the emblems of just rule. The Assyrians have fared less well at the bar of history. They are remembered instead for the other face of power: for the reliefs that show them flaying their enemies and cutting out the tongues of the defeated. One civilization is famous for producing culture; the other, for ruling people.

It has long been tempting to compare this pairing to another, better-known one. As one historian has put it, "Assyria's relationship with Babylonia was a special one, similar to the relationship that Rome had with Greece … Like Rome, [Assyria] eventually morphed into an empire that exercised political domination over its culturally more advanced sister civilization" (Frahm 2017: 286). Assyria, in other words, is Rome to Babylonia's Greece: the conqueror who admires, absorbs, and rules the older and more refined neighbor. The analogy would have pleased the Roman poet Virgil, who framed the same division of labor in his Aeneid: others, he wrote, will cast more lifelike bronzes and plead their cases more eloquently and map the wheeling of the stars, "but you, O Roman, remember to rule the peoples with your power: these shall be your arts" (Virgil, Aeneid 6.851-53). If we accept this tidy division, Babylonians the scholars and Assyrians the soldiers, then a puzzle immediately presents itself. Why is the single most important library of the entire ancient Near East to be found not in cultured Babylonia, but in the Assyrian heartland? The library in question is the famous collection assembled by king Ashurbanipal at Nineveh, and it remains the richest single source for the literature, science, and religion of ancient Mesopotamia. Clay tablets, after all, are not the sort of trophy one wins by conquest in the way one wins territory or captives. Why, then, should the greatest treasury of cuneiform learning sit in what the stereotype would have us regard as a cultural wasteland?

A library built from plunder?

The traditional answer is that the Library was an act of empire. Collecting the world's knowledge in one place was part of the imperial programme: just as the king gathered peoples and tribute at the center, so too he gathered their texts. The impulse was, so goes the argument, the same one that heaped up the great collections of carved ivory furniture in the palaces of Assyria: prestige goods accumulated as a visible sign of dominion over the

lands that produced them (Robson 2019: 126–127). At a symbolic level the capital aspired to become a microcosm of the whole world. As Mario Liverani has described this ideology, "… At a strictly symbolic level, the center (the capital city and the royal palace) attempts to take on the form of a microcosm, which sums up the elements of the whole world … At the center of the world there is everything, all is known and all is possessed — creation is complete" (Liverani 1979: 314).

On this view the tablets were accumulated on principle rather than out of any wish to read them; one conquers a people first, and extracts their writings afterward.

This idea, that Ashurbanipal's Library was assembled by stripping the older libraries of the south, is almost as old as the study of Mesopotamia itself. It was voiced already by George Smith, the pioneering decipherer who first brought to light the Babylonian accounts of the Flood and the Creation. In his Chaldean Account of Genesis he wrote that "the agents of Assurbanipal sought everywhere for inscribed tablets, brought them to Nineveh, and copied them there; thus the literary treasures of Babylon, Borsippa, Cutha, Akkad, Ur, Erech, Larsa, Nipur and various other cities were transferred to the Assyrian capital" (Smith 1876: 20). Every one of the cities in Smith's list lies in Babylonia.

Smith had grounds for his claim. Some tablets carry notes of origin in their colophons, the scribal endnotes that record who copied a text and sometimes from where. And there survives a remarkable royal letter, known from later copies, in which a king orders an official named Shadunu to seek out the learned men of Borsippa and to gather up every tablet in their houses and in the local temple and send them all to Nineveh (Frazer 2024: 312–329; Fig. 1). The letter reads almost like a warrant for the systematic emptying of Babylonia's libraries into the royal collection.

Stronger still is a set of documents known as the Library Records: four badly damaged tablets that list, in summary form, quantities of texts — so many tablets of omens, so many of laments, a handful of medical prescriptions, and so on. An influential study showed that most of these



Fig. 1. The so-called "Shadunu letter," in which an Assyrian king instructs an official named Shadunu to collect tablets in Borsippa for him, second half of the 7th century BCE. © The Trustees of the British Museum.

records can be dated to just after 648 BCE, the year in which the long civil war between Ashurbanipal and his brother, the king of Babylon, came to its end with the fall of Babylon (Parpola 1983). The timing is suggestive: the records look very much like an inventory of war booty, carried north to Assyria in the aftermath of victory. George Smith's hypothesis seemed confirmed, and the orders given to Shadunu seemed to have been carried out.

Where are the looted tablets?

And yet a serious difficulty remains. If all these tablets were truly brought to Nineveh, where are they? Here the study of handwriting comes to our aid. Assyrian and Babylonian scribes wrote the same cuneiform signs in recognizably different ways, so distinct that even a small fragment can usually be assigned to one hand or the other. This makes it possible to count the Babylonian tablets among Ashurbanipal's holdings with some confidence. The result is around five thousand fragments, only about fifteen per cent of the Library.

More troubling still, the looted tablets named in the Library Records have left almost no trace among the surviving tablets. In the course of a project dedicated to reading the whole of Ashurbanipal's Library, B. Schnitzlein and S. Cohen-Olberding have collected every colophon of every scribe from Nineveh and compared them with the names in the Library Records. Among some 179 Babylonian colophons, naming about sixty individuals, not a single secure match with the Library Records could be found. The great haul of Babylonian tablets that the records seem to document has vanished, if it ever arrived. Two explanations suggest themselves. Many of the writing-supports named in the records were of perishable materials, wooden writing-boards and the like, that would not survive in the soil. Alternatively, the imported Babylonian tablets may simply have been copied into Assyrian script and then discarded, which would help explain why the overwhelming majority of the Library is written in Assyrian hands. But this second explanation cuts both ways, and it points us toward a part of the story that has been strangely neglected.

For the Library did not draw only on Babylonia. It drew, above all, on other Assyrian collections, on generations of Assyrian scholars who had copied, owned, and studied these texts at home. If we count the private colophons, those recording tablets owned or written by individuals other than the king, the Assyrian names greatly outnumber the Babylonian ones. In the fullest study of this material to date, Cohen-Olberding (2025) shows just how large this private Assyrian contribution was, and how much of it can be traced back to identifiable scholars and their households. The Babylonian colophons, by contrast, name only around sixty individuals.

The single most striking case is that of Nabu-zuqup-kenu, a scholar active at Kalhu around 700 BCE. His personal collection, copied and annotated over a working life of some decades, was later brought north to Nineveh, where it formed one of the foundations of the royal library (Cohen-Olberding 2025: § 4.4). A single industrious Assyrian scholar, in other words, could contribute to Ashurbanipal's Library on a scale that rivalled the entire documented influx from the south.

The point is not that Babylonia counted for nothing. Most of the classic works of Mesopotamian literature were, after all, Babylonian in origin, and when Assyrian copies name the source they were copied from, that source is often a Babylonian city. But these Assyrian copies reached Nineveh from within Assyria, the end-product of centuries of local transmission. Some compositions, indeed, are known to us in the 1st millennium only from Nineveh, having survived in the conservative north long after they had fallen out of fashion in the south. The tale of Etana and the myth of Adapa, both attested in the 2nd millennium and then again only in Ashurbanipal's Library, are cases in point: they endured in Assyria, and from there found their way into the royal collection. The Library of Ashurbanipal, on this reading, is not a warehouse of southern plunder. It is the culmination of a long Assyrian tradition of learning, one that had been quietly accumulating for generations before the king ever gave the order to collect.

New tablets from the lower town

Until recently, almost everything we knew of Nineveh's written culture came from tablets excavated in the nineteenth century and long since dispersed into museum collections, often shorn of any record of exactly where they were found. The renewed excavations of the Iraqi-Italian Archaeological Expedition have begun to change this. For the first time in generations, cuneiform tablets are emerging from Nineveh in controlled, documented archaeological contexts, found in the houses and residences of the lower town, where the scholars who used them actually lived and worked. These discoveries allow us to test the grand questions of the Library's formation not against the poor findspot records of early excavation, but against the physical evidence of the tablets themselves. One tablet in particular brings the whole argument into focus.

A tablet from the last days of Assyria

The tablet Cat. 5 (see also Fig. 2), recovered by the Iraqi-Italian team from a residence in the lower town, is a compilation that includes, among other things, a commentary on magical and ritual texts. Its colophon names the man who wrote it and, crucially, the king in whose reign he wrote. That king is Sin-sharru-ishkun, the very last ruler of Assyria, on whose watch Nineveh fell to the Medes and Babylonians in 612 BCE. The copyist identifies himself as a "chief diviner," and dedicates his labor to the gods Nabu and his consort. We are, in other words, looking at the work of a senior Assyrian scholar in the final years of the Empire, perhaps the final decade of Nineveh's existence as a living city.

What makes the tablet extraordinary is what it contains. One of its sections turns out to duplicate, almost word for word, a commentary already known from the northern city of Assur: the commentary on the composition known as Marduk's Address to the Demons (Gabbay 2022). That commentary is a deeply Assyrian text. The Assur copy comes from the house of a family of exorcist-scholars at Assur, and was made in the 7th century by a young priest named Kisir-Nabu. That such a text should surface at Nineveh, copied by a chief diviner under the last Assyrian king, is telling. It is not some imported Babylonian curiosity, nor even an older southern borrowing kept on a shelf; it is a monument of the Assyrian scholarly tradition, the intellectual world of the northern exorcists and diviners, being faithfully transmitted in the imperial capital down to the Empire's dying years. The scribes of Nineveh were not merely hoarding the spoils of the south. Even as the political order around them crumbled,



Fig. 2. The photographic documentation process at the dig house of a cuneiform tablet after conservation (in this case Cat. 5).

they were still copying, and copying correctly, the texts that were most distinctively their own.

The stereotype with which we began, cultured Babylonia and brutish Assyria, turns out, like most stereotypes, to obscure more than it reveals. The Assyrians were not passive collectors of a borrowed civilization. They were its authors as much as its custodians, composing, as well as copying and preserving, the learning that filled their libraries (Fig. 3). In tablets such as Cat. 5 we can watch them at that work, quietly and expertly, until the very end (Fig. 4). The Library of Ashurbanipal was not the plunder of a wasteland. It was the harvest of a tradition, one that endured in the north for as long as there was a Nineveh in which to endure.



Fig. 3. Niches in Room H 5 in the Nabu Temple at Dur-Sharrukin (Khorsabad), perhaps used in antiquity to store cuneiform tablets (from Loud and Altman 1938: pl. 19b).



Fig. 4. Digital model of a group of tablets from area C, including Cat. 5 (by J. Monastero).

The bioarchaeology of Neo-Assyrian Nineveh

Alexandra Bojinca, Müge Ergun, Elena Maini, Eleonora Serrone, Rula Shafiq, and Alexander Weide

Bioarchaeology at Neo-Assyrian Nineveh offers privileged insights into daily life, past populations and subsistence practices of an imperial city and capital. Through reconstructing the subsistence economy, bioarchaeological analyses also have the potential to shed light on the social organisation and differences in food consumption between citizens and the city's elite.

Zooarchaeology

The zooarchaeological evidence recovered from Neo-Assyrian Nineveh provides valuable information on animal exploitation, food consumption, and the animal economy of the city. Faunal assemblages are available from different sectors of the city and from contexts with diverse architectural features and functions, allowing evidence from individual contexts to be considered within a broader urban perspective.

Domestic animals clearly predominate in the assemblages, with sheep and goats by far the most frequent taxa. Their predominance is not restricted to a particular sector of the city but recurs throughout the investigated contexts, although in varying proportions. Cattle and pigs form a much smaller component, and their relative frequencies vary between contexts. Equids are also present, including donkeys and, more rarely, horses. This overall composition highlights the central role of sheep and goats in the food supply and animal economy of Neo-Assyrian Nineveh. Their consistent predominance across different parts of the city indicates that caprine husbandry was a major component of livestock management. At the same time, variations in the relative frequencies of cattle, pigs, and equids may reflect differences in the activities represented by individual contexts, as well as in the processes that led to their formation.

Age-at-death data provide further insights into the exploitation of the main domestic animals. Sheep and goats show a broad mortality profile, including young, young-adult, and adult individuals, with some animals surviving to relatively advanced ages. This pattern suggests diversified herd management and is consistent with the multiple roles of sheep and goats, providing meat as well as resources obtained during the animals' lifetime.

Pigs show a markedly different pattern, with juvenile and young-adult animals strongly predominating, consistent with their primary exploitation for meat.

Cattle, by contrast, are more frequently represented by adult individuals. Their prolonged survival before slaughter may reflect their importance not only as a source of food but also as working animals, particularly for traction and transport.

Dogs are also documented in some contexts, while equids and camelids, although much less frequent than the principal livestock species, add another dimension to the

relationship between people and animals in the city. In particular, the presence of donkeys, horses, and camelids points to roles beyond food consumption, potentially connected with transport and the movement of people and goods (Fig. 1).
Wild animals are comparatively rare. Gazelle, deer, and hare are represented by only a few remains, suggesting that hunting made a very limited contribution compared with domestic livestock. Overall, the zooarchaeological evidence depicts an economy strongly centred on domestic herds, particularly sheep and goats, with cattle and pigs playing a secondary role.

EM, ES

Archaeobotany

The charred macrobotanical assemblage recovered from Neo-Assyrian Nineveh provides an understanding of crop cultivation, wine consumption, and the wider subsistence economy. The soil samples analysed yielded over 14,000 botanical specimens representing 75 plant taxa and types. Among the seed crops, cereals are the most common category, with barley (*Hordeum vulgare*) being dominant and free-threshing wheat (*Triticum aestivum/durum*) well attested. Pulse crops, consisting of lentils (*Lens culinaris*), bitter vetch (*Vicia ervilia*), and grass pea (*Lathyrus sativus*), are less common and occur in lower numbers. This is mainly due to the fact that pulses become charred less often than cereals, which is related to how these crops are treated and processed. These quantitative differences do not mean that pulses were less important for the diet of Nineveh's inhabitants. Seeds of wild plants make up the majority of the assemblage. Small and medium-seeded grasses and small-seeded legumes account for 31% of the whole assemblage (after the abundant grape remains are excluded, see below). In terms of ecological preferences, these wild taxa represent ruderal and arable weeds that would have grown in disturbed areas and arable fields. They possibly entered the charred botanical assemblage via crop processing and the burning of dung from animals that grazed around Nineveh or received crop-processing residues as fodder. This is evidenced through preserved herbivore dung remains that are currently under study to better understand animal husbandry and foddering at Nineveh.



Fig. 1. Articulated limb remains from area F (F.888, phase 12, late 8th century BCE): a. distal hind limb of an equid; b. articulated phalanges of a camel.

Three samples belonging to one context that dates to the central Neo-Assyrian period or Iron age II (from an immediately pre-Sennacherib phase) contributed more than 11,000 grape (*Vitis vinifera*) remains: 96.4% pips, 1.4% pedicels, and 2.2% whole fruits and skin fragments (Fig. 2). The large quantities of grape, particularly the dominance of pips and the presence of pressed grape skins, align well with remains from wine dregs or fermentation by-products, suggesting the assemblage represents discarded wine consumption and/or possible production by-products.
This is contextualised against Neo-Assyrian textual sources, including royal inscriptions, reliefs, and



Fig. 2. Grape remains from Neo-Assyrian Nineveh (from area F, F.885, phase 12, late 8th century BCE), including pedicels (upper left), seeds (upper right), and pressed whole grapes (bottom). The scale bar represents 1 mm.

administrative texts, which record the presence of grapevines in the royal gardens of Nineveh and other cities and a large number of vineyards in the surrounding areas. The major irrigation projects overseen by the Assyrian king Sennacherib (705–681 BCE) were designed to secure water supply for Nineveh and maximise agricultural productivity in its immediate hinterland. However, tributes and imports also brought wine to Nineveh from further away, supplementing local production. Wine was an important commodity and consumption good for the Neo-Assyrian elite and military, and Neo-Assyrian armies regularly engaged in organised looting of large quantities of wine from their enemies in order to sustain high-status consumption practices.

The rivers and canal systems around the city may also have facilitated the transport of large wine jars from the vineyards in Nineveh's hinterland (i.e. the Khinis winery) and possible imports to meet the growing needs of the city. Importantly, however, grape and possibly wine consumption continued after the fall of the Neo-Assyrian Empire, indicated by the relatively high ubiquity of grape pips in the post-imperial samples. This continuity demonstrates that local grape cultivation was not necessarily restricted to centralised production controlled by the royal court, but reflects an older and continuing tradition in northern Mesopotamia.

AB, ME, AW

Human osteoarchaeology

The human remains recorded at Nineveh are related to late Neo-Assyrian contexts in four of the gates along the city walls: Adad (area D), Halzi (area T), and Shamash Gates (area L), as well as a smaller gate located north of the Shamash Gate (area N). The human remains recovered from all four locations include some individuals represented by relatively articulated skeletons, while others were represented only by isolated or fragmented skeletal elements. The majority of the remains are poorly preserved, mostly as a result of collapsed mudbrick walls that covered the bodies and caused extensive fragmentation and crushing effects. None of the individuals found at these gates were intentionally placed within a prepared grave and covered with sediments (Knüsel and Robb 2016), as generally expected in formal inhumation contexts, in which the deceased were interred by their close associates.

The spatial distribution of the remains together with the body positions and orientations suggest that the individuals died where they were discovered and were not intentionally buried afterwards. On this basis, in addition to stratigraphic observations, it is possible to propose that the human remains located at the four gates may represent victims who died when Nineveh fell in 612 BCE. The remains include adults, children and infants, and were found in association with the gate structures, including areas around the entrances as well as the central sections.

Excavations within the Adad Gate fortification complex

yielded the skeletal remains of two adult individuals, both recovered from non-funerary contexts associated with structural collapse. In the stairwell of the eastern tower of the Adad Gate, there were the remains of an adult individual of undetermined sex, estimated to be between 35 and 45 years of age. The skeleton (designated as NE.22.S.405; Fig. 3) exhibits a high degree of bone fragmentation as a consequence of the collapsed mudbricks. Similarly, within the passage of the small gate in area N the remains of another adult male were recovered, his age estimated between 35–45 years (NE.21.S.130; Fig. 4).

Excavations conducted within the inner passage corridor of the Halzi Gate in area T revealed a highly commingled and fragmented assemblage of human skeletal remains. The majority of the material represents bones of adults (males and females) and children. Three objects were found among the bones with no association to any particular bone cluster: a copper fragment, a blue bead, and an iron arrowhead. Of particular interest is the partially articulated upper right torso (bust) of an adult male aged 35–45 years recovered in a prone position, face down with the cranium slightly tilted to the left. The right upper limb was elevated and abducted away from the body, with the elbow flexed putting the hand under the right chest area (NE.23.S.573; Fig. 5). The results of our excavation at the Halzi Gate correspond well to the published work by Pickworth (2005), whose previous investigations in the outer passage of the Halzi Gate exposed the unburied skeletal remains of 12 individuals, which that author too attributed to the fall of Nineveh.

The fourth context is represented by the Shamash Gate, where the remains of an adult individual of undetermined sex were recovered at the inner entrance of the gate in 2023. This poorly preserved upper torso (bust) was deposited in a prone position, with both upper limbs flexed at the elbows and positioned near the upper abdomen, and the palms positioned in front of the neck. There was no evidence of the cranium, and only the mandible was found *in situ* underneath a mudbrick, causing severe fragmentation (Fig. 6; Harrison et al. 2025). In addition to this individual, a highly disturbed



Fig. 3. Skeletal remains of an adult individual (NE.22.S.405), shown in situ*, recovered from the debris of the collapsed mudbrick walls of the Adad Gate.*



Fig. 4. In situ *remains of an adult male (NE.21.S.130), aged 35-45 years, documented in the passage of the smaller gate in area N.*

assemblage consisting of the scattered, unarticulated remains of several individuals including adults (males and females) and children as young as 2.5–3.0 years old was found in that area.

The bioarchaeological investigation of the human remains recovered from four gates of Nineveh focuses on spatial deposition, body orientation and age at death. Taken together, the evidence from this skeletal sample suggests that these individuals did not die of natural causes, but rather appear to have died violently, most likely as a result of killings perpetrated by the invading forces against the inhabitants of Nineveh during and after the fall of the city in August 612 BCE. The bodies were left *in situ* following death and subsequently covered by the collapse of the city's mudbrick walls.

RS



Fig. 5. Articulated upper torso (bust) of an adult male, age estimate 35-45 years (NE.23.S.573), recovered in a prone position within the narrow corridor passage of the Halzi Gate in area T.

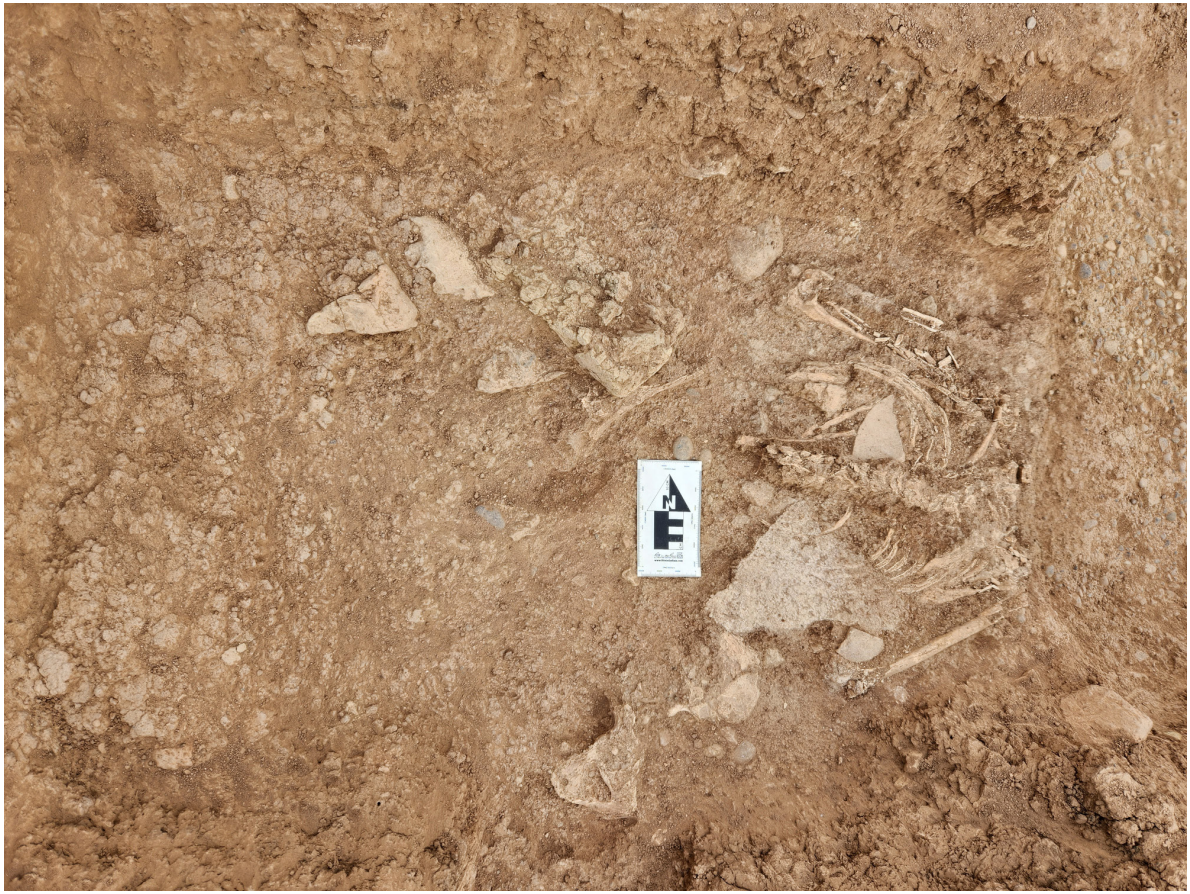


Fig. 6. The poorly preserved upper torso (bust) of an adult individual recovered at the inner entrance of the Shamash Gate.

Conservation of the cuneiform tablets from the lower town of Nineveh

Nadia Barbi and Carmen Gütschow

The recovery process

The deposit of tablets from area C in the lower town of Nineveh consisted of hundreds of unbaked fragments. They were all piled up and compressed; some of them were deformed by the collapse of the building, broken in multiple fragments and almost indistinguishable in shape, making it difficult to determine where one ended and another began (Fig. 1). The cuneiform script was also smudged, in some cases beyond recognition.

At the time of its discovery, an unbaked clay object, especially a fragmentary one, is in the most fragile condition because it has been rendered soft and flaky by moisture absorbed from the ground. In this situation, recovery is very difficult, and the safest way to avoid losing the written surfaces was found to let the earth dry and consolidate with a water-soluble adhesive. Using a mixture of water and ethanol, the adhesive can be dissolved again to remove the adhering dirt. After the solution dried, macro-fractures formed, tablet shapes were identified and labeled with reference letters (Fig. 2).



Fig. 1. The deposit of tablets in area C. In the foreground, tablet Cat. 5 before recovery is visible.

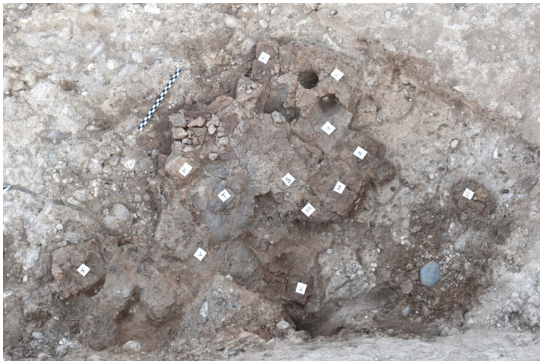


Fig. 2. The tablets at the excavation site are identified and labeled with letters after drying and the application of the consolidating solution.

We worked along these fractures to remove the tablets, leveraging them with spatulas. In some cases, large blocks of tablets were removed together since they could not be separated in the field.

Laboratory treatment: separating, cleaning, and consolidation

Once the tablets were moved to the laboratory in the excavation house, they were mechanically cleaned of soil using a scalpel and a brush (Figs. 3-4). During cleaning, a light consolidation treatment with Klucel G was applied. Klucel G can be mixed with ethanol or water and is also compatible with PVB 30. As Klucel G sets less firmly, flaking surfaces can be sufficiently stabilized whilst still allowing soil deposits to be removed with a scalpel. Polyvinyl butyral, on the other hand, can only be used on fragments that have already dried. Where necessary, stubborn deposits of soil were gently softened with ethanol or acetone. Unlike water, these do not cause the clay to swell, but they do soften the soil deposits somewhat, making it easier to expose the surface. By applying acetone to the lines where the tablets joined and gently leveraging them apart bit by bit, the fragments separated largely cleanly along their surfaces. In the case of deep micro or macro fractures, pieces of a single tablet were separated to glue them together and make them more solid, and only then were they cleaned in detail.

The initial drying served to mark the natural microfracture between one tablet and the next. This allowed us, through the injection of acetone and the calibrated force of a small, thin lever, to separate the tablets with little or no damage to the written surfaces. Figure 5 shows the microfracture after drying between two tablets, and Figure 6 shows the fracture of a section of another block of tablets, opened in Figure 7. However, there were also places where the clay of the tablets had bonded so firmly that they could no longer be separated, due to the extremely strong compression that transformed the portions of raw earth into a new, single block, without any distinction.

In some cases, the written surfaces were damaged by the comings and goings of annelids and terrestrial gastropods,



Fig. 3. Fragment belonging to NE.21.O.405 before conservation.



Fig. 4. Fragment belonging to NE.21.O.405 after conservation.

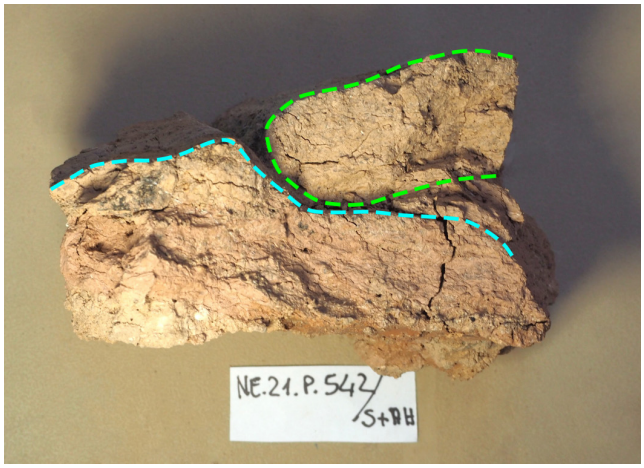


Fig. 5. Fractures from natural drying between two overlapping tablets.



Fig. 6. Fractures from natural drying on a cross-section of a block.



Fig. 7. Separation of the tablets from the block as marked in Fig. 6: NE.21.O.655 and NE.21.O.654 (Cat. 26a).



Fig. 8. The path left by a gastropod shown between green lines in a fragment of NE.21.O.461.

which gnawed and digested the soil, creating gaps in the texts where the groove is visible in the green-shaded area (Fig. 8).
In some of the fragments that were already glued and cleaned, the cuneiform script was still barely legible. The use of a 4x-45x stereo microscope enabled us to clean the heavily soiled wedges of the cuneiform script, as the remaining traces of sand could be more clearly distinguished from the clay tablet material and removed and, in some cases, barely recognizable cuneiform inscriptions could be cleaned as thoroughly as possible (Figs. 9-10).

Conclusions

The recovery and conservation of the tablets from area C in the lower town at Nineveh was not an easy task, due to the initial condition of the material and the difficulties documented in comparable situations. A strategy was tested that ultimately allowed us to recover texts that initially seemed illegible. With just a few materials (water-based glue, acetone, ethanol, and Klucel G as a consolidant) and the help of a stereo microscope, we were able to recover numerous lines of writing to hand over to philologists for analysis.



Fig. 9. Tablet NE.21.O.497 before microscope cleaning.

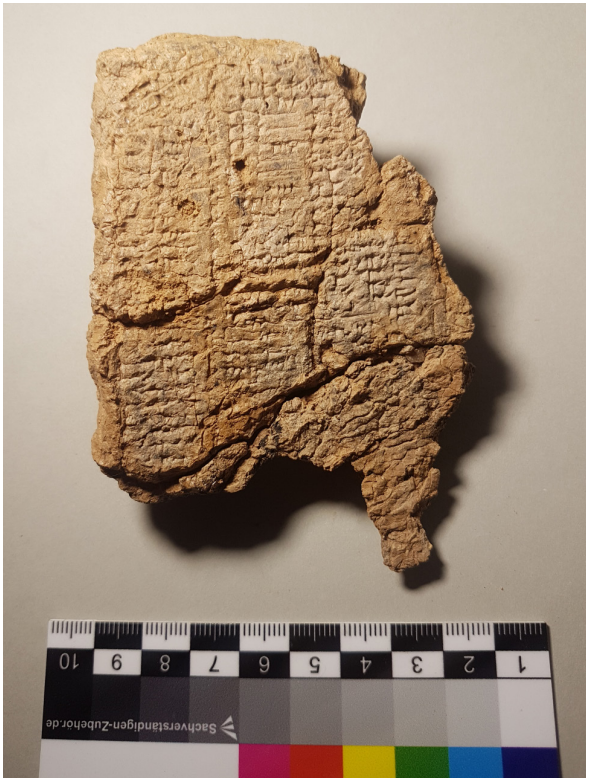


Fig. 10. Tablet NE.21.O.497 after microscope cleaning: the cuneiform wedges are more clearly visible.

From archaeological context to physical replica: 3D photogrammetric documentation, digital processing, and resin-based 3D printing of artefacts from the excavations at Nineveh

Jacopo Monastero

Introduction

Nineveh, one of the most important urban centers of the ancient Near East, has been the focus of renewed archaeological investigation in recent years. Between 2019 and 2023, the University of Bologna, jointly with the State Board of Antiquities and Heritage (SBAH) of Iraq, conducted archaeological investigations in Eastern Nineveh, combining field excavation with systematic documentation and the study of the archaeological remains and materials recovered from the site. The application of photogrammetric techniques has made it possible to produce detailed and metrically reliable three-dimensional representations of artefacts whose morphology and surface characteristics are often difficult to adequately document through conventional photographic recording alone (Remondino and Rizzi 2010). The importance of such documentation is particularly evident in the case of inscribed clay tablets. Their small dimensions, irregular morphology, fragile surfaces, and the presence of extremely fine incised or impressed signs require a level of documentation capable of recording both the overall geometry of the object and its smallest surface features while providing an additional research tool for the study of inscriptions and morphology and contributing to the long-term digital preservation of objects that are frequently in a precarious state of conservation. The present contribution describes this workflow, focusing on the acquisition and processing of photogrammetric models and on their subsequent transformation into physical replicas through resin-based additive manufacturing. The latter application was developed particularly in the context of public dissemination and exhibitions, where physical reproductions offer visitors an opportunity to engage directly with objects that would otherwise be inaccessible because of their fragility, limited access to the original artefacts, or national laws restricting, the export of antiquities.

Case study: inscribed tablets from Eastern Nineveh

The archaeological investigations undertaken by the University of Bologna in Eastern Nineveh have progressively brought to light a significant corpus of inscribed objects: a particularly important discovery took place during the 2021 campaign in area C, where c. 270 inscribed clay tablets were recovered. The discovery of this collection represented a particularly significant case for the application of three-dimensional documentation, because many tablets were preserved in a highly fragile condition. Besides this case study, this type of documentation was also applied to all other epigraphic, visual and administrative (seals and sealings) finds from our excavations. The production of detailed three-dimensional records therefore offered two

complementary advantages: on the one hand, providing scholars with an additional instrument for the study of the tablets and their inscriptions; on the other, creating a durable digital record of objects, whose physical condition may deteriorate further over time, always available for further consultation. Further groups of 70 inscribed tablets were documented during the 2023 and 2025 campaigns, recovered from area E inside a residential structure situated not far from the foot of the Kuyunjiq acropolis. Together, the material recovered from areas C and E constitutes a significant corpus for the study of the written and administrative practices documented at Nineveh, while also providing an appropriate test case for the development of a systematic three-dimensional recording methodology. The progressive acquisition of these objects during different excavation campaigns also made it possible to refine the photographic and photogrammetric workflow. Rather than treating three-dimensional acquisition as an isolated recording operation, the methodology was progressively integrated into the archaeological documentation process, with particular attention being paid to the requirements imposed by the size, morphology, surface condition, and epigraphic characteristics of each object.

Critical issues in the preservation of the tablets

The majority of the tablets considered in this study are made of unfired or partially fired clay and present significant conservation problems. Their surfaces have been deeply affected by exposure to environmental and atmospheric agents, including erosion and weathering processes that have altered the original morphology of the objects and, in some cases, compromised the readability of their inscriptions. The state of preservation is highly variable. Some tablets retain relatively well-defined surfaces and signs, whereas others display extensive erosion, fractures, losses, and irregularities (Fig. 1). These characteristics make the documentation of the surviving surface particularly important. Conventional photography remains an essential component of archaeological recording, but the representation of complex three-dimensional surfaces through two-dimensional images can be strongly influenced by lighting conditions and viewing angle. This is particularly relevant for cuneiform



Fig. 1. Detail of the inscribed tablet Cat. 31, whose poor state of preservation makes it difficult to read. The combined use of the photographic documentation (left) and the 3D imagery (right) can help read the text.

inscriptions, where the distinction between positive and negative morphological features can be extremely subtle. Three-dimensional documentation offers the possibility of preserving the spatial relationships between these features and of subsequently examining the surface under different lighting and visualization conditions, providing the observer with a high degree of interaction with the subject of study (Remondino 2011). The digital model can therefore become not simply a record of the object, but an analytical environment in which morphological and epigraphic characteristics can be investigated.

3D acquisition through photogrammetry

The choice of photogrammetry was motivated by the ability of modern close-range photogrammetry to produce highly detailed models while requiring comparatively limited equipment and investment when compared with other high-resolution three-dimensional acquisition technologies (Anderson 2020; Cerasoni et al. 2022). The acquisition system consisted of a Nikon D850 digital camera equipped with a calibrated Nikkor 60 mm Micro lens. The camera was mounted on a tripod and positioned in relation to a manually controlled turntable on which the artefact was placed. The turntable incorporated a system of reference targets defining a pre-calibrated local coordinate system. A flash lighting system combined with a softbox was employed to provide stable and controlled illumination and to minimize unwanted variations in lighting conditions between successive images. The photographic acquisition was performed by rotating the object and taking images at approximately 15–20° intervals repeated at four different camera elevations, allowing the object to be recorded from multiple vertical angles. Additional close-up images were subsequently acquired for the most significant or complex surface areas. These detail photographs were taken from a distance of approximately 20 cm from the object and were specifically intended to increase the photographic coverage of inscriptions and other fine morphological features. Once one side of the object has been scanned, it is rotated 180 degrees, and the process is repeated to fill in the gaps from the first acquisition. The resulting datasets were designed to provide a high level of surface coverage and to preserve morphological information at a sub-millimetre scale. The photographic datasets were processed using Agisoft Metashape 1.7 (Fig. 2). The workflow was structured to maximize the geometric resolution of the resulting models while maintaining the possibility of manually controlling the point cloud before mesh generation. Subsequent processing demonstrated that the same geometrical information could be exploited in different ways depending on the specific research objective, including the enhancement of surface morphology, visualization of inscriptions, production of derived maps, and preparation for physical reproduction.

Digital processing and surface visualization

Following the initial photogrammetric reconstruction, the models were further processed using a combination of software environments, including Blender, GigaMesh, and MeshLab. The use of different software packages was motivated by the need to investigate the same surface through complementary visualization and analytical

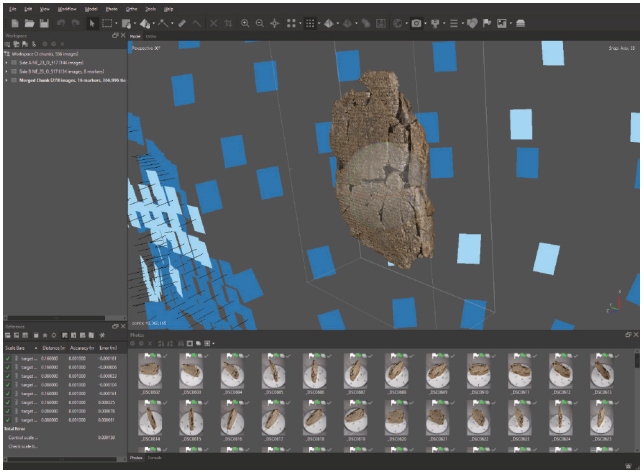


Fig. 2. Point cloud of the tablet Cat. 34 generated using Agisoft Metashape.

approaches. Particular attention was devoted to the enhancement of subtle surface features that can be difficult to perceive in conventional textured renderings. Among the visualization techniques employed were cavity-based shading in Blender and the Multi-scale Integral Invariant (MSII) approach implemented in GigaMesh (Mara et al. 2010; Fig. 3). Although both approaches can enhance the visual perception of small-scale morphological features, they are conceptually different. Cavity-based visualization, such as the cavity shading approach available in Blender, emphasizes concave and convex surface variations according to their local geometric relationships and the illumination model used for visualization. It can therefore produce a strong visual enhancement of depressions, incisions, and raised features, particularly when combined with an appropriate camera and lighting configuration. The MSII approach implemented in GigaMesh is instead based on a multi-scale geometric analysis of the surface. By considering the local geometry at different spatial scales, it can enhance morphological variations independently of a conventional lighting configuration. This makes MSII particularly useful for the investigation of subtle surface features and for epigraphic analysis, where the scale at which a feature becomes perceptible can be critical. The two approaches should therefore not be regarded as interchangeable. Rather, they provide complementary visualization strategies: cavity-based rendering is particularly effective as an intuitive and visually immediate enhancement tool, whereas MSII can provide a more analytically oriented representation of surface morphology across different spatial scales. The possibility of deriving multiple representations from a single high-resolution three-dimensional model significantly increases the research potential of the photogrammetric dataset (Fig. 4). The same model can consequently function as a geometrical archive, a visualization tool, and a basis for further quantitative or qualitative analyses (Bogacz and Mara 2022).

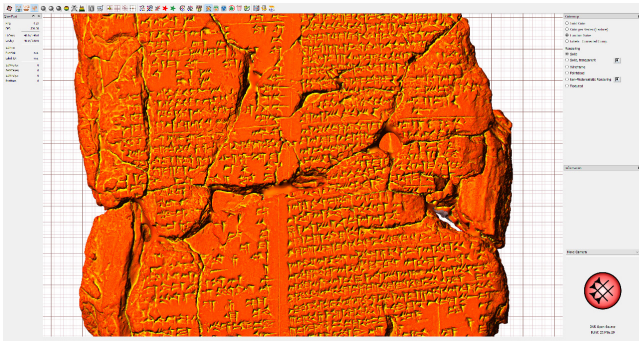


Fig. 3. Tablet Cat. 34. Example of the Multi-scale Integral Invariant (MSII) filter generated using the open-source software GigaMesh.

Web-based visualization and digital dissemination

A further stage of the workflow involved the online publication of the three-dimensional models within the OrientLab Digital Museum (https://www.orientlab.net/digital_museum/), a digital environment developed (thanks also to the support received from the ISAC of the University of Chicago) for the documentation and dissemination of archaeological and cultural heritage materials. The models were integrated using 3DHOP (3D Heritage Online Presenter), an open-source framework specifically designed for the interactive web-based visualization of high-resolution 3D cultural heritage datasets (Potenziani et al. 2015). A customized version of the 3DHOP viewer was developed for the project in order to provide users with additional visualization options beyond conventional textured rendering. Among these functionalities, the viewer allows the user to dynamically enable or disable the MSII visualization generated through GigaMesh (Fig. 5). This implementation makes it possible to switch between the photorealistic representation of the object and an enhanced representation of its surface morphology, facilitating the identification and interpretation of subtle features such as cuneiform impressions, incisions, and areas affected by surface erosion. The MSII representation

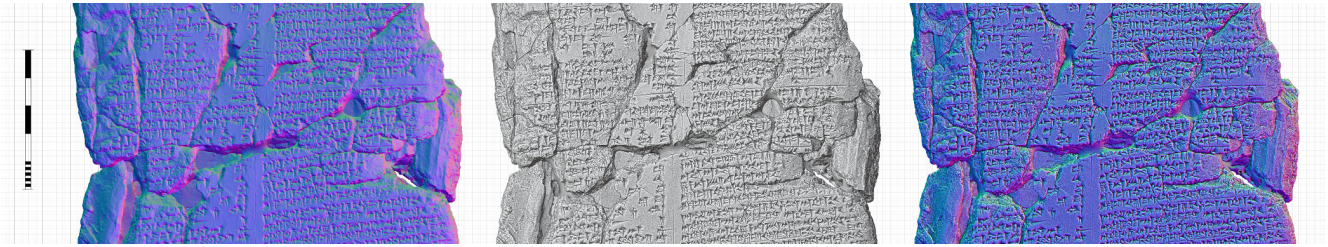


Fig. 4. Tablet Cat. 34. Different representations can be produced by applying filters to enhance surface details: a normal map (left), a cavity map (center), or a combination of normal, cavity, and MSII maps.

is based on the analysis of local surface curvature at multiple spatial scales and is specifically suited to enhancing small morphological features in damaged or poorly preserved cuneiform surfaces. The integration of the MSII layer directly into the web-based viewer therefore extends the function of the digital repository from simple model visualization to an interactive research and interpretation environment (Galeazzi et al. 2016). Researchers and users can compare the original textured model with the enhanced MSII representation within the same interface, without requiring dedicated specialist software, contributing to the broader dissemination of the three-dimensional documentation and making advanced visualization techniques developed during the analytical phase accessible through a standard web browser.

From digital models to physical replicas

An additional application of the digital workflow concerned the production of physical replicas of selected tablets. This activity was first developed in connection with the exhibition *Gli Assiri all'ombra delle Due Torri* (2023) and now with the current one. The objective is not simply to reproduce the objects mechanically, but to transform the digital models into accessible physical representations capable of communicating their morphology and function to a wider audience (Merchán, Merchán, and Pérez 2019). Physical replicas can be particularly effective in archaeological exhibitions, where the original objects may be too fragile to be handled or may need to remain in their original country, under controlled conservation conditions. Before printing, the selected photogrammetric models were imported into Blender for specific mesh preparation. The high-resolution models produced for research and visualization were not directly suitable for additive manufacturing and therefore required a dedicated cleaning and optimization stage. This stage included the removal of residual noise, isolated components, small disconnected islands, and other geometrical artefacts that could compromise the printing process. The prepared models were subsequently exported and processed through Chitubox for slicing and preparation of the printing files. Resin-based manufacturing was selected because of its ability to reproduce relatively small-scale morphological details and to provide a suitable surface quality for the production of archaeological replicas. Different printer and resin configurations were tested according to the dimensions and requirements of the individual models. Smaller and medium-sized replicas were produced using an Elegoo Saturn 16K Ultra, while larger models were produced using an Anycubic Photon Mono M7 Max. The experiments also involved different resin formulations, particularly Water-Washable 8K resin and ABS-Like Resin 3.0. The use of different printing systems and resin formulations made it possible to evaluate the relationship between object dimensions, printing parameters, material properties, and the preservation of fine surface details. In this context, the physical replica

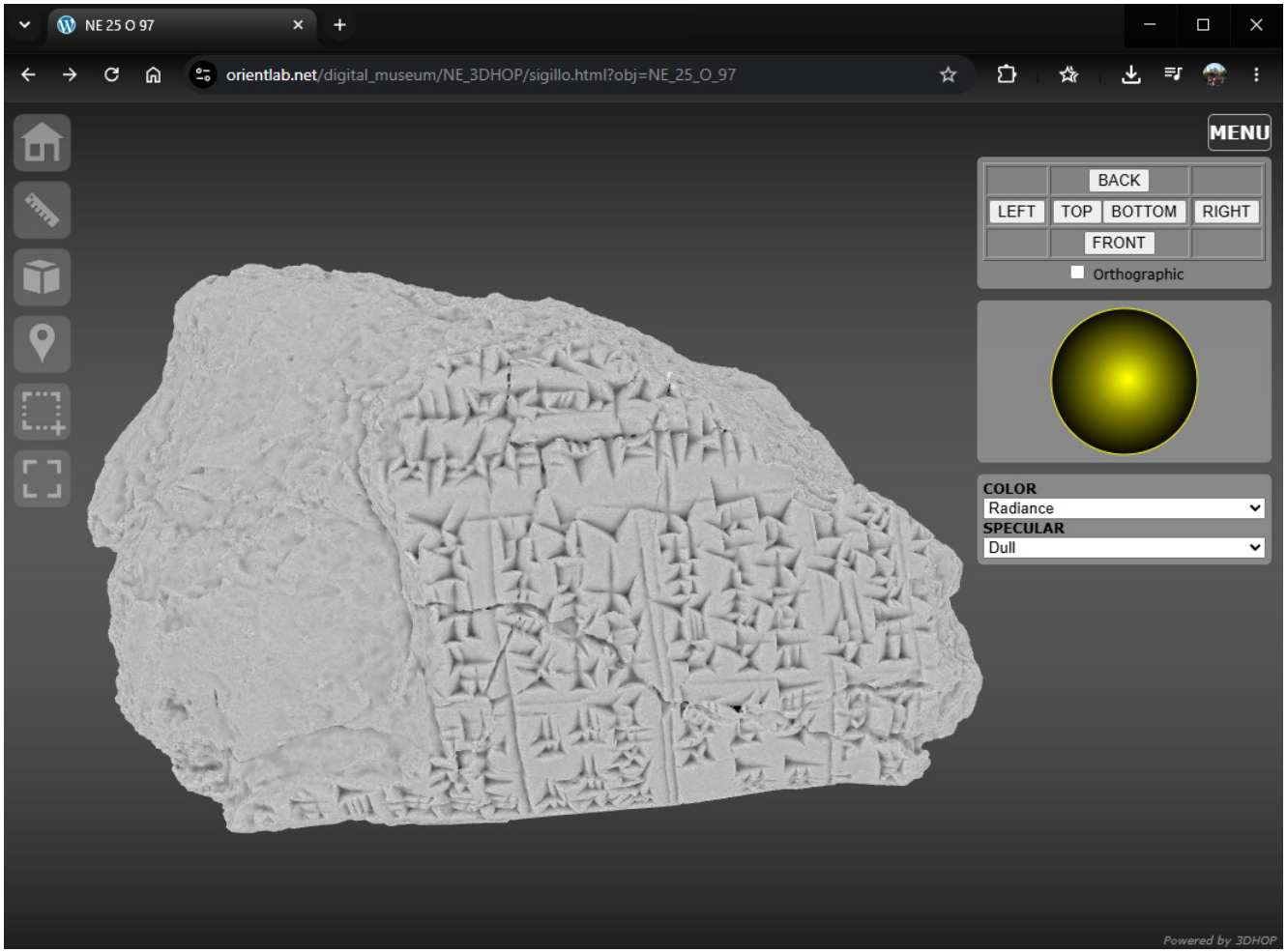


Fig. 5. Tablet Cat. 23. Once processed, the models are uploaded online and can be viewed using the 3DHOP framework.

was considered as the final stage of a digital workflow rather than as an independent manufacturing process. Following printing, the replicas underwent a series of post-processing operations aimed at improving their physical appearance and their suitability for exhibition. These operations included the removal of printing supports, surface cleaning, and finishing of the printed objects. Particular attention was subsequently devoted to painting. The replicas were painted according to the documented chromatic characteristics of the original objects, with the aim of providing a more immediately understandable representation of their original appearance (Fig. 6). This aspect was particularly relevant for public dissemination. The combination of accurate three-dimensional geometry and a reconstructed colour scheme allowed the replicas to communicate not only the physical morphology of the tablets but also aspects of their original visual appearance. The resulting objects could therefore function as interpretative tools, helping visitors to understand the size, shape, surface organization, and material characteristics of the archaeological finds.

Discussion

The workflow developed for the Nineveh tablets demonstrates the potential of integrating photogrammetric acquisition, high-resolution digital processing, advanced surface visualization, and resin-based manufacturing within a single archaeological documentation framework. From a methodological perspective, photogrammetry proved particularly advantageous because it combined high geometric resolution with relatively accessible equipment and a comparatively low acquisition cost. The use of a full-frame Nikon D850 with a macro lens, controlled lighting, calibrated targets, and a systematic multi-angle acquisition strategy allowed detailed models to be produced without the need for dedicated scanning equipment. The importance of this approach is amplified by the condition of the archaeological objects. In the case of fragile clay tablets, repeated handling and manipulation should be minimized whenever possible. A detailed digital model can provide researchers with an additional representation of the object that can be examined remotely and visualized under different conditions. While digital documentation cannot replace direct examination of the original artefact, it can substantially reduce the need for repeated physical handling and provide a permanent record of the object's morphology at the time of acquisition. The high polygon density of the models also enabled the application of different visualization techniques. The possibility of switching or combining conventional texture-based rendering, cavity enhancement, MSII visualization, and other derived representations demonstrates that the value of the three-dimensional model extends beyond simple visualization. A well-acquired model can become a flexible research dataset from which multiple forms of representation can be generated according to the requirements of individual research questions (Diara, Barsacchi, and Martino 2024). At the same time, the transition from the research model to a printable model demonstrates the importance of distinguishing between different levels of digital representation. A model optimized for scientific analysis does not necessarily correspond to a model optimized for manufacturing. The latter requires geometrical cleaning, removal of disconnected components, and adaptation to the physical constraints of the printing technology. Consequently, the workflow should be understood as a sequence of transformations in which the same archaeological record is progressively adapted to different scientific, technical, and communicative purposes. The production of physical replicas further demonstrates the potential of digital archaeological documentation as a bridge between research and public dissemination. In an exhibition context, a resin replica can provide visitors with a tangible representation of an otherwise fragile object, while the original remains protected (Ballarin, Balletti, and Vernier 2018). This is particularly valuable for inscribed artefacts, whose dimensions and surface morphology can be difficult to appreciate through display cases alone.



Fig. 6. A replica of the tablet Cat. 32 was produced from its photogrammetric model using a resin 3D printer and then painted to match the colors of the original.





CATALOGUE

Authors' initials:
CDO Claudia D'Orazio
EJ Enrique Jiménez
GM Gianni Marchesi
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NM Nicolò Marchetti
PN Palmiro Notizia
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*Photos and drawings are reproduced at the scale indicated at the bottom of the page, where present, with the exception of details marked with * and of the 3D models. The objects Cat. 5, 13-19, 29, 35-42, 44-45 are kept at the Iraq Museum, Baghdad, while the remanining objects are currently kept at the SBAH storerooms in Mosul (except Cat. 4). When the photograph of one of the two main sides of a tablet is not provided, it is because no text is preserved/present.*



Cat. 1

Baked brick with inscription by King Sennacherib
Excavation no. NE.21.O.316
Material: Baked clay
Dimensions: l. 36; w. 35.5; th. 10 cm
Context: Northern lower town, Adad Gate, area D, fill F.2108
Date: Reign of Sennacherib (705–681 BCE)

Description

Inscribed bricks were among the most widespread media for royal inscriptions in ancient Mesopotamia. Incorporated into temples, palaces, city walls, and other monumental structures, they served to commemorate the building activities of individual rulers. The present brick, recovered from the collapsed layer inside the northern passage of the Adad Gate, bears a short, two-line inscription of Sennacherib (705–681 BCE) on one of its edges, recording the reconstruction of the city wall of Nineveh, a project undertaken by the Assyrian ruler between 699 and 691 BCE. The text reads: "Sennacherib, king of the world, king of Assyria, built the wall of Nineveh anew." Only three exemplars of this inscription were recorded in the edition by Grayson and Novotny (2014: 137–138, Sennacherib 96). Recent excavations at Tell Nebi Yunus, however, have yielded a further 71 bricks bearing the same inscription or closely related variants, distinguished primarily by differences in Sennacherib's royal titulature (Maul and Miglus 2021: 179–180; Maul, Miglus, and Schmitt 2025: 222 n. 75). Recovered in the area of the Review Palace (*ekal masharti*) rather than from the city walls themselves, these bricks raise questions concerning their original use and possible reuse there in later building activities.

PN



Cat. 2

Relief fragment depicting an Elamite and an Assyrian soldier

Excavation no. NE.22.O.101

Material: Alabaster

Dimensions: l. 18; w. 13; th. 7.3 cm

Context: Tell Kuyunjiq, North Palace, area K1, wall W.3600

Date: Reign of Ashurbanipal (669–631 BCE)

Description

Fragment of a carved orthostat, broken on all sides. The upper portion preserves the remains of two lines of cuneiform inscription (9.2 × 3.6 cm). Below are two partially preserved standing figures. That on the right wears the pointed conical helmet characteristic of Assyrian soldiers. If he is indeed facing right, he may have a bow on his back and be positioned back to back with his enemy. The figure on the left is a bearded man with curly hair and a knotted headband (identifying him as an Elamite), who has one arm raised as he flees. This piece and the related Cat. 4 depict scenes associated with a key event in Ashurbanipal's reign. The kingdom of Elam, in southwestern Iran, had long been a thorn in the side of the Assyrian Empire because of its interference in southern Mesopotamia and its support for rebels who periodically rose against Assyrian rule in that region. The Assyrian military campaign of 653 BCE culminated in a bloody pitched battle near the Ulaya River (modern Karkheh), on the way to Susa. The Elamites were defeated, and their king, "Teumman" (more precisely, Tempt-Humpan-Insushnak), was killed and beheaded. As a matter of fact, in the two fragmentary lines of cuneiform text, one can still read the name "Elam" (upper line: [KUR].ᵀELAM.MA.KIᵀ) and the clause "[whom] I had defeated with my own hands" (lower line: [... *šá*] KUR ŠU.MIN-[A.A]). This clause formed part of a sentence known from another inscription of Ashurbanipal: "The fugitive Ummanigash (= Humpan-nikash II), a servant who had seized my feet, ... I placed on the throne of Teumman, whom I had defeated with my own hands" (see Novotny and Jeffers 2018: 324, Ashurbanipal 34).

GM, NM



Cat. 3

Relief fragment depicting two Elamite soldiers
Excavation no. NE.22.O.100
Material: Alabaster
Dimensions: l. 23; w. 13; th. 17 cm
Context: Tell Kuyunjiq, North Palace, area K1, wall W.3600
Date: Reign of Ashurbanipal (669–631 BCE)

Description

Fragmentary orthostat, broken on all sides, preserving a small portion of a cuneiform inscription (5.5 × 2 cm) in its upper part (only the signs [N]E and MAN are preserved; reading by G. Marchesi). Below, an archer aims to the left while another warrior strides behind him. Cat. 2 and 3 were recovered in 2022 during a brief emergency conservation of the area excavated in 2011–2013 by the University of Mosul in the North Palace: together with Khalid Salim Ismael and Yasemeen Kareem of the College of Archaeology, we documented and protected the northwest sector of the palace (our areas K1, K2 and Q). The two relief fragments were found embedded in a wall of the Parthian reoccupation phase, slightly above the original floor of the North Palace. They likely derive from the suite of rooms H and I, located nearby to the east at a higher elevation (Reade 2022: figs. 15, 72). Ashurbanipal had two sets of reliefs carved depicting the Battle of the Ulaya River (known also as Battle of Til Tuba): one was placed shortly after the event in his grandfather's palace, while the other one, made some years later, in his brand new North Palace. Featuring this specific victory across two different royal spaces highlights the major significance of this event for his reign.

NM



Cat. 4

Relief depicting an Elamite horseman galloping to the left
Museum no. Mav. 48/ Deposit 1939/ Inv. CL XXV 772 (National Archaeological Museum of Venice, Museo Correr)
Material: Alabaster
Dimensions: l. 25; w. 25.3; th. 2.8 cm
Context: Tell Kuyunjiq, either from the North Palace (possibly from Room H) or, more likely, from the Southwest Palace (possibly from Forecourt H)
Date: Reign of Ashurbanipal (669-631 BCE)

Description

Two registers are preserved in this fragmentary relief: in the upper one there are the bare feet of a man facing left and next to it is another foot shown in perspective, while to the far right there is a horse's hoof. Below, an Elamite archer, identified as such by the headband tied at the back and by his quiver, rides a richly harnessed horse galloping to the left. The Elamite is most likely engaged in the Battle of Til Tuba, as are Cat. 2 and 3. Of the two series commemorating this battle, the reliefs in Room XXXIII in the Southwest Palace were carved closer to the event and use a lateral perspective, which follows the movement of the Assyrian army as it drives the Elamites into the River Ulai to the right, with special attention to the landscape and the tactical deployment of the army. Those in Room I of the North Palace, by contrast, employ a frontal perspective (i.e. a distant viewpoint), creating a flatter but more detached effect, more in keeping with the evolution of Ashurbanipal's kingship. The battle is integrated there into a broader, multi-room epic also narrating the military campaigns of the following years, which led to the sack of the Elamite capital, Susa, in the course of his sixth campaign (646 BCE), thus turning Til Tuba into the opening chapter of Elam's total annihilation. Since Layard left Nineveh for good before the discovery of the North Palace by Rassam at the end of 1853, it is likely that the piece kept in his Cappello Layard palace in Venice (and then donated to the Museo Correr; Barnett 1976: 62, fragment aa, pl. LXXII.aa; E. Bleibtreu in Barnett, Bleibtreu and Turner 1998: 50, no. 17, pl. 28.17; F. M. Fales in Dolce and Nota Santi 1995: 164, no. 26, fig. 71) actually came from the Southwest Palace.

NM



Cat. 5

Cuneiform tablet: commentary on magical and ritual texts
Excavation no. NE.21.O.368
Material: Clay
Dimensions: l. 25; w. 16; th. 2.5 cm
Context: Northern lower town, area C, fill F.1929
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

Description

Large tablet partially damaged by moisture and accidental fire from the fill (F.1929) in the library room (L.1932) of the residence in area C (Marchetti and Marchesi 2022: 188–189, fig. 13; Marchetti 2025a–b: fig. 11). The text is a commentary on ritual and magical texts. The partially preserved column i contains quotations from the ritual *Bit meseri*, "House of enclosure," or related texts concerning the means of creating a ritual enclosure around a patient to protect him from disease-bearing demons (Schwemer in press), together with explanatory glosses on key words. Apotropaic images were used for that purpose. For instance, our text begins as follows:

1: Two images of interlocked twins are drawn in white paint at the head of the patient's bed, on the right and left (cf. Schwemer in press: 314–315, line 9).
2: *Interlocked* means *strong*.
3: You should set up two figurines of interlocked twins, perfect in their features, who repel the evil *galla*-demon, at the patient's head, on the right and left.
4: ‹I have set up› two figurines of interlocked twins, perfect in their features, ‹who repel the evil *galla*-demon, at the patient's head, on the right and left›.

The last two sentences quote lines 233–234 of the Incantation Tablet(s) of *Bit meseri* (Schwemer in press: 213–214, 219, and 222), although the second



sentence was left incomplete. The two interlocked twins referred to, who act as the patient's guardians, were probably lion demons otherwise known as *ugallū* (ibid., 114). Additional apotropaic objects such as figurines of dogs and *eššebû*-ritualists (on whom see Schwemer in press: 326–327) are subsequently mentioned, but the relevant passages are fragmentary.

The reverse of the tablet contains a duplicate of a commentary from Assur on an incantation entitled Marduk's Address to the Demons (Frahm 2011: 123–126; Geller 2014: 64–68; Gabbay 2022), as well as references to another, as yet unidentified text. The incantation (Geller 2016: 340–392) was to be recited by an exorcist (Akkadian *āšipu*) who identified himself with the exorcist-god Marduk during its recitation. The commentary from Assur belonged to one such exorcist, Kisir-Nabu, who presumably lived during Ashurbanipal's reign (Baker 2000: 627–628) and may also have been the author of the commentary (Gabbay 2022: 131; Jiménez in this volume). The present tablet, however, belonged to Kanunaiu, Sin-sharru-ishkun's chief diviner. According to its colophon, it was the fourth tablet of an otherwise unknown commentary series comprising at least five tablets. The incantation cited by its incipit ("He does not judge a case, he does not judge …") in the catchline of the following tablet is likewise unattested elsewhere.

GM



Cat. 6

Cuneiform tablet: divination (menology)
Excavation no. NE.21.O.407
Material: Clay
Dimensions: l. 16; w. 7.7; th. 2.4 cm
Context: Northern lower town, area C, fill F.1929
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

Description

The colophon at the end of this tablet tells us that it was written by a junior scribe who was the son of a senior professional in the service of the last king in Nineveh, Sin-sharru-ishkun. It was common for apprentice scribes to copy manuscripts for their teacher's collection during a kind of apprenticeship stage of education. The title of this text is given as "If in the month Addaru (the twelfth month, around February–March) the sun in the middle of the day …" Celestial divination was a very important scholarly pursuit in support of royal policy during the Neo-Assyrian period. The movements and phenomena of the heavens were thought to hold meaning, created by the gods, which could be read and understood by humans when gifted with the divine knowledge of how to interpret such signs. This belief persisted even when astronomical knowledge could predict celestial movements. The main scholarly handbook of celestial divination was *Enuma Anu Enlil*, "When Anu and Enlil," comprising many dozens of chapters. It was accompanied by a standardised commentary, forming a guide to the series. Alongside these were several calendrical texts recording suitable times for actions. These include a text called *Iqqur ipush*, "He destroyed, he built;" it addresses the suitability of each month of the year for various activities. It comes in two forms: one is ordered by month, the other by activity.

JT



Cat. 7

Cuneiform tablet: divination
Excavation no. NE.21.O.366
Material: Clay
Dimensions: l. 7.9; w. 8.2; th. 2.6 cm
Context: Northern lower town, area C, fill F.1929
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

Description

The commonest way of putting a question to the gods was to slaughter a sheep and read the answer in its entrails (Koch 2015: 67–134). Diviners were trained to interpret every mark and blemish on the liver, the lungs and the coils of the gut, and the accumulated readings were gathered into a series of some hundred tablets, arranged in ten chapters, that took its name from the profession itself (*Barutu*, "Art of the diviner"). Of this manuscript only the beginning and the end survive, and the surface is very abraded. After the last omens comes a catchline (the opening words of the next tablet, copied at the foot so that a reader would know which tablet to reach for, since clay bears no spine and no title page) and then the colophon, in which the scribe notes that he wrote his copy in haste. Enough remains to suggest that the tablet belonged to the ninth chapter, "If the Lung," consisting of fourteen tablets on the markings of the lungs. That chapter is among the least studied parts of the series: it has never been edited, many of its manuscripts are still unpublished, and broken pieces of it are still waiting to be fitted together. A fragment of this size, which would add little to a well-known composition, is correspondingly worth more here.

EJ



Cat. 8

Cuneiform tablet of medical content
Excavation no. NE.21.O.357
Material: Clay
Dimensions: l. 7.1; w. 8.5; th. 1.7 cm
Context: Northern lower town, area C, fill F.1929
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

Description

Babylonian and Assyrian therapeutic texts are arranged in the order a physician would work over a patient, beginning at the crown of the head and ending at the feet. This fragment comes from the end of one such tablet, and what it preserves is chiefly the apparatus: the catchline, quoting the opening words of the tablet that came next ("if his feet go numb") and beneath it the colophon. According to the colophon, the tablet belonged to the son of a man whose name is now only half legible but who is given the title chief physician, the head of the medical profession at the Assyrian court and an office whose holders wrote to the king about his health and the health of his household. The same title appears in the colophon of a tablet from Ashurbanipal's Library. Medicine in Mesopotamia was a family trade, learned from a father and practised out of a house, and the tablets went with the household. Here the text itself is almost entirely lost, and what remains records who owned it and where it stood in the sequence — the two things a working physician most needed to know.

EJ



Cat. 9

Cuneiform tablet of medical content (Diagnostic Handbook)
Excavation no. NE.21.O.414
Material: Clay
Dimensions: l. 15; w. 9; th. 4.4 cm
Context: Northern lower town, area C, fill F.1929
Date: 672–669 BCE (reign of Esarhaddon)

Description

The text of the 11th chapter of the Diagnostic Handbook is poorly known, due to the partial survival of sources. This tablet therefore represents a welcome addition to the material, especially since it is relatively large and one of the best-preserved tablets found in this newly excavated group. The chapter starts "If a patient's right wrist hurts: (it is due to the) Hand of Shamash." No cure is given, only a diagnosis of sorts; a separate series offered healing therapies. The colophon at the end of the tablet records that it was written "according to a wooden writing board, original from Babylon, and collated." While clay survives very well in the soil of Iraqi archaeological sites, organic materials like wood do not. It is possible that this Babylonian board was left with the tablet group in which this tablet was found, but it would not have survived. The colophon goes on to name as scribe a man called Nabu-nadin-shumi, chief exorcist of Ashurbanipal, the crown prince. The tablet must therefore have been written sometime 672–669 BCE. He names his father as Nabu-sharru-usur, chief exorcist of Esarhaddon, king of Assyria. The tablet ends with the pious statement that "he who believes in you [invoking here a deity] will not come to shame." Medicine was of particular importance for the royal family; the king represented the link between heaven and earth, and was responsible for the wellbeing of all his subjects.

JT



Cat. 10

Cuneiform tablet of medical content (series *Sagig*, "Symptoms")
Excavation no. NE.21.O.373
Material: Clay
Dimensions: l. 11; w. 9.6; th. 2.6 cm
Context: Northern lower town, area C, fill F.1929
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

Description

Most Mesopotamian texts are anonymous. One of the few compositions whose ancient author is known by name is a medical series called *Sagig*, "Symptoms." It comprised around 3,000 entries arranged into six groups, together making a total of forty chapters, and was edited by a famous scribe called Esagil-kin-apli in the 11th century BCE, chief scholar of the Babylonian king and holder of the most prestigious position in the cuneiform world (Heeßel 2000; Schmidtchen 2021). This tablet contains a copy of chapter 26, not otherwise attested in Nineveh. Each entry pairs what the healer sees with what he should conclude: a run of signs, then a verdict naming the god or demon whose hand lay behind the illness. The best preserved lines here describe a man who cries out again and again "my heart, my heart," who opens his eyes and covers them, who is feverish and touches the tip of his nose, and whose fingers and toes are cold. If you try to make him speak and he gives no answer, the verdict is the hand of a *lilu*-demon. If instead he sees the illness that has seized him, talks with it, and grows strange to himself, the demon is named more exactly. The next entry describes numbness spreading over a man while his fingers and toes fly outwards: this is *antashubba*, the falling sickness, whose name means "that which fell from heaven," and the text records where it took him, out on open ground or in a corner of the house.

EJ, JT



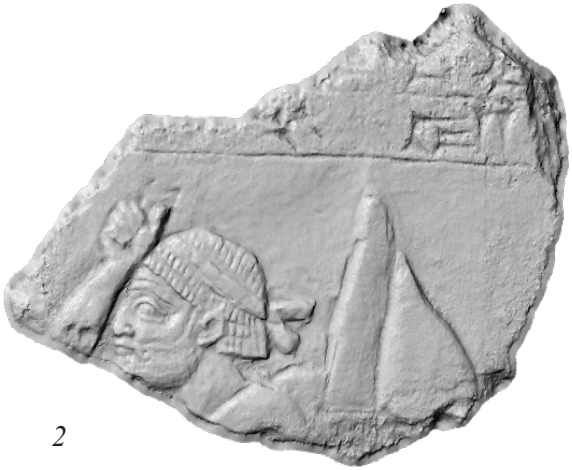
Cat. 11

Cuneiform tablet: lexical text
Excavation no. NE.21.O.372
Material: Clay
Dimensions: l. 26; w. 9.8; th. 1.3 cm
Context: Northern lower town, area C, fill F.1929
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

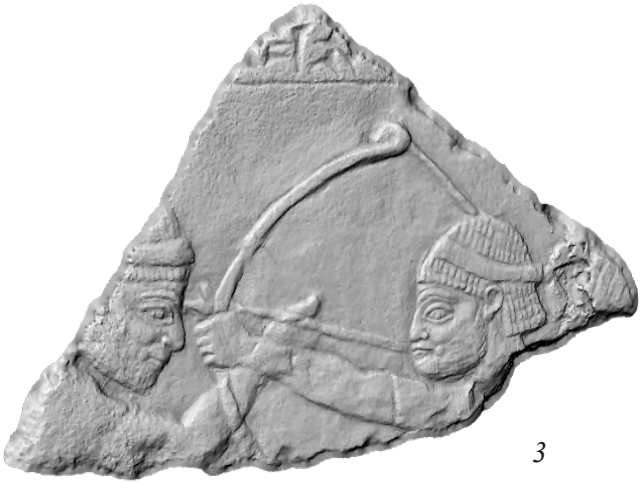
Description

An essential part of cuneiform scholarship was formed by "lexical lists," usually pairing Sumerian words with their Akkadian equivalents. They formed the backbone of education. Students would memorise long lists of cuneiform signs alongside syllabic explanations of how to read them, as well as other lists compiling vocabulary. Some lists were instead very learned compositions, containing advanced material. The lexical corpus was well established by the 7th century BCE. The same compositions in more-or-less the same form are found at sites across the region. It is therefore usually straightforward to assign any tablet found to one of these lists. Not all lists are preserved in their entirety, however. This means that from time to time, a new discovery can reconstruct previously missing content. In such cases, even when the text is new to us, it is nevertheless usually clear to which composition it should belong; we will also have an idea of which gaps in the text it might fill. This large tablet is remarkable. It contains an otherwise unparalleled collection of words. It belongs to a category of lists organised not by belonging to a single shared theme (such as things made of wood, or terms for professions), but by the signs used to write them. It contains words like wage, gift, and value; horizon and height of heaven; and outdoor cult niche.

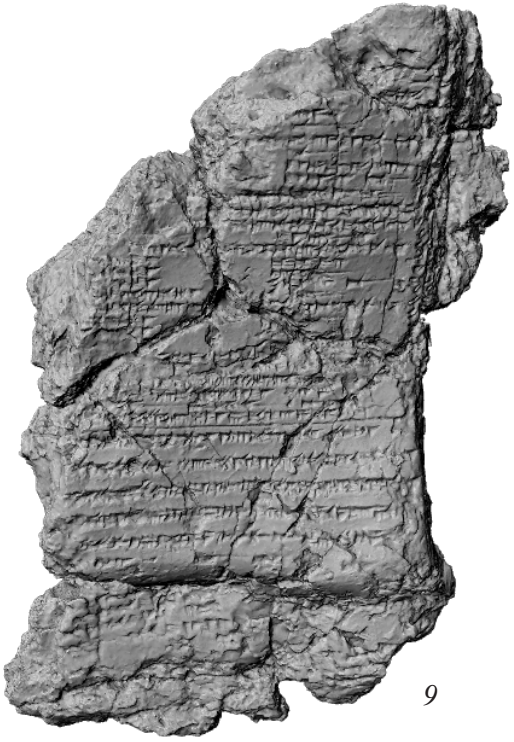
JT



2



3



9



10

not to scale



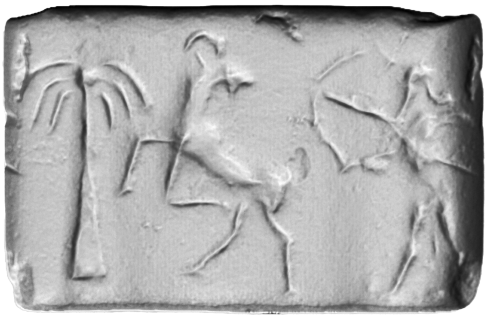
15



16



14



17



18



19



Cat. 12

Cuneiform tablet: lexical text (synonym list *Malku* = *sharru*)
Excavation no. NE.21.O.630
Material: Clay
Dimensions: l. 23; w. 10.6; th. 3.2 cm
Context: Northern lower town, area C, fill F.1929
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

Description

Cuneiform scholarship had long roots; its texts go back many centuries. They changed shape, new content was added, some old content removed, and scribes used these texts in different ways. But the texts are nevertheless recognisable as the latest versions of something inherited from a distant past. Over time, languages change; words can change meaning or fall out of use altogether. Mesopotamian lexical lists both transmitted difficult terms (being obsolete, rare, or of foreign origin) and offered a tool for explaining them. In any place, new languages may gain currency. A good example of this is Assyria in the 7th century BCE. Assyria's kings employed a policy of mass deportations. Citizens of one region would be relocated to another part of the empire. This ensured that labour was available where the empire required it. It also had the advantage of breaking bonds with the homeland, replacing them with allegiance to the king and the empire as a whole. An unforeseen consequence was that Aramaic gradually replaced Assyrian as the dominant language. Cuneiform was tied to Assyrian, while Aramaic was written in an alphabetic script on organic materials that do not usually survive. But loanwords from Aramaic into Assyrian are found in cuneiform. This tablet is chapter four of a lexical list that began by explaining the Aramaic loanword *malku* with its Akkadian equivalent *sharru*, each word meaning "king."

JT



Cat. 13

Cylinder bearing a royal inscription recounting the deeds of King Sennacherib
Excavation nos. NE.21.O.280 + NE.21.O.281 + NE.22.O.170
Material: Baked clay
Dimensions: h. 21; th. 1.2; inner diam. 10.6 cm
Context: Northern lower town, area H, fills F.1677 and F.2575
Date: Reign of Sennacherib (705–681 BCE)

Description

Royal inscriptions were among the earliest cuneiform texts to be published in the 19th century, following the rediscovery and exploration of ancient Mesopotamian sites. Inscribed on various media, including bricks, cylinders, prisms, orthostats, and stelae, they constitute essential textual sources for reconstructing the deeds and royal ideology of Mesopotamian rulers.

The present fragmentary hollow clay cylinder, found in a private house in the northeastern quarter of Nineveh's lower town (see Cavaliere, D'Orazio, and Giacosa in this volume), bears a copy of a 94-line inscription of Sennacherib (705–681 BCE), commonly known as the Rassam Cylinder (Grayson and Novotny 2012: 55–69, Sennacherib 4). The inscription is attested by 87 exemplars, including several complete cylinders and numerous fragments recovered at Nineveh and Assur. Five complete exemplars, now housed in the British Museum in London and the Istanbul Archaeological Museums, were discovered during the excavations conducted by Hormuzd Rassam between 1878 and 1882. Found embedded in the walls of Sennacherib's Southwest Palace, also known as the "Palace without a rival," they attest to the use of such cylinders as foundation documents. By contrast, the present specimen may have served a different purpose (see Marchesi in this volume).

The inscription recounts Sennacherib's first three military campaigns and describes the construction of the Southwest Palace, together with other

*



*



buildings and irrigation works undertaken at Nineveh. Of particular historical significance is the account of the third campaign (701 BCE), during which Sennacherib marched into the Levant, received tribute from local rulers, defeated an Egyptian-led coalition, and conquered numerous cities of Judah. The inscription concludes with a date formula naming Mitunu, governor of Isana, as the eponymous official, dating the text to the month of Ayyaru (approximately April-May) in 700 BCE.

PN









Cat. 14

Cylinder seal
Excavation no. NE.21.O.240
Material: Faience
Dimensions: h. 2.6; diam. 0.9; perf. diam. 0.3 cm
Context: Northern lower town, area H, fill F.1677
Date: Second half of the 7th century BCE

Description

Cylinder seal found in the filling layer (F.1677) of one of the rooms of Building H1, phase 2. The seal, made of brownish faience, is engraved with a cult scene featuring a bearded worshipper in a long robe with a mace in his left hand, likely a king, facing a standard, the so-called Marduk's spade, next to a horned snake, resembling the Egyptian uraeus. The scene is framed by two simple lines. The god Marduk, depicted through his symbol (the spade or *marru*) in Neo-Assyrian and Neo-Babylonian glyptic (Collon 2001: 13-14), is perhaps interceding between the worshiper and the vicious snake (for hunting scenes against horned snakes, see ibid., nos. 1, 42-44, pl. IV, Herbordt 1992: pl. V.9, 12-13; Poli 2010: 964-965, fig. 8; Fügert 2015: nos. 100-103; the snake appears together with a spade on a cylinder seal from Nimrud, Parker 1955: 105, no. ND.856, pl. XVII.1).

CDO



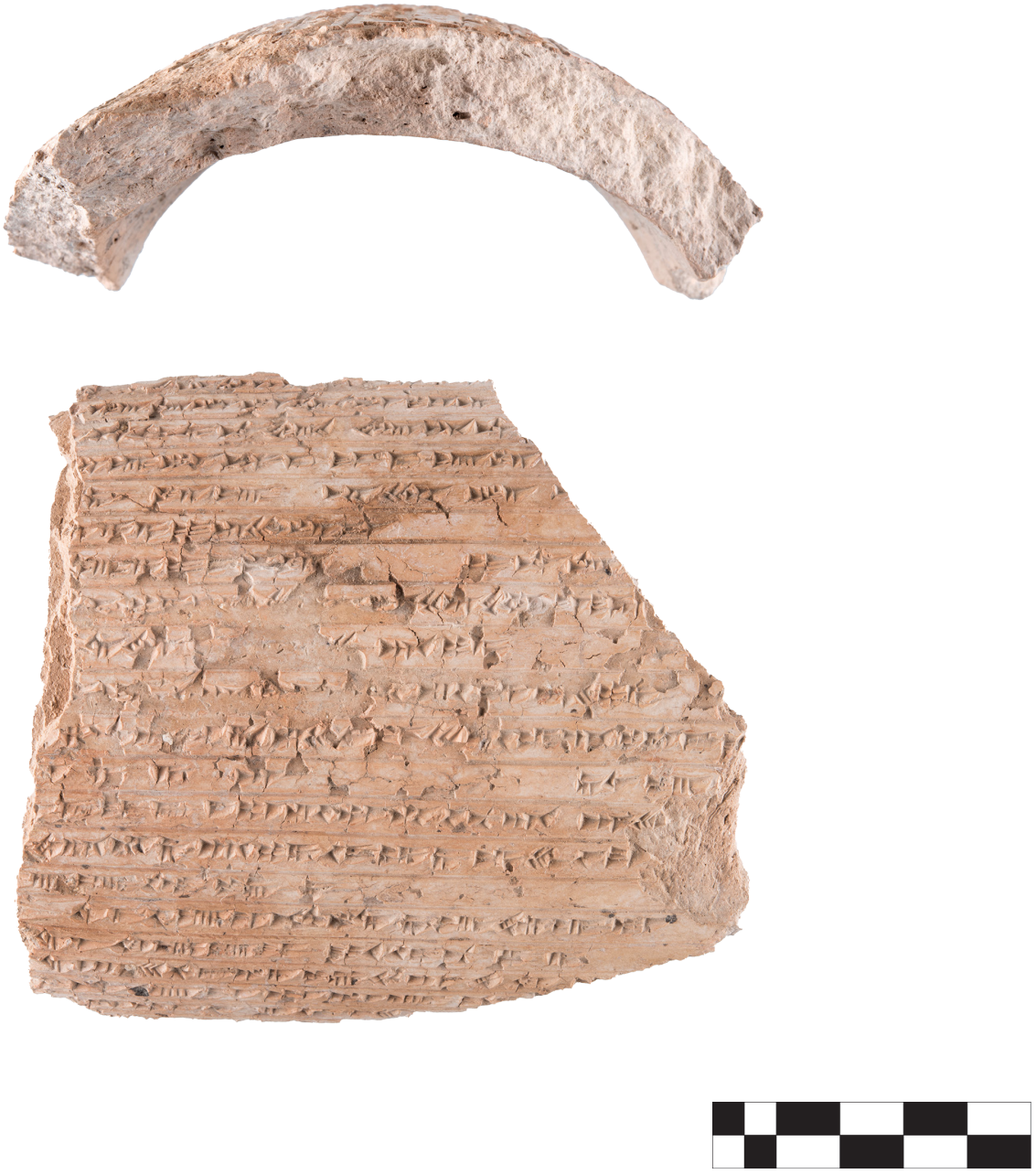
Cat. 15

Prism bearing a royal inscription recounting the deeds of King Sennacherib
Excavation no. NE.19.O.35
Material: Baked clay
Dimensions: h. 8.4; w. 9.2; th. 3 cm
Context: Northern lower town, area B, fill F.112
Date: Reign of Sennacherib (705–681 BCE)

Description

Inscribed clay prisms allowed Neo-Assyrian kings to record lengthy narratives of military achievements and building projects, and were commonly used as foundation documents. Their multiple inscribed faces offered ample space for detailed accounts of royal deeds. Often deposited within the fabric of monumental buildings, such texts celebrated the king's accomplishments and were intended to preserve his name for future generations. The present fragment, preserving portions of three inscribed faces of a clay prism, was recovered in area B, in Nineveh's northern residential district (see Cavaliere, D'Orazio, and Giacosa in this volume). It bears part of an inscription of Sennacherib (705–681 BCE) dated to the month of Abu (approximately July–August) in 694 BCE, during the eponymy of Ilu-ittiya (Grayson and Novotny 2012: 125–146, Sennacherib 17). Five other exemplars have been identified, including two nearly complete octagonal prisms: the King Prism in the British Museum, London, and the Heidel Prism in the Iraq Museum, Baghdad. With approximately 740 lines, it is the longest surviving inscription of Sennacherib. It recounts his first five military campaigns and expeditions in Cilicia (696 BCE) and Tabal (695 BCE), whose detailed accounts survive only in this version. It also describes the construction of the Southwest Palace (the "Palace without a rival"), gardens, irrigation works, and Nineveh's inner and outer walls, with their fifteen gates.

PN



Cat. 16

Cylinder: royal inscription (Sin-sharru-ishkun)
Excavation no. NE.19.O.1
Material: Baked clay
Dimensions: l. 9.8; w. 10; th. 1.5 cm
Context: Lower town, area B, fallen from the north section
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

Description

Fragment of a hollow clay cylinder bearing a royal inscription of Sin-sharru-ishkun (ca. 628–612 BCE; cf. Wang 2026: table 5), the last effective king of Assyria (his son and heir, Ashur-uballit II, never became king; see Radner 2018). Twenty lines of text are preserved, all of them fragmentary. The inscription, previously known from five exemplars (Novotny, Jeffers, and Frame 2023: 169–173, Sin-sharra-ishkun 1), is also referred to as Cylinder C. It commemorates the reconstruction of the "House of Alabaster," i.e., the southwestern entrance to the "Palace without a rival," built by Sin-sharru-ishkun's great-grandfather, Sennacherib. This part of the palace had become dilapidated over time. The work was completed toward the end of Sin-sharru-ishkun's reign. One of the extant exemplars bears a date referring to the eponymy of Nabu-tapputi-alik, who is known to have been Sin-sharru-ishkun's chief eunuch. His eponymy falls in one of the last years of the king's reign (see Novotny, Jeffers, and Frame 2023: 40).

GM



Cat. 17

Cylinder seal
Excavation no. NE.19.O.288
Material: Stone
Dimensions: h. 2.6; diam. 1.3; perf. diam. 0.3 cm
Context: Northern lower town, area B, fill F.176
Date: Second half of the 7th century BCE

Description

This cylinder seal was found in the burnt layer (F.176) covering the earthen floor L.177 in the western sector of the house in area B. The burnt layer seals the latest Neo-Assyrian phase of the building before its abandonment. The cylinder seal is made of a fine grayish-white stone, possibly chlorite, and is engraved with a linear style hunting scene featuring a standing man with a bow attacking to his left a leaping ibex with its head turned backwards, next to a stylized palm tree. The man with the bow has a long beard and curly hair and wears a rounded hat and a short kilt. Comparisons can be found in contemporary Neo-Assyrian glyptic art in hunting scenes carved in a linear style on cylinder seals made of either stone or faience (Collon 2001: 39-41, in particular no. 22, pl. II and ibid., nos. 33-34, pl. III; Collon 2005: 75, nos. 335-337).

CDO







Cat. 18

Cuneiform tablet: silver-loan document
Excavation no. NE.19.O.42
Material: Baked clay
Dimensions: l. 4.9; w. 3.5; th. 1.4 cm
Context: Northern lower town, area E Top, fill F.414
Date: 621 BCE

Description

Debt note in Neo-Babylonian script recording an interest-bearing loan of silver from a woman named Bun(u)-madat to a certain Nergal-nasir, at an annual interest rate of approximately 24%. Bun(u)-madat was presumably the wife of Ninurta-ahu-iddin, the scribe who drew up the debt note and the owner of the archive in Nineveh to which this document belonged (see Jiménez, Marchesi, and Taylor in this volume). The loan was made in Zabban, a city of northeastern Babylonia (Diyala region), during the 7th regnal year of the Assyrian king Sin-sharru-ishkun. The text reads as follows: "1 ⅓ minas and 3 shekels (= 83 shekels, ca. 689 g) of silver belonging to Bun(u)-madat (are) at the disposal of Nergal-nasir, son of Huzalu. From the first day of Nisannu (= March-April), it (= the silver) will increase by 1 ⅔ shekels (ca. 14 g) of silver per month. Witnesses: Kabtia, son of Bammaia; Maltika, son of Absimshu; Belshunu, son of Ahu-leshir. Scribe: Ninurta-ahu-iddin, son of La-qipu. Zabban, Nisannu (= March-April), 1st day, 7th year of ‹Sin›-sharru-ishkun, king of Assyria" (after Marchesi forthcoming). See also Cat. 19.

GM





Cat. 19

Cuneiform tablet: silver-loan document
Excavation no. NE.19.O.138
Material: Baked clay
Dimensions: l. 4.8; w. 3.4; th. 1.6 cm
Context: Northern lower town, area E Top, fallen from the south section
Date: 621 BCE

Description

Debt note recording a silver loan, written in Neo-Babylonian script like Cat. 18. Here the lender is Ninurta-ahu-iddin, the scribe who owned the residence in area E at Nineveh (see Jiménez, Marchesi, and Taylor in this volume). His father's name, La-qipu, is also given to distinguish him from any namesakes. Ninurta-ahu-iddin's profession as a scribe is known from Cat. 18. The loan was made in Uruk in the 6th regnal year of Sin-sharru-ishkun and carried an annual interest rate of 25% if it was not repaid by the stipulated deadline. This was the penultimate year of Assyrian control over Uruk, which would soon pass permanently into the hands of Nabopolassar, king of Babylon (see Beaulieu 1997; Wang 2026: 85-96).

The text reads as follows: "10 shekels of silver (= 83 g) belonging to Ninurta-ahu-iddin, son of La-qipu, (are) charged to Sukkaya, the shepherd of the Palace. In Aiaru (= April-May), he (= Sukkaya) will repay (the silver) in full. If he does not repay (it), it will increase (yearly) by ¼ of a shekel (ca. 2 g) of silver per shekel. Nabu-shumu-ibni, son of Nabu-shumu-iddin, guarantees (the repayment of) the silver. Witnesses: Illil-iqisha, son of Kurigalzu (!), (and) Nergal-ashared, son of Kurigalzu (!). 6th year of Sin-sharru-ishkun, king of ‹As›syria. Uruk (!), Addaru (= February-March), 2nd day" (after Marchesi forthcoming).

This text presents several peculiarities, beginning with the omission of the





name of the scribe who wrote it. It is conceivable that Ninurta-ahu-iddin himself drew up the document, although creditors rarely wrote their own debt notes. An examination of the script reveals a certain degree of incompetence or carelessness on the part of the writer, who omitted the sign AŠ in the writing of *māt aššur* (KUR ‹*aš*›-*šur*, "Assyria"); confused graphically or phonetically similar signs, writing DI for KI (rev. 5) and RU for RI (twice, rev. 2-3); and used an unusual (erroneous?) form of the sign UNUG (rev. 5) to represent the toponym Uruk. Equally unusual is the order of the elements in the place and date formula (rev. 4-5): year, place, month, day (the usual sequence is place, month, day, year, as in Cat. 18). This suggests that the scribe initially omitted the place, month, and day and added them at the end as an afterthought.

GM



Cat. 20

Cuneiform tablet: collection of omens drawn from abnormal births (series *Shumma izbu*, "If a malformed newborn …")
Excavation no. NE.25.O.89
Material: Clay
Dimensions: l. 5.7; w. 7.9; th. 1.9 cm
Context: Northern lower town, area E Top, fill F.5008
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

Description

Shumma izbu, "If a malformed newborn," is the Babylonian handbook of birth omens (De Zorzi 2014: 592–607; Koch 2015: 262–273). Its twenty-four tablets catalogue the deformities of newborn animals and children and read from each of them a message about the future, most often the fate of the king, his army and his land. An anomalous birth was among the most alarming things that could happen in a household, and the series exists to make such events legible, and through ritual harmless. The ninth tablet of the series deals first with growths and protuberances on the body of the newborn, and then, at much greater length, with its horns. If it has a protuberance, the king's son will rebel against his father. If it has a single horn growing from the top of its head, that is the weapon of Sargon: the prince's land will grow wide, and the king will have no rival. Until now this tablet was known chiefly from one Late Babylonian manuscript from Uruk and a few small fragments, and some seventy-five omens could be recovered from them. The new copy restores the beginning and end of the text, and its colophon informs us that the chapter originally contained 130 lines. It is written in Babylonian script, and its colophon names the scribe, Marduk-etir, son or descendant of Basiya; and records that he copied it from a wooden writing board from Akkad (i.e., northern Babylonia).

EJ



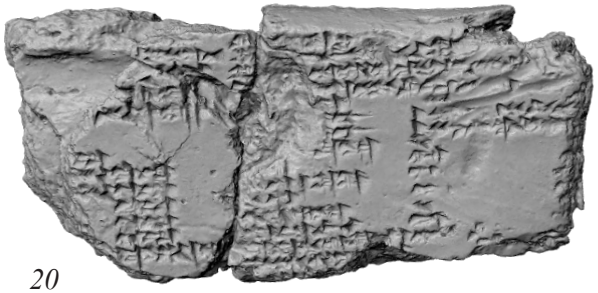
Cat. 21

Cuneiform tablet: collection of incantations known as "Gattung II"
Excavation no. NE.23.O.519
Material: Clay
Dimensions: l. 21.3; w. 15.5; th. 2.8 cm
Context: Northern lower town, area E Top, fill F.4649
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

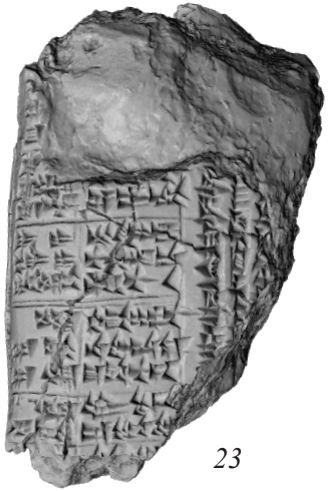
Description

Exorcism worked by naming. To drive out a demon the exorcist bound it under oath, invoking one god after another: be adjured by Anshar and Kishar, by Lahmu and Lahama, by Enlil, by Ninlil, and so on through the whole pantheon, each line in Sumerian with an Akkadian translation beneath it. The collection copied here runs to hundreds of such lines and reaches at last the gods of the dead, among whom Etana and Gilgamesh serve as governors of the underworld. The series is known by a number assigned to it in 1953, when it was published from three manuscripts, largely in transliteration and without translation (Ebeling 1953). This copy was once a very large tablet of three columns, of which only the reverse survives. Its strings of adjurations are interrupted at intervals by rubrics setting out what the exorcist was to do while he spoke. Incantations were not recited into the air: the words did their work in company with actions performed over the patient and his house, and these rubrics are the directions for them, telling the practitioner what to prepare and what to do with it at each point in the recitation. A second copy of the series was found in the same residence, in area E Top (Cat. 32).

EJ



20



23



22



21



24a

not to scale



27



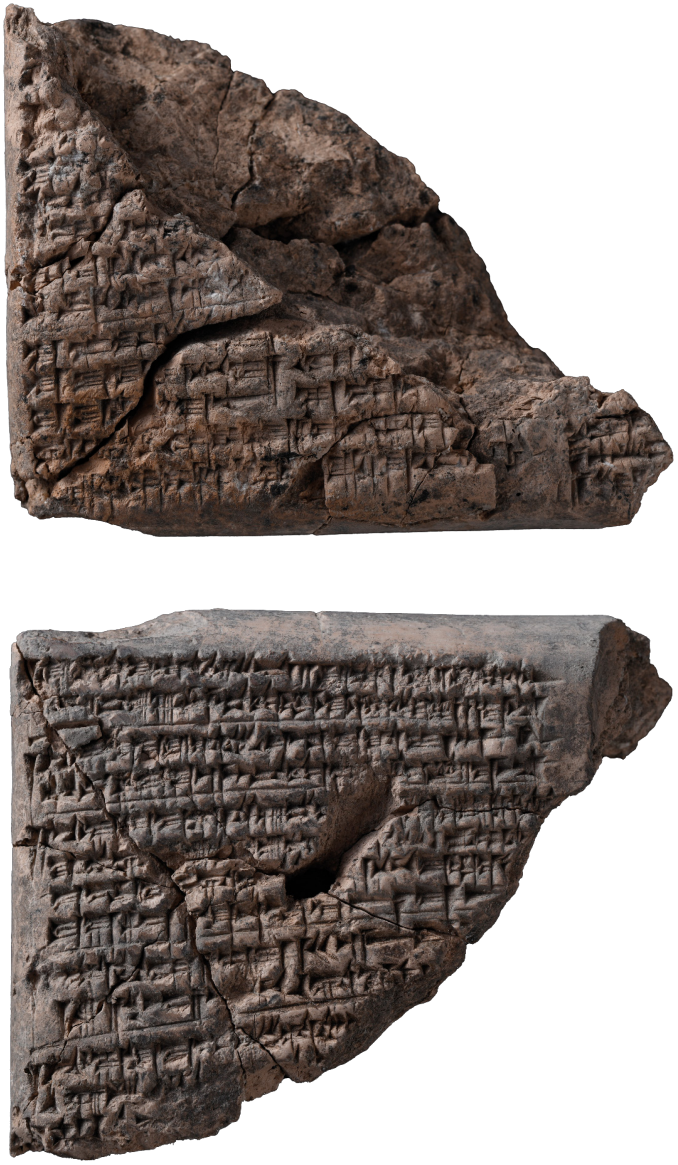
30



29



32



Cat. 22

Cuneiform tablet of medical content (childbirth)
Excavation no. NE.25.O.96
Material: Clay
Dimensions: l. 3.9; w. 7.7; th. 1.5 cm
Context: Northern lower town, area E Top, fill F.5008
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

Description

Childbirth was an even riskier process than it is today. And all sorts of issues occurred during pregnancy, as well as postpartum. Treatments included physical remedies — ranging from infused tampons or suppositories, through potions and lotions, to fumigations — and psychological remedies — in the form of amulets, ritual actions, or magical spells. These two complementary approaches were the realm of two connected branches of knowledge. This text sets out remedies for the situation "if a woman gives birth." It lists the time-honoured combinations of ingredients and their proportions for each cure. They include here various aromatics. The text gives more than one suggestion for some issues. At some point in the history of copying, the scribe will have come across more than one cure for the problem, compiling the alternatives alongside each other. Would the healer have chosen which cure to try based on the availability of the sometimes exotic and expensive ingredients? Or did the patient select treatment according to budget or preference? What was the source of the alternative treatments? Sometimes they are said to have come from oral lore. This is common in cuneiform scholarship of all forms. In the case of medicine, the specialists were overwhelmingly male. It is not clear that they were able to treat female patients in matters of reproductive health. There were female healers who practised folk medicine, not committed to writing. Some of the cures might have come from them.

JT







Cat. 23

Cuneiform tablet: scribal exercise with excerpts from various sources
Excavation no. NE.25.O.97
Material: Clay
Dimensions: l. 7; w. 4.7; th. 2.0 cm
Context: Northern lower town, area E Top, fill F.5008
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

Description

Very few Assyrian training tablets are known, especially from Nineveh. They contain a series of short extracts from several types of text, like a school exercise book with notes from the different subjects studied that day. On the front of this tablet is an extract from a lexical list where Sumerian words are explained using their Akkadian equivalents, called *Erimhush*, "Strife." The preserved text includes words for interaction with the divine, moving from sequences of terms relating to mercy to those indicating praise. Then, following a double ruling to indicate a change in topic, comes an extract from an as-yet unidentified list based on words built with a common sign; the preserved examples are constructed around the sign KA, which referred to the mouth. The words indicate negative emotions, from anger to dejection. Remarkably, at ninety degrees to these excerpts is written another short extract of a literary character. What is even more striking is that while the main body of the tablet is written using Babylonian script, this extract alone is written in Assyrian script. This may suggest that the scribe was an Assyrian practising Babylonian script, or being trained by a Babylonian using Babylonian models. On the back of the tablet comes first a kind of calendrical text noting propitious and unpropitious days for various events. Then come lines of a more literary character again, perhaps incantations. The source of these lines has not yet been identified.

JT



a



Cuneiform tablets: myth about the god Ninurta (*Lugale*)

Cat. 24a-b

a: Excavation no. NE.23.O.500
Dimensions: l. 9.2; w. 6.2; th. 1.5 cm
Context: Northern lower town, area E Top, fill F.4608

b: Excavation no. NE.23.O.502
Dimensions: l. 16; w. 13.5; th. 1.8 cm
Context: Northern lower town, area E Top, fill F.4602

Material: Clay
Date: Reign of Sin-sharru-ishkun (628-612 BCE)

Description

Lugale, a Sumerian mythological poem attested from the Old Babylonian period, recounts the exploits of the warrior god Ninurta and his battle against the Asakku demon. Its date of composition remains uncertain; the earliest securely attested manuscripts belong to the early 2nd millennium BCE. Originally written in Sumerian, the poem was later transmitted with an interlinear Akkadian translation, in Assyrian and Babylonian scribal traditions (van Dijk 1983; Seminara 2001).

Cat. 24a is a cracked and fragmentary tablet in Neo-Babylonian script. The reverse preserves a relatively legible column on the right and traces of writing to the left, with a broad uninscribed area below; the obverse is illegible. The identified passage begins at l. 187, at a critical moment in Ninurta's struggle against Asakku. The demon's devastating assault has alarmed the gods, and Enlil expresses his concern for his son Ninurta to Ninlil. Shortly afterwards, Sharur, Ninurta's divine weapon, travels to Nippur to inform Enlil of the danger facing his master.

Cat. 24b is a heavily fragmented tablet in Neo-Babylonian script. Portions of three densely inscribed columns survive on the obverse, interrupted by cracks



b

and surface loss; the reverse is illegible. The surviving text appears to include part of the episode in which, following his victory, Ninurta brings the waters under control and makes the land suitable for cultivation.

Several manuscripts of *Lugale* in Neo-Assyrian script are known from the British Museum's Kuyunjiq Collection, some of which probably belonged to Ashurbanipal's Library.

Recovered together from Room L.4612 of the elite residence in area E Top, these tablets are notable for their Neo-Babylonian script and securely documented domestic context, providing further evidence for the circulation of Babylonian scholarly traditions beyond the royal collections at Nineveh.

PN



Cat. 25

Cuneiform tablet: creation myth (*Enuma elish*, "When on high …")
Excavation no. NE.23.O.1019
Material: Clay
Dimensions: l. 8.4; w. 7; th. 2 cm
Context: Northern lower town, area E Top, fill F.4815
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

Description

Enuma elish, the Poem of Creation, tells how the young god Marduk defeated Tiamat, the primeval sea, and out of her body fashioned the ordered world, winning for himself kingship over the gods and the fifty names recited in its closing tablets (Lambert 2013; Heinrich 2021). Composed perhaps in the late 12th century BCE, it became the most widely read religious poem of Mesopotamia, and was recited in full at the Babylonian New Year festival. This tablet preserves some ninety lines of the passage in which Tiamat prepares for war. She gives birth to monstrous serpents with sharp fangs and venom for blood, and to fierce dragons, lion men, scorpion men and bull men, eleven creatures in all, clothed in the terrifying radiance of gods. Over them Tiamat sets her consort Qingu, presses the Tablet of Destinies to his chest, and declares that his word will never be altered. This scene is told in the first tablet of the poem and then repeated, almost line for line, in the third, when Anshar sends his vizier Kakka to fetch the older gods and the message is delivered word for word, as messages in Babylonian poetry always are. The fragment could belong to either tablet, though a second piece found beside it (NE.23.O.1024) makes the third the more likely. It is the first manuscript of the poem in Babylonian script to be excavated at Nineveh.

EJ



a



b



Cuneiform tablets: historiographical text (Dynastic Chronicle)

Cat. 26a-b

a: Excavation no. NE.21.O.664+654
Dimensions: l. 11.6; w. 6.9; th. 2.8 cm

b: Excavation no. NE.21.O.669
Dimensions: l. 9.6; w. 7.8; th. 2.8 cm

Context: Northern lower town, area C, fill F.1929
Material: Clay
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

Description

The Dynastic Chronicle is a history of kingship from the first rulers who reigned before the Flood down to the Babylonian dynasties of the early 1st millennium BCE. A descendant of the Sumerian King List, it proceeds dynasty by dynasty (so many kings ruled in this city for so many years, then its kingship passed to another) and adds, characteristically, notes on where many of the kings were buried. Each line is given twice, in Sumerian and then in Akkadian (Finkel 1980; Glassner 2004: 117–126). Between the kings before the Flood and those after it, the chronicle tells the story of the Flood itself, and it is this section that the present fragment (written in Assyrian script across at least three columns per side) preserves. Until now the episode was known only from its edges: the copies from Ashurbanipal's Library break off after a few lines, in which Enlil is disturbed by the noise of mankind and resolves to destroy the inhabited world, while a tablet from Babylon picks the account up long afterwards, when the streets are full again, the seed of men has spread over the land, and kingship descends from heaven for a second time. Some forty couplets separated the two, and they contained the flood story proper. This is the only telling of the Flood written out in both Sumerian and Akkadian, and the new tablet is the first source in which any substantial part of it can be read.

EJ



Cat. 27

Cuneiform tablet: wisdom text (*Shima milka*, "Hear the advice")
Excavation no. NE.23.O.707
Material: Clay
Dimensions: l. 7; w. 5.2; th. 2.3 cm
Context: Northern lower town, area E Top, fill F.4646
Date: Early/mid-7th century BCE

Description

Mesopotamian wisdom literature often takes the form of a father instructing his son. *Shima milka*, "Hear the advice," is the most subversive of these works (Cohen 2013: 81–128; Jiménez 2022: 249–250). The father, Shupe-ameli, delivers a long string of practical counsels ("do not covet another man's wife," "do not jump across a wide canal," "do not dig a well at the head of your field") and the son answers by rejecting all of it. What is a house worth, or a thousand sheep, when on the day of your death only nine loaves will be counted out and set at your head? The lines preserved in NE.23.O.707 come from the end of that reply: few are the days on which we eat bread, and many the days our teeth will be idle; few the days we look upon the sun, and many the days we shall sit in shadow. There follows a comparison between the living and the dead and a closing line on the fates allotted to men. The composition was long thought to be a Babylonian work that survived only abroad, since all its manuscripts came from Ugarit, Emar, and Hattusa, copied in the late 2nd millennium BCE. Copies have recently been recognised at Nippur and Kalhu; this tablet brings the text to Nineveh. Its colophon records the length of the composition at 250 lines, considerably more than the roughly 150 reconstructed for the 2nd-millennium version, so the poem read in Assyria had grown substantially in the intervening centuries.

EJ



Cat. 28

Cuneiform tablet: collection of proverbs
Excavation no. NE.23.O.702
Material: Clay
Dimensions: l. 8.7; w. 10.9; th. 2.3 cm
Context: Northern lower town, area E Top, fill F.4649
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

Description

Proverbs were among the first things a Mesopotamian schoolboy learned to write, and the collections copied in Sumerian early in the 2nd millennium BCE were still being read a thousand years later, by then supplied with an Akkadian translation running alongside. Some entries are pithy in the way proverbs are everywhere; others are strings of practical advice. The lines preserved here belong to a set of instructions for a man driving oxen. Hold the ox on its lead rope and make it tremble with a switch; sing over it the work song called *elu mallu*, and listen out for its bellowing as it carries away across the ground to the next edge of the field, so that your task may be completed and the animals freed of their load at the end of it (Alster 2014; Lambert 1960: 222–282). The passage duplicates a large collection tablet from Ashurbanipal's Library, dug out of the citadel mound in the 19th century; the new fragment comes from a house in the lower town, and the two can now be read against each other. Its colophon is broken, but enough survives to show that the tablet was written out and excerpted by a diviner named [...]-shumu-usur, a man not otherwise known. Diviners are usually met with omens in their hands, and it is worth noting that this one also kept a book of proverbs.

EJ



Cat. 29

Amulet: Pazuzu head
Excavation no. NE.22.O.83
Material: Bronze
Dimensions: l. 4.8; w. 2.6; th. 2.4 cm
Context: Northern lower town, area B, fill F.2979
Date: Late 7th century BCE

Description

Head of the demon Pazuzu, cast in bronze, found in the level of destruction (F.2979) in the Neo-Assyrian house in area B. The amulet depicts the hybrid figure of Pazuzu, formed by a square head with caprid horns, bulging eyes, thick eyebrows and muzzle with sharp jaws. A suspension ring on the top indicates that it could be worn as a necklace or tied to a belt or placed at the entrance of houses or next to a sick person or woman in labor (Heeßel 2011: 361-362). Similar small amulets, made of bronze, are known from Nimrud (Curtis 2013: 216-217, nos. 1080-1081, pl. XC) and Tell Kuyunjiq (Braun-Holzinger 1984: 265, pl. 54; for a comprehensive catalog of Pazuzu amulets, see Heeßel 2002: 115-169; see also Heeßel 2011: 359-360 n. 7). Depictions of Pazuzu first appear in Neo-Assyrian contexts in the 8th century BCE and become widespread throughout Mesopotamia during the 7th and the 6th centuries BCE, with the latest examples dating to the Seleucid period (Heeßel 2011: 359). He is characterized by a dual function: an apotropaic one as a domestic spirit and an exorcistic one against other evil demons (Wiggermann 2007: 125). Pazuzu also features on apotropaic bronze plaques bearing incantations against the powerful demoness Lamashtu (Farber 2014: 4, figs. 1 and 18; for Lamashtu incantation texts, see also Cat. 30).

CDO



Cuneiform tablet: rituals against the demon Lamashtu

Excavation no. NE.23.O.512

Material: Clay

Dimensions: l. 10.7; w. 7.7; th. 3 cm

Context: Northern lower town, area E Top, fill F.4646 (phase 2)

Date: Early/mid-7th century BCE

Cat. 30

Description

Lamashtu, "the daughter of Anu," was a demon-goddess personifying frustrated motherhood. She was particularly feared for her attacks on pregnant women, women in childbirth, and infants, although adults could also fall victim to her (Farber 1983; Wiggermann 2000; Farber 2014: 1-5).

Held responsible for miscarriages and infant deaths, Lamashtu was conceived as a composite being, combining human and animal features. Amulets depicting her, sometimes together with Pazuzu (a powerful demon-god capable of countering Lamashtu; see Wiggermann 2004; Heeßel 2011; see also Cat. 29 above), were part of the protective measures used against her. A three-tablet ritual series bearing her name (Farber 2014: 16-29 and 45-258) was compiled in the 1st millennium BCE, drawing on earlier traditions and bringing together spells and ritual instructions intended to prevent or counter her attacks.

Although not part of the Lamashtu Series, the tablet fragment in Babylonian script published here (Cat. 30) is related to it, as it contains a passage (rev. 1-6) that closely resembles a section of Tablet III (ll. 67-75; cf. Farber 2014: 135-137 and 190-191). After listing various ingredients for a salve to be applied to Lamashtu's victim — "[…,] *azallû* (a medicinal plant), the leatherworker's tanning paste, […,] lard of a white pig: this is the ointment" — the text instructs the practitioner to recite three (?) spells three times over the ointment. One of



these mentions a black dog ("I made the black dog, your demon-persecutor, seize you"), possibly a reference to the black dog of the healing goddess Gula (cf. Konstantopoulos 2020: 5). A recipe for fumigation (snake skin, onion peel, etc.) follows, concluding the ritual.

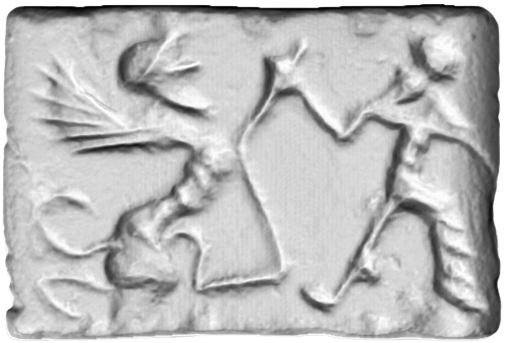
The other, more damaged side of the fragment contains an unintelligible abracadabra spell (obv. 9–11) to be recited over the stones used to protect Lamashtu's victim (cf. Lamashtu Series III 61–63; Farber 2014: 134–135 and 188–189). Similar spells, possibly in the Elamite language, also occur in other magical and ritual texts (van Dijk 1982: 101; Farber 1989: 74–76).

The residence in area E (see Jiménez, Marchesi, and Taylor in this volume) also contained two other tablet fragments dealing with Lamashtu: NE.23.O.711 and NE.23.O.1020. Both, together with Cat. 30, come from phase 2, an earlier occupation phase (see D'Orazio, Monastero, and Redamante in this volume). They may well all be fragments of the same tablet, but this cannot yet be established with certainty.

EJ, GM



34



35



37



36



38

not to scale



39



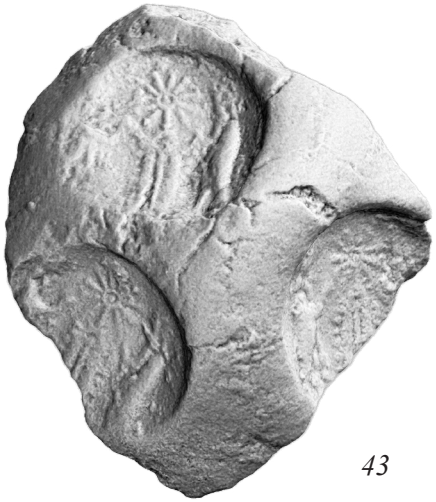
40



41



42



43



44



45



Cat. 31

Cuneiform tablet of magic content (series *Udug-hul*, Tablet XII)
Excavation no. NE.23.O.504
Material: Clay
Dimensions: l. 21.5; w. 13.7; th. 2.2 cm
Context: Northern lower town, area E Top, fill F.4602
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

Description

Manuscript of the incantation series known in Sumerian as *Udug-hul* and in Akkadian as *Utukku lemnutu*, both meaning "Evil demons." This predominantly bilingual collection of incantations and rituals, comprising fourteen to sixteen tablets, was compiled in the 1st millennium BCE by expanding an earlier monolingual series of Sumerian incantations, adding Akkadian translations and further incantations composed in Akkadian. As the title makes explicit, these incantations were directed against evil demons thought to cause illness (see Taylor in this volume). This badly damaged exemplar, written in Neo-Babylonian script, is a new source for Tablet XII (Geller 2016: 16–17 and 399–433). Note ⌜ha⌝-la ba-an-ús in the third-to-last line of column ii on the reverse, which forms part of the catchline of *Udug-hul* XIII–XV (cf. Geller 2016: 433, line 171).

GM



Cat. 32

Cuneiform tablet: collection of incantations known as "Gattung II"
Excavation no. NE.23.O.714
Material: Clay
Dimensions: l. 26.5; w. 20; th. 3 cm
Context: Northern lower town, area E Top, fill F.4661
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

Description

A second manuscript of the incantation series described under Cat. 21 (Ebeling 1953). It opens with the incantation "King Namtar," addressed to the fierce demon of that name, and this incantation is followed by dozens of invocations of god pairs. It is written in Babylonian script. Its colophon records that the text was copied out in full and gives the owner's name, Taqish-Gula, described as an exorcist, or else the son of one; a diviner may be named alongside him. The name is not otherwise attested at Nineveh, but it is at home in Nippur, from where this tablet may have come.

EJ



Cat. 33

Cuneiform tablet: Sumerian incantation

Excavation no. NE.21.O.369

Material: Clay

Dimensions: l. 8.8; w. 6.6; th. 2.9 cm

Context: Northern lower town, area C, fill F.1929

Date: Reign of Sin-sharru-ishkun (628–612 BCE)

Description

What survives here is the end of a tablet and a colophon. The text is an incantation in the Sumerian language called "Where have you flown?" It draws on the magical power of the number seven, invoking Enki, god of wisdom, to expel a demon by making it fly away like a bird, rise like smoke into the sky, or be thrown to the ground like a storm cloud. By this time, Sumerian was a long-dead language, but it persisted in scholarship. It was especially popular in magic, where its antiquity and difficulty seem to have given it special power. "Where have you flown?" was used in a ritual where an amulet with seven stones was tied to the right wrist to treat epilepsy. The incantation was also used for illnesses affecting the right side of the body, and for ringing ears caused by a ghost. We also know it from a ritual fighting serious fungal infestations in your house. There the exorcist makes seven tamarisk-wood daggers, cuts a piece of fungus, then ritually burns it and covers it with dirt, before sacrificing a goat to the healing goddess Gula. The colophon tells us that the tablet belonged to an official serving King Sin-sharru-ishkun. It was copied from a "grand tablet" of Nabu-ahhe-iddina, who was a senior professional. Grand tablets were extraordinarily large tablets, containing vast amounts of text. They must have been uncommon. There are very few references to them, and even fewer examples survive. It is the kind of tablet one might only expect to find in an elite context like the residence in area C.

JT



Cat. 34

Cuneiform tablet: ritual text (*Mis pi*)
Excavation no. NE.23.O.517
Material: Clay
Dimensions: l. 19.7; w. 13.7; th. 2.7 cm
Context: Northern lower town, area E Top, fill F.4649
Date: Reign of Sin-sharru-ishkun (628–612 BCE)

Description

The ancient inhabitants of Mesopotamia believed that deities were present in their temples in the form of statues. In other words, these divine images could host the deities they represented, but for this to happen, the statues had to undergo a consecration rite known as "mouth-washing." This ceremonial washing of a divine statue's mouth prepared it to receive the deity. The procedure is described in two texts that present different versions of the ritual: an earlier version from Nineveh (Walker and Dick 2001: 33–67) and a later Babylonian version (ibid., 69–82), which differ in several details. Although written in Neo-Babylonian script, this new manuscript contains the Nineveh version.

GM



Cat. 35

Cylinder seal
Excavation no. NE.22.O.525
Material: Faience
Dimensions: h. 2.7; diam. 1.2 cm (perf. diam. 0.3 cm)
Context: Northern lower town, area H, fill F.2595
Date: Late 7th century BCE

Description

Complete cylinder seal, pierced lengthwise, of white faience with a vitreous surface, now considerably eroded. It was found in the fill (F.2595) of phase 2 in room L.3300 of Building H1. The carved scene depicts a contest between a hero and a winged sphinx. The bearded hero, with long hair and wearing a long tiered, flounced skirt, faces right; he holds a scimitar lowered behind him in his right hand, while with his left he grasps one of the forepaws of the sphinx, which crouches on its hind legs. The bearded sphinx faces left and appears to wear a horned tiara. The design fills the entire height of the field, without borders; the sphinx's spread wings occupy the upper field above its crouching body, balancing the composition against the standing figure of the hero. The bodies are built up from full, rounded masses, as in the globular heads of both figures and the haunch of the sphinx, recalling the drill-hollows of the drilled style, while the wings are rendered as straight incisions fanning out from a single point. The rendering is summary but not careless: proportions are elongated, heads are large and globular, and internal detail is reduced to a minimum. The scene follows a well-established compositional scheme, in which a hero holds a weapon lowered behind him and seizes an animal or composite being by one of its forelegs, a formula attested on seals from both southern and northern Mesopotamia, including Nineveh and Nimrud. A close parallel is provided by a cylinder seal in the British Museum (Collon 2001: 159, no. 303, WA 120955).

SP









Cat. 36

Cylinder seal
Excavation no. NE.22.O.95
Material: Stone
Dimensions: h. 1.6; diam. 1.2 cm (perf. diam. 0.3 cm)
Context: Northern lower town, area C, fill F.1915
Date: Late 7th century BCE

Description

Complete cylinder seal of squat proportions, pierced lengthwise, made of a fine, soft whitish stone with brownish veining; the surface is partly worn. The seal was found in the fill (F.1915) of the tablets' room L.1932. The carved scene is centered on a stylized tree, consisting of a vertical trunk with branches arranged in V-shaped pairs, flanked by a winged sphinx and an ibex, both turned towards it in a mirrored posture, their foreparts raised towards the tree. The sphinx wears a horned tiara; its leonine body extends horizontally beneath the crescent, while it lifts its chest and stretches its forelegs towards the tree. Its wings, spread back, are rendered with parallel and cross-hatched incisions. The ibex, recognizable by its curved horns sweeping back, rears up on its hind legs, its head raised close to the trunk and its body covered with dense striations. A crescent moon occupies the upper field, above the two animals, while a horizontal rhomb is set in the lower field between the sphinx and the tree. The design fills the entire height of the field, without borders. The seal is carved in linear style, entirely with hand-held gravers, without the use of the drill or cutting wheel. Both animals are rendered in considerable detail by means of fine incised lines, with hatching and cross-hatching used to convey the texture of the wings and coat, while the tree and the crescent are cut with simple, deep strokes.

SP









Cat. 37

Cylinder seal
Excavation no. NE.22.O.236
Material: Faience
Dimensions: h. 2.6; diam. 1.1 cm (perf. diam. 0.2 cm)
Context: Northern lower town, area A, fill F.2926
Date: Second half of the 7th century BCE

Description

Complete cylinder seal, pierced lengthwise, of light yellowish faience, with slightly raised edges at both ends, found in the fill (F.2926) above room L.2907 to the west of the pebble-paved courtyard in the residence of area A. The seal is well preserved: the surface is porous and slightly worn, and — while the original glaze is almost entirely lost, surviving only as traces of greenish color at the ends — the carved design remains clearly legible. The design, framed by a simple line border at top and bottom, consists of three motifs: a stylized tree with three branches on each side of a vertical trunk, a tasseled spear of Marduk and a tasseled crescent-standard, generally identified as the cult emblem (*šurinnu*) of the moon-god Sin of Harran. The motifs are rendered with deep, rounded incised lines, evenly spaced across the field. Parallels for this type of stylized tree combined with a tasseled crescent-standard occur on other Neo-Assyrian cylinder seals, as on a specimen from Assur (Klengel-Brandt 2014: 7, no. 19, pl. 5.19, VA Ass 1592). The pairing of the tasseled crescent-standard with the tasseled spear of Marduk is also attested elsewhere, although the crescent-standard appears then as the object of worship by male figures (e.g. Collon 2001: 120, nos. 227-228, WA 89591 and WA 105112). The crescent-standard is also found on its own as the sole motif on stamp seals from Nineveh, Nimrud (Herbordt 1992: pl. 10, nos. 11, 14-15), and Assur (Klengel-Brandt 2014: 16, no. 70, pl. 17.70, VA Ass 5039).

SP



Cat. 38

Sealing with seal impressions
Excavation no. NE.21.O.333
Material: Clay
Dimensions: l. 4.5; w. 3.9; th. 1.1 cm
Context: Northern lower town, area H, fill F.2513
Date: Second half of the 7th century BCE

Description

Fragment of a bag sealing, burnt, found in a filling layer (F.2513) of a room (L.2585) of Building H1. It belongs to a large corpus of discarded sealings retrieved from phase 2 of the building, alongside clay tokens (see also Cat. 42–43). The sealing was applied on a leather bag closure tied by three rows of twisted rope. On the obverse, the sealing bears four stamped impressions of a cylinder seal in linear style, most likely made from the same seal (measure: h. 2.2 cm). Two impressions feature a passing human headed bird-like figure, a third impression shows the back part of a quadruped with curving tail facing right, while the fourth impression is too fragmentary for any possible reading. The scene, albeit incomplete, may be compared with a seal impression on a tablet from Nimrud which includes a bull facing a human headed bird (Parker 1955: 121, pl. XXVII.5, fig. 20). Similar scenes with both mythical creatures and animals can be seen on a number of Neo-Assyrian cylinder seals (Collon 2001: 49–51; see Klengel-Brandt 2014: nos. 253, 259, pls. 48–49 from Assur; Fügert 2015: nos. 152–159, from Dur-Katlimmu). After the 8th century BCE, the practice of stamping cylinder seals instead of rolling them mimics the increasingly frequent use of stamp seals, as documented on dockets and sealings from Nimrud (Parker 1962: no. ND.7070, pl. XX.4, no. ND.7075, pl. XXII.6, no. ND.7080, pl. XXI.1) and on a small number of sealings from Dur-Katlimmu (Fügert 2015: nos. 70, 121, 127, 175, 184, 214).

CDO



Cat. 39

Stamp seal
Excavation no. NE.21.O.74
Material: Stone
Dimensions: h. 2.3; diam. 1.3; perf. diam. 0.3 cm
Context: Northern lower town, area C, fill F.2002
Date: Late 7th century BCE

Description

Cone-shaped stamp seal, made of dark red stone, found in the upper fill (F.2002) above floor L.2016, possibly an outdoor space in the monumental residence of area C, from which come two other stamp seals engraved with simple motifs (Cat. 40-41). The seal presents a round perforation on its top and is engraved on the base with a single figure of a horned quadruped, possibly an ibex. Several impressions of round and ovoidal seals depicting quadrupeds have been found on tablets and sealings from other Neo-Assyrian contexts, i.e. from Nineveh, Nimrud (Herbordt 1992: pl. 16), and Assur (Klengel-Brandt 2014: pls. 63-64). During the early 1st millennium BCE, stamp seals became the most popular type of seal in administrative practices, as attested by the numerous impressions on tablets and sealings, while the use of cylinder seals in administration decreased considerably (Collon 2005: 75).

CDO



Cat. 40

Stamp seal
Excavation no. NE.21.O.16
Material: Clay
Dimensions: l. 1.6; w. 1.4; th. 0.9; perf. diam. 0.3 cm
Context: Northern lower town, area C, fill F.1901
Date: Late 7th century BCE

Description

Stamp seal found in the fill (F.1901) of a well/cistern underneath the baked brick courtyard L.215 in the residence of area C (for two other stamp seals from that same building, see Cat. 39 and 41). The seal, of a scaraboid shape, is made of baked clay, oval-shaped and pierced along its length: one face is blank while the other is engraved with the figure of a fish, with four fins, two for each side, and a tail. The body of the fish is incised with a net-like pattern to resemble the scales. A close parallel can be seen with a scaraboid seal found in a Neo-Assyrian grave from Dur-Katlimmu (Fügert 2015: no. 464); other seals and seal impressions with fish motifs are known from Nimrud (Parker 1955: 107, no. ND.3224, pl. XVIII.2), Assur (Klengel-Brandt 2014: nos. Ist 21, 462, pl. 66), Khorsabad (Loud and Altman 1938: pl. 58.101), and Nineveh (Herbordt 1992: pl. 17.18-19). According to Herbordt (ibid: 121), both the scaraboid shape of the seal and the motif might have had an Egyptian inspiration.

CDO



Cat. 41

Stamp seal
Excavation no. NE.21.O.440
Material: Faience
Dimensions: h. 1.8; diam. 1.2; perf. diam. 0.2 cm
Context: Northern lower town, area C, fallen from the south section
Date: Late 7th century BCE

Description

Stamp seal found in the loose soil along the section of Daesh's trench 2 delimiting area C to the south, most likely coming from the monumental residence above (see also Cat. 39–40). The seal is made of light greenish faience, bell-shaped and pierced on the top. It presents a decoration of three grooved lines in the central section. On the base there is an engraving with a stylized flower-like motif with eight petals. A similar bell-shaped seal, made of faience, is known from Assur (Klengel-Brandt 2014: no. 70, pl. 17; see also Wicke 2012), while other stamp seals present comparable rosette/star motifs (Klengel-Brandt 2014: nos. 75–77, pl. 18). Despite their simple design, rosettes are symbols associated with Ishtar: they are found impressed both on tablets and sealings in the archives from Nineveh and Nimrud (Herbordt 1992: pl. 11.5,7).

CDO



Cat. 42

Sealing with seal impressions
Excavation no. NE.21.O.313
Material: Clay
Dimensions: l. 3.4; w. 2.2; th. 1.2 cm
Context: Northern lower town, area H, fill F.1692
Date: Second half of the 7th century BCE

Description

This fragmentary sealing, burnt, was found in a filling layer (F.1692) above floor L.1684 and the water channel D.1690 in Building H1, phase 2 (see also Cat. 38, 43). The sealing bears three impressions made by the same ovoidal stamp seal (measures: l. 1.65 x w. 1.3 cm) alongside fingerprints. One of the impressions is complete and features a kneeling genie or hero with four wings and raised hands to grasp the rays/feet of a winged sun-disk with three heads above it. The same seal is also impressed on another sealing found in the same building (NE.22.O.425). A similar depiction of a kneeling hero under a sun-disk with flaring rays can be seen in a more elaborate scene of a stamp seal impression on a tablet from Nineveh (Herbordt 1992: 225, Nin.79, pl. 13.10). In general, standing or kneeling genies and sun-disks are common themes in Neo-Assyrian glyptic, often found in couples at the sides of a stylized tree both on stamp seals (ibid., pl. 13; Fügert 2015: nos. 254-257) and on cylinder seals (Collon 2001: 81, pl. XVI). The back side of the sealing shows the negative impressions of a possible peg, tied with a twisted rope.

CDO



*

Cat. 43

Sealing with seal impressions

Excavation no. NE.21.O.415

Material: Clay

Dimensions: l. 2.5; w. 2.1; th. 0.8 cm

Context: Northern lower town, area H, fill F.1679

Date: Second half of the 7th century BCE

Description

Sealing found in a filling layer (F.1679) of room L.1685 of Building H1, phase 2 (see also Cat. 38, 42). On the reverse it bears two negative impressions of a twisted rope, although it remains unclear to which object it had been tied. On the obverse it bears three impressions made from the same circular stamp seal with a highly detailed carved scene featuring two genies (probably identical) on either side of a sacred tree, underneath a star with eleven rays ending with small globes. The tree is represented with a central trunk within an arch decorated with a series of bulbs. This specific iconography of the tree is usually dated to the end of the 8th century BCE, based on its representation on stone reliefs (Collon 2001: 83). The figure to the right of the tree, better preserved, can be identified with the apotropaic fish-cloaked man or *apkallu* — a bearded demigod wearing a fish skin on his back, holding a bucket in his right arm (Black and Green 1992: 82–83). Their iconography is quite popular during the 1st millennium BCE, as they appear as guardians of thresholds in stone reliefs of the Neo-Assyrian palaces and among foundation figurines (see Green 1983; Nigro 2002; Kertai 2015b; Nakamura 2017). In the glyptic, the *apkallu* can be found both on cylinder seals (Collon 2001: 6, nos. 154, 157, 174, 182) and on stamp seals: from Assur (Klengel-Brandt 2014: 62, no. Ist 89, pls. 57, 84) and from Dur-Katlimmu (Fügert 2015: nos. 250–253) there are examples of fish-cloaked figures next to sacred trees, though a winged sun-disk is usually placed above the tree. A single *apkallu* appears also on a stamp seal impression from Nimrud alongside astral symbols (Parker 1962: 37, no. ND.7939, pl. XIX.5).

CDO



Cat. 44

Sealing with seal impressions
Excavation no. NE.22.O.426
Material: Clay
Dimensions: l. 3.1; w. 2.2; th. 1.1 cm
Context: Northern lower town, area H, fill F.2586
Date: Late 7th – early 6th century BCE

Description

Container sealing found in the filling layer (F.2586) of one of the rooms (L.3307) of Building H1 (see also Cat. 35 and 45), but from phase 1, i.e. the post-Assyrian reoccupation of the area. Eleven other sealings were retrieved from the same layer. The sealing was likely placed on the opening of a container covered with a textile with a weft-faced tabby, laced with several laps of a rope (0.2 cm diam.), also visible along the broken section. On the front there are two impressions of the same oval stamp seal alongside fingerprints. The seal, almost entirely preserved, features a standing male worshiper with raised hands and wearing a long robe. Worshiping scenes are quite common among stamp seals of this period, often featuring additional figures or elements, such as standards, altars and astral symbols, next to the worshiper, as in specimens from Nimrud and Nineveh (Herbordt 1992: pl. 14) and from Dur-Katlimmu (Fügert 2015: nos. 236, 242-244).

CDO







Cat. 45

Sealing with seal impression
Excavation no. NE.22.O.405
Material: Clay
Dimensions: l. 3.5; w. 2.6; th. 1.4 cm
Context: Northern lower town, area H, fill F.3303
Date: Late 7th – early 6th century BCE

Description

Container sealing found in a filling layer (F.3303) of the stairwell L.3345 in Building H1 (for which see also Cat. 35, 38, 42–43), but from phase 1 (for which see under Cat. 44). The sealing presents on the obverse a complete circular stamp seal impression (1.5 cm diam.) depicting a crouching lion-griffin, facing left, with wings, donkey ears and scorpion tail, framed by a simple line. Iconographic parallels for the lion-griffin can be seen on contemporary cylinder seals (see Collon 2001: 11, nos. 232, 290–293), while on stamp seals single depictions of hybrid animal figures include more often sphinxes rather than lion-griffins (Herbordt 1992: pls. 15.18–20, 17.20; Fügert 2015: nos. 256–258). As for the function of the sealing, it was likely used to secure a container tied by a small string as indicated by two negative impressions of a twisted rope (0.3 cm diam.) and quite faint traces of fabric/basket on its back side.

CDO





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